Population Politics in the Tropics.

Demography, Health and Colonial Rule in Portuguese Angola, 1890s-1940s.

Samuël Coghe

Thesis submitted for assessment with a view to obtaining the degree of Doctor of History and Civilization of the European University Institute

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European University Institute
Department of History and Civilization

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ABSTRACT

This Ph.D. thesis examines the colonial efforts aimed at increasing and physically improving the native population in Portuguese Angola from the late nineteenth to the mid-twentieth century. It argues that, throughout this period, these – thus far under-researched – efforts were diverse and inextricably linked to the pervasive idea of a demographic crisis: due to alarming reports on epidemic and endemic diseases, high infant mortality rates and mounting emigration flows, many colonialists feared that the native population was declining, and that this endangered both the economic development of the colony and the legitimacy of Portuguese colonial rule.

While critically assessing this depopulation discourse and the role played in it by scarce but widely used demographic knowledge, my analysis focuses on the ideas, policies and practices that were conceived and implemented by colonial administrators, doctors, missionaries and scientists in order to 'stem the tide'. I pay particular attention to the colonial response to sleeping sickness from the late nineteenth century onwards and the establishment of a broader system of African healthcare after the First World War. I also look at colonial attempts to resettle the rural population into model villages, to reduce long-distance labour migration and to curtail emigration to neighbouring colonies.

This study reveals that the impact of population politics in Angola often remained more modest than planned, insofar as their implementation was severely hampered by the 'weakness' of the colonial state and by the attitudes and actions of many Africans themselves. These last did often not approve of Portuguese goals and methods and sought to evade medical and administrative control.

Moreover, this dissertation consistently argues that both the discourse of population decline and the particular policies conceived and implemented were not unique to Angola. They were embedded in and shaped by broader contemporary debates and practices that transcended colonial and imperial boundaries.

The English in this Ph.D. Thesis has been revised by Margot Wylie.

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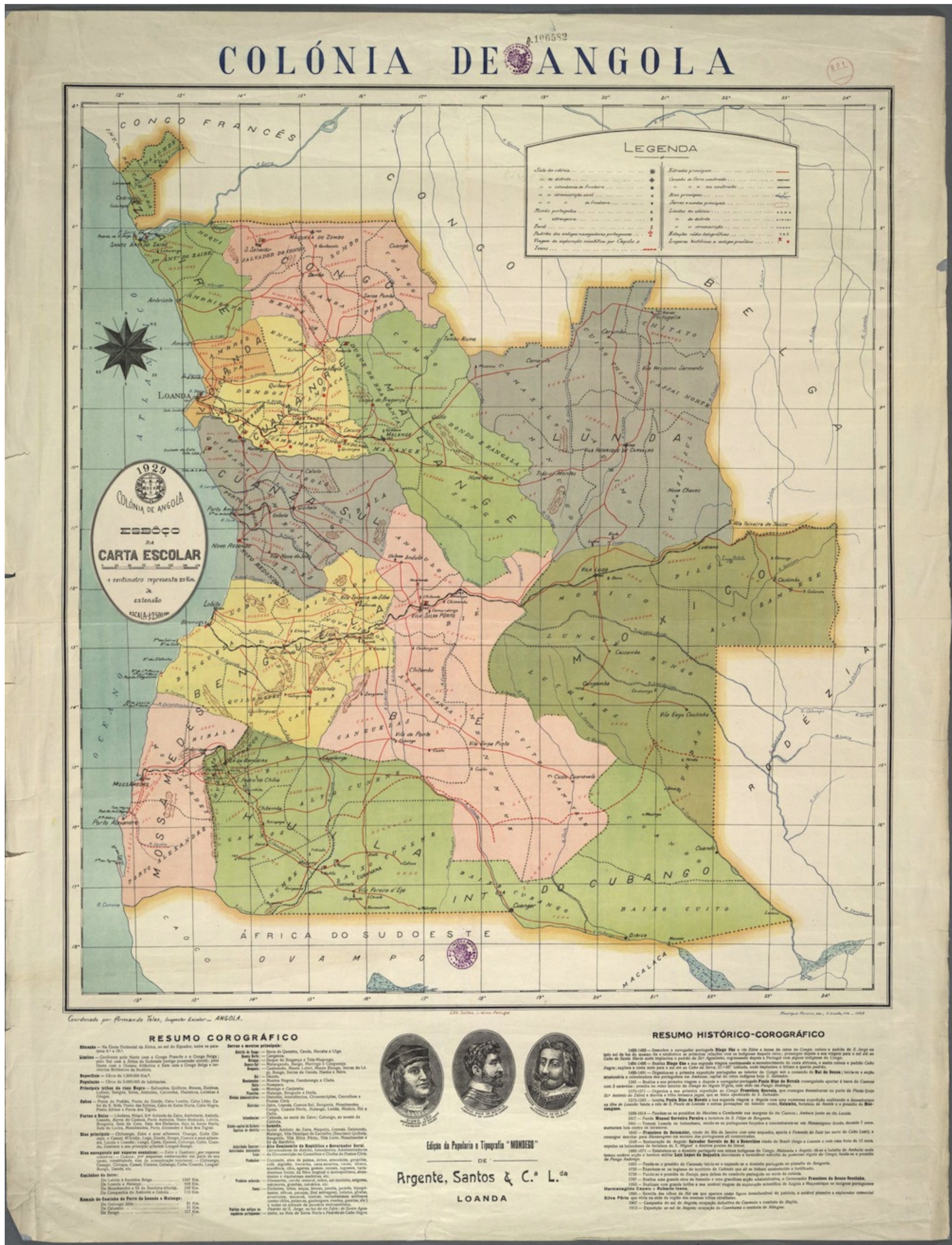

(Teles, Armando; Moreira, Henrique; Simões, V., *Colónia de Angola. Esboço da carta escolar,* Luanda: Papelaria e Tipografia Mondego, 1929.
Online: http://purl.pt/8143/3/ [last accessed 30.12.2013])

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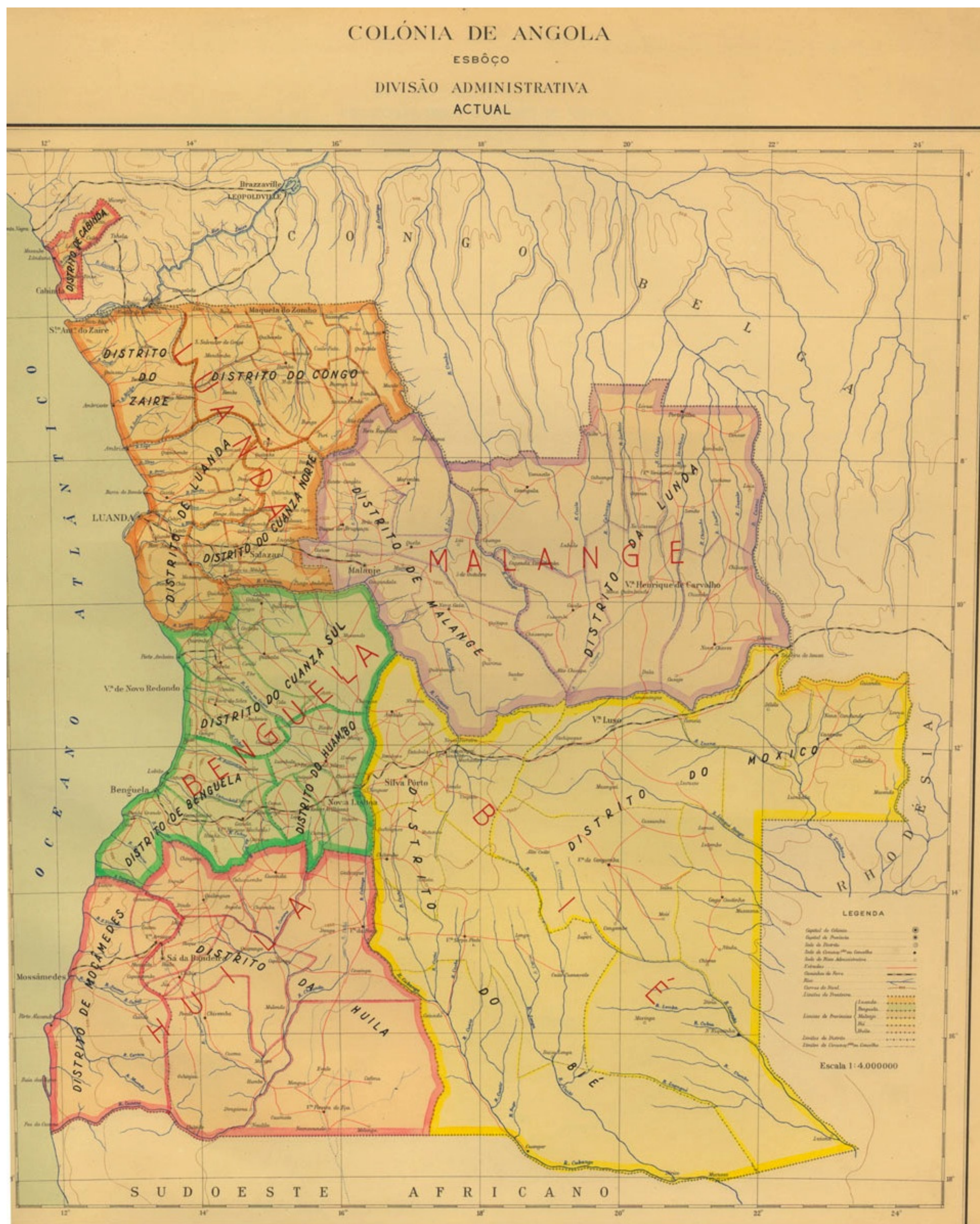

(Source: Ministério das Colónias - Junta das Missões Geográficas e de Investigações Coloniais, 1940/1943, available under http://www.tvciencia.pt/tvccat/pagcat/tvccat01.asp?pag=03&campo=COTCAT&txt=CDI-0818-1943 [last accessed 30.12.2013])

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Introduction

"The large indigenous population of Africa and its extraordinary fertility; the instinct which connects the population intimately to its country of birth; as well as the strength and independent nature of the individuals do not allow for the hypothesis of annihilating the indigenous population or for its substitution by emigrating races. In modern times, to civilize must not be to destroy, but to transform."[1] With this statement, which appeared in 1880 in the journal of the *Sociedade de Geografia de Lisboa* (Geographical Society of Lisbon – SGL), Portugal's most important procolonial think tank, the Portuguese colonial official Joaquim José Machado summarized his view on one of the key questions debated in Portuguese and other European colonial circles at the time: how to deal with the native populations that had been placed under European rule during the colonial expansion in Africa.[2]

In Portuguese Angola, the colony that will be the focus of this dissertation, the gradual abolition of slavery between the 1850s and 1870s was already an initial answer to this question.[3] With the Scramble for Africa – the partition and occupation of the African continent by European powers in the last third of the nineteenth century – however, finding answers gained new urgency. The question was whether the policies that had been implemented in the past or in other regions were applicable to the new situation in Africa.[4]

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[1] Machado, Joaquim José, "Caminho de ferro de Lourenço Marques à fronteira do Transvaal", *Boletim da Sociedade de Geografia de Lisboa* 2,2 (1880), pp. 67–104, here p. 68. Also quoted in Guimarães, Ângela, *Uma corrente do colonialismo português. A Sociedade de Geografia de Lisboa, 1875-1895,* Lisboa: Livros Horizonte, 1984, p. 68. All translations in this dissertation from Portuguese, French and German are my own.

[2] On the *Sociedade de Geografia de Lisboa*, see particularly Guimarães, *Corrente do colonialismo*. See also, more recently, Butlin, Robin Alan, *Geographies of Empire. European Empires and Colonies c. 1880 - 1960* (Cambridge studies in historical geography; 42), Cambridge: Cambridge University Press, 2009, pp. 296–299; Jerónimo, Miguel Bandeira, *A Diplomacia do Império. Política e Religião na Partilha de África (1820-1890),* Lisboa: Edições 70, 2012, pp. 202–235 and Cantinho, Manuela, *O museu etnográfico da Sociedade de Geografia de Lisboa. Modernidade, colonização e alteridade,* Lisboa: Fundação Calouste Gulbenkian, 2005. In the first decades of the twentieth century, the *Sociedade de Geografia de Lisboa* organised a series of important colonial conferences, see, for instance, Barata, Óscar Soares, "Os Congressos Coloniais na Sociedade de Geografia", *Boletim da Sociedade de Geografia de Lisboa* 123 (2005), pp. 311–361.

[3] See Marques, João Pedro, *Sá da Bandeira e o fim da escravidão. Vitória da moral, desforra do interesse,* Lisboa: Imprensa de Ciências Sociais, 2008; Coghe, Samuël, "The Problem of Freedom in a Mid Nineteenth-Century Atlantic Slave Society. The Liberated Africans of the Anglo-Portuguese Mixed Commission in Luanda (1844–1870)", *Slavery and Abolition* 33,3 (2012), pp. 479–500.

[4] For the Scramble for Africa, see particularly Förster, Stig; Mommsen, Wolfgang J; Robinson, Ronald (eds.), *Bismarck, Europe, and Africa. The Berlin Africa conference 1884 - 1885 and the onset of partition,* Oxford: Oxford University Press, 1988; Pakenham, Thomas, *The scramble for Africa, 1876-1912,* London: Weidenfeld and Nicolson, 1991; Koponen, Juhani, "The Partition of Africa. A Scramble for a Mirage?", *Nordic Journal of African Studies* 2,1 (1993), pp. 117–135; Wesseling, H. L., *Divide and rule. The partition of Africa, 1880-1914,* Westport, Conn.: Praeger, 1996 and, for a recent reappraisal of the 1884-85 Berlin Conference, see Eckert, Andreas, "125 Jahre Berliner Afrika-Konferenz. Bedeutung für Geschichte und Gegenwart", *GIGA Focus* 12 (2009), pp. 1–8. For the Portuguese case, see Axelson, Eric, *Portugal and the scramble for Africa, 1875-1891,* Johannesburg: Witwatersrand University Press, 1967; Teixeira, Nuno Severiano, *O Ultimatum Inglês. Política externa e política interna no Portugal de 1890,* Lisboa: Alfa, 1990; Jerónimo, *Diplomacia*.

In 1879, French anthropologist Topinard wrote that, when dealing with "savage races", "governments only had a choice between two systems: to wipe them out or to win them over".[5] Like Topinard, Joaquim José Machado and other members of the SGL including Barbosa du Bocage and A.F. Nogueira discarded the first option. In their opinion, the policies that had, deliberately or not, led to the disappearance or extreme marginalisation of the native populations in the United States or Australia were not to be replicated in Portugal's African possessions.[6] But, if they rejected this option, it was not simply for humanitarian reasons or, as Joaquim Machado suggested, that it was unrealistic because of the strength of the native populations. In the late nineteenth century and well into the twentieth, in fact, most Portuguese and other European colonialists and scientists were convinced that 'white' Europeans could not acclimatize – that is, stay healthy and procreate – in the tropics and hence in most parts of Africa.[7] Therefore, were the immeasurable resources, which many suspected were present on the continent, to be exploited, colonisation in tropical Africa would necessarily have to rely on the native populations, insofar as they were the only ones considered capable of withstanding the physical demands of manual labour in such climatic conditions. "Our politics with regard to the Negro", Nogueira concluded, "is hence inevitably one of preservation". He continued: "If we thrust away or annihilate the Negro, we would only make a desert around us, we would only create ... sterility. Yet a passive attitude is not

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[5] Topinard, Paul, *L'Anthropologie. Avec Préface du Professeur Paul Broca,* 3rd ed., Paris: C. Reinwald et Cie, 1879, p. 11.

[6] Nogueira, A. F., *A raça negra sob o ponto de vista da civilização da África. Usos e costumes de alguns povos gentilicos do interior de Mossamedes e as colonias portuguezas,* Lisboa: Tipografia Nova Minerva, 1881, pp. 7–12; Guimarães, *Corrente do colonialismo,* pp. 62–63. Recently, a group of historians has reassessed – and mostly confirmed – the relationship between settler colonialism and genocide. See the contributions in Moses, Anthony Dirk (ed.), *Empire, colony, genocide. Conquest, occupation, and subaltern resistance in world history,* New York, NY: Berghahn Books, 2008 and in particular for Australia and the United States, Finzsch, Norbert, "'The aborigines … were never annihilated, and still they are becoming extinct'. Settler Imperialism and Genocide in Nineteenth-Century America and Australia", in: Moses, Anthony Dirk (ed.), *Empire, colony, genocide. Conquest, occupation, and subaltern resistance in world history,* New York, NY: Berghahn Books, 2008, pp. 253–270.

[7] Nogueira, *Raça negra,* pp. 10–11. From the vast literature on the acclimatization debate, see especially Livingstone, David N., "Tropical Climate and Moral Hygiene. The Anatomy of a Victorian Debate", *British Journal for the History of Science* 32,1 (1999), pp. 93–100; Grosse, Pascal, *Kolonialismus, Eugenik und bürgerliche Gesellschaft in Deutschland 1850 - 1918,* Frankfurt am Main: Campus-Verlag, 2000, pp. 54–96; Jennings, Eric Thomas, *Curing the Colonizers. Hydrotherapy, Climatology, and French Colonial Spas,* Durham: Duke University Press, 2006, esp. 8-39. For the Portuguese colonies, see Roque, Ricardo, *Antropologia e império. Fonseca Cardoso e a expedição à Índia em 1895,* Lisboa: Imprensa de Ciências Sociais, 2001, pp. 307–324 and Bastos, Cristiana, "Migrants, Settlers and Colonists. The Biopolitics of Displaced Bodies", *International Migration* 46,5 (2008), pp. 27–54. Jenning's claim that the longevity of the French debate – which more or less continued right up to the Second World War – was exceptional is implicitly contested by a similar finding for British East Africa in Crozier, Anna, "What Was Tropical about Tropical Neurasthenia? The Utility of the Diagnosis in the Management of British East Africa", *Journal of the History of Medicine and the Allied Sciences* 64,4 (2009), pp. 518–548.

enough in this case; we need to do more; we need to help the Negro in his evolution towards a civilized life."[8]

Even if colonialism in practice often looked very different, particularly during the so-called 'pacification campaigns' or wars of conquest, the idea that it was necessary to preserve and civilize the native populations in Africa gradually became the cornerstone of a widely accepted colonial doctrine in the late nineteenth and early twentieth centuries.[9] At the Berlin Conference in 1884-85, European powers (together with the Ottoman Empire and the United States) thus agreed "to watch over the preservation of the native tribes, and to care for the improvement of the conditions of their moral and material well-being" in the Congo Basin, a principle that was confirmed three years later with regard to colonial occupation in general by the Institute of International Law.[10] It even informed a new theoretical understanding of colonization, evident in many treatises on colonial rule, according to which colonization was no longer synonymous with the "occupation of a territory by the inhabitants of another", but necessarily implied a "civilizing action on people and things", a "double cultivation of the land and its people".[11]

To be sure, there was generally a wide gap between colonial ideology and practice. Even if the Berlin conference had arguably "helped to set up a new international opinion and a new international standard", colonial powers 'on the ground' often paid little more than lip service to this ideological shift.[12] Throughout the colonial period, colonial rule was often characterized by violence and indifference towards the well-being of native populations, partly because the civilizing mission stood in stark contrast with persisting social Darwinist ideas of racial superiority. However, there was clearly change over time, and from the first decade of the twentieth century onwards, policies on the ground slowly began to respond to

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[8] Nogueira, *Raça negra,* p. 11.

[9] For Portuguese colonialism, see for instance Jerónimo, Miguel Bandeira, *Livros Brancos, Almas Negras. A 'missão civilizadora' do colonialismo português, c. 1870-1930,* Lisboa: Imprensa de Ciências Sociais, 2010, pp. 51–68.

[10] General Act on the Berlin Conference on West Africa, 26.02.1885, article 6, see http://africanhistory.about.com/od/eracolonialism/l/bl-BerlinAct1885.htm [last accessed 16.12.2013]; "Session de Lausanne (1888)", in: *Annuaire de l'Institut de Droit International. Édition nouvelle abrégée,* Bruxelles: Imprimerie Lesigne, 1928, pp. 573–813, pp. 722-724 and, for the declaration, pp. 808-811.

[11] Souza, José Ferreira Marnoco e, *Administração Colonial. Prelecções feitas ao curso do 4.° anno jurídico do anno de 1906-1907,* Coimbra: Typographia França Amado, 1906, pp. 7-8 (quotes). Marnoco e Souza basically adhered to the views exposed by French, German and American theoreticists, see notably Girault, Arthur, *Principes de la colonisation et de législation coloniale. Tome I,* 3rd ed., Paris: Larose, 1907.

[12] Gann, L. H., "The Humanitarian Conscience", in: Förster, Stig; Mommsen, Wolfgang J; Robinson, Ronald (eds.), *Bismarck, Europe, and Africa. The Berlin Africa conference 1884 - 1885 and the onset of partition,* Oxford: Oxford University Press, 1988, pp. 321–331, esp. p. 330 (here quote); Miers, Suzanne, "Humanitarianism at Berlin. Myth or Reality", in: Förster, Stig; Mommsen, Wolfgang J; Robinson, Ronald (eds.), *Bismarck, Europe, and Africa. The Berlin Africa conference 1884 - 1885 and the onset of partition,* Oxford: Oxford University Press, 1988, pp. 333–345, here pp. 343–345.

the idea that it was necessary to preserve, increase and improve the native populations – often dubbed the "greatest wealth" of tropical Africa.[13]

By then, many Portuguese and other colonialists feared that these populations were already suffering from a severe demographic crisis. Indeed, although the economic exploitation of the African colonies and the very legitimacy of colonialism itself arguably hinged on the well-being of large and possibly growing native populations, colonialism in practice seemed to be provoking the opposite. In the late nineteenth and early twentieth centuries, the perception that the native population was large, strong, fertile and immobile – a perception that still informed Joaquim Machado's positions in 1880 – increasingly gave way to the belief that the opposite was actually occurring. Due to the emergence of new diseases – as well as increased perceptions of the diseases – and novel forms of demographic intelligence, many colonial officials throughout tropical Africa came to believe that the native population was diminishing, or at best stagnating, and physically degenerating.

[13] For such quotes in Portuguese, see, for instance, Diniz, José de Oliveira Ferreira, *Negócios indígenas. Relatório do ano 1913,* Luanda: Imprensa Nacional de Angola, 1914; Garcia, José de Penha, "A assistência e a protecção aos indígenas na moderna política colonial", *Boletim da Agência Geral das Colónias* 5,48 (1929), pp. 16–39, here p. 17. For the emergence of population politics, see Chapter 1.

1. Research Questions and Perspectives

This dissertation is about colonial attempts to preserve, increase and physically improve the native population in Portuguese Angola from the late nineteenth century to the late 1940s. It argues that these efforts ran parallel to the emergence, persistence, and shifts in the types of anxieties over population decline in Angola and were inextricably linked to similar anxieties and practices in other parts of Africa and in Europe at the time.

It examines how the outbreak, or rather 'discovery', of epidemic sleeping sickness in northern Angola at the end of the nineteenth century triggered anxieties of depopulation among Portuguese colonial officials and how, over the following decades, the idea that the population was subject to decline and degeneration was reinforced by a multitude of reports and other statements that claimed the persistence of sleeping sickness, the incidence of other diseases, low fertility and high infant mortality rates, widespread under- and malnutrition, endemic labour scarcity and rampant emigration. Consequently, the role played by demographic knowledge is critically assessed. More specifically, this study looks at how demographic data were produced by different actors and how this scanty, inconsistent and sometimes even contradictory evidence fed into debates about the demographic past, present and, above all, future of the colony. It is important to note that this dissertation focuses on the discourse surrounding the topic of depopulation and its aim is not to answer the question as to whether or not depopulation effectively took place.[14]

At the same time, this study analyses how anxieties regarding the size and health of the native population dovetailed with ideological, economic, political and scientific concerns and interests, giving rise to a wide range of medical and administrative interventions aimed at improving both the quantity and quality of the population. It pays much attention to the colonial response to sleeping sickness from the late nineteenth century onwards and to the emergence of a rudimentary public health system after the First World War. It also looks at colonial attempts to halt depopulation and foster population growth by gaining control over African space and movement: through the resettlement of populations in hygienic and

[14] Still, it is important to note that some historians and historical demographers have recently challenged this view, for both Angola and Africa in general. According to the projections of Patrick Manning, there was a slow but continuous growth of the population in Angola between 1850 and 1920, which then became more pronounced from the 1920s onwards, especially after the Second World War. See Manning, Patrick, "African Population. Projections, 1850-1960", in: Ittmann, Karl; Cordell, Dennis D.; Maddox, Gregory H. (eds.), *The Demographics of Empire. The Colonial Order and the Creation of Knowledge,* Ohio: Ohio University Press, 2010, pp. 245–275 and the appendices available as an xls-sheet at http://www.dataverse.pitt.edu/archive/users.php (last visited 27.11.2013). For Africa in general, see also Caldwell, John C.; Schindlmayr, Thomas, "Historical Population Estimates. Unravelling the Consensus", *Population and Development Review* 28,2 (2002), pp. 183–204.

agricultural model villages, with reforms of labour migration, and by curbing cross-border out-migration.

Moreover, this dissertation argues that both the discourse of population decline and the particular policies conceived and implemented were not unique to Angola, but were embedded in broader debates and practices that transcended colonial and imperial boundaries. It shows that what happened in other colonies or in Europe often had a profound impact on colonial rule in Angola and that colonial rule cannot be understood without these multiple links – links that were forged through mutual readings of colonial reports, but also through the mobility and mutual exchange of transnational actors.

In order to find the answers to these research questions, I will examine the agency and mutual interactions of a wide array of actors: governors and local administrators, doctors and missionaries, journalists and scientists, national and international organisations and networks as well as Africans in their role as labourers, peasants, soldiers, tax-payers, chiefs, mothers, nurses and midwives.

Yet it is important to note that this dissertation is not – nor does it pretend to be – a history from below, written from the perspective of 'the colonized'.[15] Although African views, actions and experiences are not absent, they are not the focal point of this study. The research questions I have outlined above focus on the views and ideas, anxieties and imaginations, practices and policies of – mostly, though not exclusively, European – actors from within (or those closely tied to) the administrative apparatus of the colonial state in Angola. The aim of this study is to explore, within the given thematic confines, the transnationally shaped and often messy, contradictory and even self-critical 'official mind' of Portuguese colonialism in Angola as well as the very practices of population 'improvement' it engendered on the ground.[16] This study, however, does not ignore the fact that colonial anxieties, policies and practices were not only shaped by the theoretical ideals of the civilizing

[15] For a recent example of such a study, based on fifty years of research, see Vansina, Jan, *Being Colonized. The Kuba Experience in Rural Congo, 1880-1960,* Madison: University of Wisconsin Press, 2010.
[16] I borrow the expression 'official mind' from Robinson, Ronald; Gallagher, John, *Africa and the Victorians. The Official Mind of Imperialism,* London: Macmillan, 1961. See also Thomas, Martin, "Mapping the French Colonial Mind", in: Thomas, Martin (ed.), *The French colonial mind. Vol. 1: Mental Maps of Empire and Colonial Encounters,* Lincoln: University of Nebraska Press, 2011, pp. xi–xlvii and Keese, Alexander, "Searching for the Reluctant Hands. Obsession, Ambivalence and the Practice of Organising Involuntary Labour in Colonial Cuanza-Sul and Malange Districts, Angola, 1926–1945", *Journal of Imperial and Commonwealth History* 41,2 (2013), pp. 238–258, esp. pp. 6-7.

mission and ethnographic representations of African populations, but also by the actual beliefs, attitudes and resistances of African people.[17]

By analysing the population politics of the Portuguese colonial state, this dissertation fills an important research gap, in that such a history has not yet been written for Angola in the time period under consideration. With regard to the period between the end of the Scramble and the onset of the war of decolonization in 1961, recent historiography has mainly focused on issues of labour and race, leaving other aspects of colonialism fairly under-researched.[18] Moreover, this is not a marginal perspective for African history. The impact of colonial projects and interventions aimed at measuring and immobilizing, curing and improving, preserving and increasing the native populations may, especially before 1945, have been more modest than planned and may generally have varied much in time and space, but they were nevertheless intrusive in the lives of many Africans. Furthermore, many of the ideas and practices that were conceived, discussed and tested in Angola before the end of the Second World War were, as I will demonstrate, implemented more thoroughly and on a larger scale only after 1945.

This study roughly parallels the depopulation discourse; it begins with the colonial response to epidemic sleeping sickness in the 1890s and ends with the infamous Galvão Report in the late 1940s. With the exception of the first chapter, the empirical focus is on the latter half of this long timespan: the Interwar Years and the Second World War. Not only did these years see the apogee of the depopulation discourse, it was also then that a broad array of new population policies were conceived, discussed, tested and implemented in Angola. This coincides with a general shift towards African health and development in the whole of colonial Africa in the period immediately following the First World War.[19]

The decision not to extend the analysis beyond the 1940s corresponds with the wish to explore the debates and policies of this period in the greatest possible depth. Were the period under examination to have been extended until the outbreak of the war of decolonization in 1961 or even until decolonization in 1975, the period before the 1940s may very well have become a kind of prologue. This because it is widely assumed that colonial powers began to

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[17] See, for instance, Steinmetz, George, *The Devil's Handwriting. Precoloniality and the German Colonial State in Quindao, Samoa, and Southwest Africa,* Chicago: Chicago University Press, 2007, pp. 2; 66-67 and below in this introduction.

[18] A more detailed overview is given in section 2 of this chapter.

[19] See, for instance, Hodge, Joseph Morgan, *Triumph of the Expert. Agrarian Doctrines of Development and the Legacies of British Colonialism,* Athens: Ohio University Press, 2007; Kunkel, Sönke; Meyer, Christoph, "Dimensionen des Aufbruchs. Die 1920er und 1930er Jahre in globaler Perspektive", in: Kunkel, Sönke; Meyer, Christoph (eds.), *Aufbruch ins postkoloniale Zeitalter. Globalisierung und die außereuropäische Welt in den 1920er und 1930er Jahren,* Frankfurt am Main: Campus-Verlag, 2012, pp. 7–33.

invest much more money, time and effort into 'developing' the colonies and enhancing the welfare of the native populations during the 'second colonial occupation' after the Second World War.[20] By analysing the 1890s to 1940s as a period in its own right, without the *telos* of the developmental state, this study aims to depict the period's "contingencies, confusions, false starts, and failures that mark real historical experience".[21]

It is important to note that this time frame is at odds with common periodization patterns in Portuguese twentieth-century (colonial) history. Many studies either stop or begin in 1926, with the demise of Portugal's First Republic (1910-1926), or, for less clear reasons, in 1930.[22] Although there are often good reasons to do so, such periodizations are also problematic for three reasons. First, they are bound to miss continuities between different political systems – between the *Primeira República* (1910-1926), *Ditadura Militar* (1926-1932/3) and *Estado Novo* (1932/3-1974) – and to ascribe to one system what was actually common to several.[23] Second, they either prioritize political history over social, cultural and other histories or (tacitly) assume that these other fields were strongly determined by the political. Finally, they suggest that with regard to the evolution of Portuguese colonialism national breaks were more important than international chronologies and constellations. Indeed, scholars of African colonialism generally use both World Wars as distinctive markers and not 1930, despite the world economic crisis.

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[20] The term 'second colonial occupation' was coined by Low and Lonsdale in the 1970s, see Cooper, Frederick, "Africa and the World Economy", *African Studies Review* 24,2-3 (1981), pp. 1–86, here p. 36. On the idea and practice of development after 1940/1945, see Cooper, Frederick, "Modernizing Bureaucrats, Backward Africans, and the Development Concept", in: Cooper, Frederick; Packard, Randall (eds.), *International development and the social sciences. Essays on the history and politics of knowledge,* Berkeley, Calif.: University of California Press, 1997, pp. 64–92; Eckert, Andreas, "'We are all planners now'. Planung und Dekolonisation in Afrika", *Geschichte und Gesellschaft* 34 (2008), pp. 375–397.

[21] On the dangers of writing history backwards, see Berman, Bruce J., "The Perils of Bula Matari. Constraint and Power in the Colonial State. Review of The African Colonial State in Comparative Perspective by M. Crawford Young", *Canadian Journal of African Studies* 31,3 (1997), pp. 556–570, here pp. 568 (quote) and Cooper, Frederick, *Colonialism in Question. Theory, Knowledge, History,* Berkeley: University of California Press, 2005, pp. 18-19 (first quote p. 18).

[22] See, for instance, Clarence-Smith, William Gervase, *Slaves, peasants and capitalists in southern Angola, 1840-1926* (African studies series; 27), Cambridge/London/New York: Cambridge University Press, 1979; Keese, Alexander, *Living with Ambiguity. Integrating an African Elite in French and Portuguese Africa, 1930 - 61,* Stuttgart: Steiner, 2007; Keese, *Reluctant Hands* and particularly the influential volumes Marques, A. H. de Oliveira (ed.), *O Império Africano, 1890 - 1930* (Nova História da Expansão Portuguesa; 11), Lisboa: Estampa, 2001; Bethencourt, Francisco; Chaudhuri, Kirti (eds.), *Do Brasil para África (1808-1930)* (História da Expansão Portuguesa; 4), Lisboa: Temas & Debates, 2000. The tendency to use 1926 as a start or end point has recently been reinforced by the flood of publications commemorating the centenary of the First Republic. See, for instance, Rosas, Fernando; Rollo, Maria Fernando (eds.), *História da Primeira República Portuguesa,* Lisboa: Tinta-da-Cha, 2009; Neto, Maria da Conceição, "A República no seu estado colonial. Combater a escravatura, estabelecer o 'indigenato'", *Ler História* 59 (2010), pp. 205–225; Silva, Cristina Nogueira da, "Natives who were Citizens and natives who were Indigenas in Portuguese Empire (1900-1926)", in: McCoy, Alfred W. (ed.), *Endless empire. Spain's retreat, Europe's eclipse, America's decline,* Madison: University of Wisconsin Press, 2012, pp. 295–305.

[23] Often, the New State is periodized as having run from 1926 to 1974, and thus includes the period of military dictatorship.

The research questions and the analytical approach of this dissertation are informed by the work of Michel Foucault. When Foucault introduced the terms "biopower" and "biopolitics" in the mid-1970s, he referred to a set of technologies that had emerged in seventeenth- and eighteenth-century Europe and that were used to know and optimize the life of both the individual and the collective body.[24] While, according to Foucault, the individual body was addressed through disciplinary institutions like the clinic, the prison and the army in order to "produce human beings whose bodies are at once useful and docile", the collective body, i.e. the population, was tackled from the mid-eighteenth century onwards by "an entire series of interventions and regulatory controls" that targeted the biological basis of the population and were made possible by medicine and the emergence of 'statistics' as a new scientific discipline, in other words "a biopolitics of the population".[25]

My use of the term 'population politics' refers to the latter part of Foucault's biopower/biopolitics paradigm, more precisely to Foucault's idea of a "biopolitics of the population". As paraphrased by Philipp Sarasin, this term refers to "the registration and regulation of the population 'movements' in a given society, ranging from the statistical registration of births and deaths, the state's efforts to increase the birth rate and the most diverse forms of public hygiene and health care to the actual regulation of the population from a 'qualitative' point of view, in the end to the eugenically motivated extirpation of life deemed 'unworthy of living'".[26]

Certainly, historians of colonialism have criticized Foucault's biopower/biopolitics paradigm for mainly two reasons. On the one hand, some have rightly criticized the Eurocentrism of his account, which can be said to be both empirical and epistemological: Foucault neither used non-European (con)texts to support his claims nor does the rise of 'biopower' seem to have been influenced by events or thoughts that originate from outside Western Europe. Thus, Ann Laura Stoler has asked what Foucault's analysis and chronologies

[24] Michel Foucault introduced the concepts of biopower and biopolitics simultaneously in one of his yearly lecture series at the Collège de France and in the first volume of his History of Sexuality, see Foucault, Michel, "Cours du 17 mars 1976", in: Foucault, Michel, *"Il faut défendre la société". Cours au Collège de France, 1975-1976,* edited by Mauro Bertani und Alessandro Fontana, Paris: Gallimard 1997, pp. 213–235 and Foucault, Michel, *La volonté de savoir* (Histoire de la sexualité; 1), Paris: Gallimard, 1976, pp. 177–191.

[25] Inda, Jonathan Xavier, "Analytics of the Modern. An Introduction", in: Inda, Jonathan Xavier (ed.), *Anthropologies of Modernity. Foucault, governmentality and life politics,* Malden, Mass.: Blackwell, 2005, pp. 1–20, here p. 6 (first quote); Foucault, *La volonté de savoir,* p. 183 (second quote).

[26] Sarasin, Philipp, *Michel Foucault zur Einführung,* revised 2 ed., Hamburg: Junius Verlag, 2006 [2005], p. 167. It has to be noted that this definition is state-centred and that, due to Foucault's ubiquitous definition of power in this very context, biopolitics should not be considered as a privilege of the state. See, on this point, Foucault, *La volonté de savoir,* p. 122 and Rouse, Joseph, "Power/Knowledge", in: Gutting, Gary (ed.), *The Cambridge Companion to Foucault,* 2nd ed., Cambridge: Cambridge University Press, 2005, pp. 95–122, here p. 109.

would look like if one included colonial settings.[27] On the other hand, scholars like Frederick Cooper and Megan Vaughan have downplayed the relevance of 'biopower' in the context of colonial rule in Africa, arguing that in most colonial settings power was "repressive" rather than "productive", more "arterial" than "capillary".[28]

It seems to me, however, that Cooper and Vaughan's dismissal is based on a reductionist reading of Foucault, which ignores that Foucault has described the rise of successive forms of power, technologies and governmental rationalities, which did not necessarily eclipse one another, but often continued to exist contemporaneously.[29] In other words, even if power was often more repressive than productive in twentieth-century Africa, this does not exclude *a priori* the possibility that biopower and biopolitics existed simultaneously. As Nancy Rose Hunt has stated in an article reviewing studies on motherhood and reproductive policies in Africa: "Foucault's notion of bio-power needs to be taken seriously for colonial Africa; these were not just extractive economies, but ones that wilfully, if ambivalently, promoted life."[30]

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[27] See, for instance, Stoler, Ann Laura, *Race and the Education of Desire. Foucault's History of Sexuality and the Colonial Order of Things,* Durham/London: Duke University Press, 1995, pp. 1–18 and on the concept of epistemological Eurocentrism Mudimbe, V.Y., *The Invention of Africa. Gnosis, Philosophy, and the Order of Knowledge,* Bloomington/Indianapolis: Indiana University Press, 1988, esp. pp. 19-20.

[28] Vaughan, Megan, *Curing their Ills. Colonial Power and African Illness,* Cambridge: Polity Press, 1991, pp. 8-12, quotes p. 10; Cooper, *Colonialism in Question,* pp. 48-49, quotes p. 48.

[29] The same reductionist reading can be found in other texts that have tried to apply Foucault's notions of biopolitics and governmentality to colonial settings, such as Scott, David, "Colonial Governmentality", *Social Text* 43 (1995), pp. 191–220 and Kalpagam, U., "Colonial Governmentality and the Public Sphere in India", *Journal of Historical Sociology* 15,1 (2002), pp. 35–58. On this, see also Stielike, Laura, *Wie regieren in Afrika? Eine genealogische Aussagenanalyse in gouvernementalitätstheoretischer Perspektive* (Diplomarbeit - Freie Universität Berlin, Otto-Suhr-Institut), 2009, esp. pp. 48-52.

[30] Hunt, Nancy Rose, "Fertility's Fires and Empty Wombs in Recent Africanist Writing", *Africa. Journal of the International African Institute* 75,3 (2005), pp. 421–435, here p. 429.

2. Historiographical Debates and Contexts

Its broad research agenda places this dissertation at the intersection of various historiographical fields and approaches within colonial history and history in general. It ties in with ongoing debates on the colonial state, demography and population politics, colonial medicine and Portuguese colonialism in general. Empirically rooted in and focusing on the history of Angola, the dissertation incorporates the existing literature on other (African) colonies and Europe – as well as additional research – to enrich the analysis with comparative and transnational perspectives.

The colonial state

In recent historiography, the colonial state has been characterized in many ways: as being deficient compared to Western Europe – due to the absence or insignificance of civil society and participation rights; as a particular political form based on the rule of difference; or as the form in which 'modern' statehood was transformed and implemented on a global scale. More important for this study, however, is that the colonial state in late nineteenth and twentieth century Africa – and often also in other continents – has been characterized as weak and marked by contradictions: almost permanently underfinanced and understaffed, it was unable to fulfil its own far-reaching claims to control and transform colonial territories and populations, which were often larger than those of their metropoles.[31] Counter to Crawford Young's vision of a more powerful and autonomous colonial state, Bruce Berman and others have convincingly argued that, especially before 1945 – when their bureaucratic apparatuses began to greatly expand due to increased funding – colonial states had only limited power insofar as these last relied heavily on African intermediaries, operated with little expert knowledge, and only had a fragmentary impact on African societies and cultures.[32]

To be sure, there were important variations across time and space, both between and within colonies and empires. But the propositions mentioned above are important reminders

[31] For these different perspectives, see Conrad, Sebastian, "Wissen als Ressource des Regierens in den deutschen und japanischen Kolonien des 19. Jahrhunderts", in: Risse, Thomas; Lehmkuhl, Ursula (eds.), *Regieren ohne Staat? Governance in Räumen begrenzter Staatlichkeit*, Baden-Baden: Nomos Verlagsgesellschaft, 2007, pp. 134–153 and Eckert, Andreas, "Vom Segen der (Staats-)Gewalt? Staat, Verwaltung und koloniale Herrschaftspraxis in Afrika", in: Lüdtke, Alf; Wildt, Michael; Algazi, Gadi (eds.), *Staats-Gewalt: Ausnahmezustand und Sicherheitsregimes. Historische Perspektiven* (Göttinger Gespräche zur Geschichtswissenschaft; 27), Göttingen: Wallstein-Verlag, 2008, pp. 145–165.

[32] Berman, *Perils*. Berman's article is a very convincing critique of Young, Crawford, *The African Colonial State in Comparative Perspective,* New Haven: Yale University Press, 1994. A similar view on the colonial state can be found in Eckert, *Segen*.

of the general constraints under which colonial states acted, and therefore invite scholars to look very carefully at what happened on the ground with colonial ideas and projects. The 'intermediarity' of colonial rule – or rather, its dependence on intermediaries – and the problems this entailed has received much attention in recent years. Various studies have shown that African intermediaries such as 'traditional' or newly appointed authorities, clerks, interpreters, soldiers, policemen and catechists were crucial for the functioning of the colonial state but that they were also difficult to control as they often followed their own agenda.[33] In addition to this, the German sociologist Trutz von Trotha has emphasized that the 'intermediarity' of colonial rule was twofold: the colonial state not only depended on African intermediaries ('external intermediarity'), but also on European local administrators ('internal intermediarity'). Especially in the early decades of colonial rule in Africa, these 'men on the spot' often acted independently from – and/or contrary to the policies devised by – the central administrations in the colonial capitals, and bringing them under more continuous and tight control was a long and difficult process.[34] Against the backdrop of this 'weakness paradigm', recent scholarship has also emphasized the feelings of vulnerability and helplessness colonial officials often experienced.[35]

The claim that colonial states governed with little expert knowledge is less unanimously agreed upon in that it runs counter to the idea of scientific colonialism, which was both a political imperative incessantly repeated by colonial regimes in the twentieth

[33] See Osborn, Emily Lynn, "'Circle of Iron'. African Colonial Employees and the Interpretation of Colonial Rule in French West Africa", *Journal of African History* 44,1 (2003), pp. 29–50; Rich, Jeremy, "Troubles at the Office. Clerks, State Authority and Social Conflict in Gabon (1920-1945)", *Canadian Journal of African Studies* 38,1 (2004), pp. 58–87; Jézéquel, Jean-Hervé, ""Collecting Customary Law". Educated Africans, Ethnographic Writings, and Colonial Justice in French West Africa", in: Lawrance, Benjamin N.; Osborn, Emily Lynn; Roberts, Richard L. (eds.), *Intermediaries, Interpreters, and Clerks,* Madison, Wis: University of Wisconsin Press, 2006, pp. 139–158; the essays in Lawrance, Benjamin N.; Osborn, Emily Lynn; Roberts, Richard L. (eds.), *Intermediaries, Interpreters, and Clerks,* Madison, Wis: University of Wisconsin Press, 2006; Eckert, Andreas, *Herrschen und Verwalten. Afrikanische Bürokraten, staatliche Ordnung und Politik in Tanzania, 1920 - 1970,* München: Oldenbourg, 2007; Glasman, Joel, "Penser les intermédiaires coloniaux. Note sur les dossiers de carrière de la police du Togo", *History in Africa* 37 (2010), pp. 51–81; Orosz, Kenneth J., "The 'Catechist War' in Interwar French Cameroon", in: White, Owen; Daughton, James Patrick (eds.), *In God's empire. French missionaries and the modern world,* Oxford: Oxford University Press, 2012, pp. 233–255. For medical intermediaries, see footnote 77.

[34] Trotha, Trutz von, "Was war Kolonialismus? Einige zusammenfassende Befunde zur Soziologie und Geschichte des Kolonialismus und der Kolonialherrschaft", *Saeculum. Jahrbuch für Universalgeschichte* 55 (2004), pp. 49–95, here pp. 63–64. On the functioning of colonial bureaucracies and the position of these local administrators, see also, in greater detail, Spittler, Gerd, *Verwaltung in einem afrikanischen Bauernstaat. Das koloniale Französisch-Westafrika, 1919-1939,* Freiburg: Steiner, 1981 and Trotha, Trutz von, *Koloniale Herrschaft. Zur soziologischen Theorie der Staatsentstehung am Beispiel des 'Schutzgebietes Togo',* Tübingen: Mohr, 1994.

[35] See Stoler, Ann Laura, *Carnal Knowledge and Imperial Power. Race and the Intimate in Colonial Rule,* Berkeley: University of California Press, 2002, esp. p. 10 and Reinkowski, Maurus; Thum, Gregor, "Introduction", in: Thum, Gregor; Reinkowski, Maurus (eds.), *Helpless imperialists. Imperial failure, fear and radicalization,* Göttingen: Vandenhoeck & Ruprecht, 2013, pp. 7–20.

century and an analytical concept used by historians to analyse the connection between knowledge (and/or science) and colonial rule.[36] Moreover, it appears to be contested by a vast body of literature on, for instance, colonial anthropology, geography, agriculture and tropical medicine, as well as by the existence of colonial schools in Europe destined to train future colonial officials in Africa in a variety of disciplines.[37] Yet the question as to whether colonial states ruled with 'little' or 'much' expert knowledge cannot be resolved with one general overarching answer. Discerning the answer to such a question is a matter of scale, comparison and needs and, above all, of perspective; what may seem to be much knowledge to a contemporary historian, who takes a macro view, may very well have been considered very little knowledge by the colonial officials on the ground at the time, given the immense territories and numerous populations that were each characterized by different living habits. Hence, while it is safe to say that all colonial powers produced and used forms of knowledge about colonial territories and populations, it might be prudent to bear in mind what Helen Tilley has recently concluded in her publication on colonial anthropology: that the "colonial project to order Africa [...] was inevitably a messier and less comprehensive endeavour than one might expect."[38]

The debate on the contingencies of colonial rule in Africa has much influenced my approach and analysis of population politics in Angola. It has induced me to look more carefully at the internal conflicts and limitations of the colonial state that underwrote (the

[36] For the concept and a differentiated, but generally rather affirmative view, see for instance Conrad, *Wissen als Ressource*; Sibeud, Emmanuelle, *Une science impériale pour l'Afrique. La construction des savoirs africanistes en France, 1878 - 1930,* Paris: Éditions de l'École des Hautes Études en Siences Sociales, 2002; Bonneuil, Christophe, "Development as Experiment. Science and State Building in Late Colonial and Postcolonial Africa, 1930-1970", *Osiris, 2nd Series* 15 (2000), pp. 258–281; Lagae, Johan, "'Het echte belang van de kolonisatie valt samen met dat van de wetenschap'. Over kennisproductie en de rol van wetenschap in de Belgische koloniale context", *Het geheugen van Congo. De koloniale tijd,* Tervuren: Koninklijk Museum voor Midden-Afrika, 2005, pp. 131–138; Tilley, Helen, *Africa as a Living Laboratory. Empire, Development, and the Problem of Scientific Knowledge, 1870-1950,* Chicago: Chicago University Press, 2011.

[37] From the vast bibliography on these subjects, see, by way of example, on anthropology: L'Estoile, Benôit de; Neiburg, Federico; Sigaud, Lygia, "Introduction. Anthropology and the Government of 'Natives', a Comparative Approach", in: L'Estoile, Benôit de; Neiburg, Federico; Sigaud, Lygia (eds.), *Empires, Nations, and Natives. Anthropology and State-Making,* Durham: Duke University Press, 2005, pp. 1–29; Wilder, Gary, "Colonial Ethnology and Political Rationality in French West Africa", in: Tilley, Helen; Gordon, Robert J. (eds.), *Ordering Africa. Anthropology, European imperialism and the politics of knowledge,* Manchester: Manchester University Press, 2007, pp. 336–375; on geography: Butlin, *Geographies of Empire*; on agriculture: Hodge, *Triumph of the Expert* and on tropical medicine Neill, Deborah Joy, *Networks in Tropical Medicine. Internationalism, Colonialism, and the Rise of a Medical Specialty, 1890-1930,* Stanford: Stanford University Press, 2012. On colonial schools, see for instance Ruppenthal, Jens, *Kolonialismus als "Wissenschaft und Technik". Das Hamburgische Kolonialinstitut 1908 bis 1919*, Stuttgart: Steiner, 2007; Wilder, *Colonial Ethnology* and Lagae, *Het echte belang van de kolonisatie*.

[38] Tilley, Helen, "Introduction. Africa, imperialism, and anthropology", in: Tilley, Helen; Gordon, Robert J. (eds.), *Ordering Africa. Anthropology, European imperialism and the politics of knowledge,* Manchester: Manchester University Press, 2007, pp. 1–45, here pp. 1–2.

implementation of) these policies and, hence, to be more attentive to the tension between colonial discourse and the "contested, fragmentary and often ineffective nature of colonial practices", and consequently to see failure as almost inherent to colonial rule and not as a deviation from the norm.[39] It has also caused me to pay greater attention to the vulnerabilities, anxieties and "epistemological worries" of colonial officials.[40] Finally, it has increased my levels of scepticism of the analytical value of theories, like Boaventura de Sousa Santos' idea of Portugal's colonial subalternity, which have claimed the exceptionalism of Portuguese colonial rule by referring to its particular level of weakness.[41] Given the expanding literature on the weakness of other colonial states, I believe that the analysis of Portuguese colonialism should rather begin with the assumption, recently formulated by Alexander Keese as well, that the differences between Portuguese and other colonialisms were not absolute but at most a question of gradation and that "Portuguese colonialism is in its own ways representative of European colonial practices".[42]

Thus far, how the colonial state actually functioned has received very little attention in the historiography on late nineteenth- and twentieth-century Angola and more in general Portuguese colonialism. In his doctoral dissertation, Alexander Keese has examined reformist attitudes within Portuguese colonial bureaucracies in Africa and Portugal, especially between 1945 and 1960, and, in a recent article, he has looked at the mindset and actions of local administrators in Angola with respect to labour recruitment in the 1930s and 1940s.[43] Philip Havik has recently studied the role of appointed chiefs and native employees in Portuguese Guinea, but he has also argued that, for the Portuguese colonies in general, their role is still unclear.[44] Furthermore, in a case study on Eastern Angola, Ricardo Roque has shown how feelings of vulnerability shaped colonial actions and discourse alike.[45] In the last two decades,

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[39] Duncan, James S., *In the Shadows of the Tropics. Climate, Race and Biopower in Nineteenth Century Ceylon,* Aldershot: Ashgate, 2007, pp. 2-4, quote p. 2.

[40] Stoler, Ann Laura, *Along the archival grain. Epistemic anxieties and colonial common sense,* Princeton: Princeton University Press, 2008, pp. 3 (quote).

[41] Santos has argued that Portuguese colonialism was different and subaltern, because it was marked by its "incapacity to colonize efficiently" and simultaneously by its 'particular' dependency on Great Britain. See Santos, Boaventura de Sousa, "Between Prospero and Caliban. Colonialism, Postcolonialism, and Inter-identity", *Luso-Brasilian Review* 39,2 (2002), pp. 9–43, quote p. 9. Building on Santos' earlier writings, a similar viewpoint is expressed in Feldman-Bianco, Bela, "Colonialism as a Continuing Project. The Portuguese Experience", *Identities. Global Studies in Culture and Power* 8,4 (2001), pp. 477–482.

[42] Keese, *Reluctant Hands,* p. 241 (quote).

[43] Keese, *Living with Ambiguity*; Keese, *Reluctant Hands*.

[44] Havik, Philip J., "'Direct' or 'indirect' rule? Reconsidering the roles of appointed chiefs and native employees in Portuguese West Africa", *Africana Studia* 15 (2010), pp. 29–56; Havik, Philip J., "Tchon I Renansa. Colonial Governance, Appointed Chiefs and Political Change in 'Portuguese Guinea'", in: Keese, Alexander (ed.), *Ethnicity and the long-term perspective (*CEAUP Studies on Africa; 1), Bern: Lang, 2010, pp. 155–190.

[45] Roque, Ricardo, *The Razor's Edge. Portuguese Imperial Vulnerability in Colonial Moxico, Angola,* in: Penvenne, Jeanne Marie (ed.), *Colonial Encounters between Africa and Portugal* = The International Journal of African Historical Studies 36,1 (2003), pp. 105–124.

various scholars have also critically examined the production of colonial knowledge, particularly in the fields of anthropology and geography.[46] However, as Ricardo Roque has emphasized with regard to the field of colonial anthropology, studies have often focused on agents and practices of production but have failed to analyse how colonial agents on the ground used this knowledge.[47]

Population politics and demography

This dissertation is also a contribution to the historiography on demographic crises and population politics. There exists a vast body of scholarship on how states, scientists and other actors have constructed, perceived and dealt with the 'population problem' in the nineteenth and twentieth. Over the last two or three decades, two major strands of research have emerged.

Many scholars have analysed the decline of fertility, first in France in the mid-nineteenth century and then, around the turn of the century, in other European countries. While this was initially the field of historical demography, social and cultural historians have, from the 1980s onwards, shifted their focus from the statistical reconstruction of falling birth rates to the fears of general population decline and the scientific and political debates and programmes these provoked.[48] They showed how contemporaries conceived of decline in either quantitative or qualitative terms, and often both. Numerical decline was something to be feared because a large and growing population was considered necessary to maintain and increase, through industry and military, the power of the nation. Population growth was also

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[46] By way of example, for Portuguese colonial anthropology see Roque, *Antropologia e império*; Roque, Ricardo, "A Antropologia Colonial Portuguesa (c. 1911-1950)", in: Curto, Diogo Ramada (ed.), *Estudos de Sociologia da Leitura em Portugal no Século XX,* Lisboa: Fundação Calouste Gulbenkian; Fundação para a Ciência e Tecnologia, 2006, pp. 789–822; Roque, Ricardo, *Headhunting and Colonialism. Anthropology and the Circulation of Human Skulls in the Portuguese Empire, 1870-1930,* Basingstoke/New York: Palgrave Macmillan, 2010; Santos, Gonçalo Duro dos, "The Birth of Physical Anthropology in Late Imperial Portugal", *Current Anthropology* 53,S5 (2012), pp. S33-S55. For geography, see Santos, Maria Emília Madeira; Lobato, Manuel (eds.), *O domínio da Distância. Comunicação e Cartografia,* Lisboa: Instituto de Investigação Científica Tropical, 2006. For Portuguese colonial science in general, see for instance Martins, Ana Cristina; Albino, Teresa (eds.), *Viagens e Missões Científicas nos Trópicos, 1883-2010,* Lisboa: Instituto de Investigação Científica Tropical, 2010 and Rollo, Maria Fernando; Queiroz, Maria Inês; Brandão, Tiago, "Pensar e Mandar fazer Ciência. Princípios e pressupostos da criação da Junta de Educação Nacional na génese da política de organização científica do Estado Novo", *Ler História* 61 (2011), pp. 105–145.

[47] Roque, Ricardo, "Equivocal Connections. Fonseca Cardoso and the Origins of Portuguese Colonial Anthropology", *Portuguese Studies* 19 (2003), pp. 80–109, here pp. 82–83.

[48] For an authoritative analysis of the characteristics and causes of fertility decline by historical demographers, see Coale, Ansley J. (ed.), *The decline of fertility in Europe. The revised proceedings of a Conference on the Princeton European Fertility Project (July 1979),* Princeton: Princeton University Press, 1986. For the crisis of historical demography in the 1980s and the subsequent turn toward a political history of population, see Rosental, Paul-André, "Pour une histoire politique des populations", *Annales. Histoire, Sciences Sociales* 61,1 (2006), pp. 7–29.

seen as a sign of national well-being. On the other hand, the decline in birth rates strengthened discourses of degeneration, as it was believed that the decline in fertility was greater among the 'educated classes' than among the 'lower and dangerous classes', and that this in turn would result in a growing dominance of 'undesirable elements'. Historians have also largely shown that each fear corresponded to a different intellectual answer and political programme – pronatalism and eugenics respectively. They have argued that, although these policies often occurred simultaneously, pronatalist policies prevailed in Catholic countries and eugenic policies, until 1945, in Protestant ones.[49] Both pronatalist and eugenicist debates and policies have received much scholarly attention, in Portugal as well. Studies on these issues have coincided with studies on gender and reproduction, as well as race and hygiene.[50]

Over the past ten to fifteen years, historians have also begun to explore the global dimensions of the population problem and thereby have, in particular, focused on the global population control movement after the Second World War. Scholars like Matthew Connelly and Marc Frey have influentially shown how, between the late 1940s and early 1980s, neo-Malthusian (and eugenicist) concerns regarding rapid population growth burgeoned in many national contexts as well as on the international stage, triggering numerous programmes

[49] Winter, Jay M., "The Fear of Population Decline in Western Europe, 1870-1940", in: Hiorns, R. W. (ed.), *Demographic Patterns in Developed Societies,* London: Taylor & Francis, 1980, pp. 173–197; Teitelbaum, Michael S.; Winter, Jay, *The fear of population decline,* Orlando: Academic Press, 1985; Schneider, William H., *Quality and quantity. The quest for biological regeneration in twentieth century France,* Cambrdige: Cambridge University Press, 1990; Soloway, Richard Allen, *Demography and degeneration. Eugenics and the declining birthrate in twentieth century Britain,* Chapel Hill: University of North Carolina Press, 1990; Cole, Joshua, *The power of large numbers. Population, politics, and gender in nineteenth-century France,* Ithaca: Cornell University Press, 2000.

[50] In addition to the literature in the previous footnote, see, on pronatalist policies, especially Thébaud, Françoise, "Le Mouvement nataliste dans la France de l'entre-deux-guerres. L'Alliance nationale pour l'accroissement de la population française", *Revue d'histoire moderne et contemporaine* 32 (1985), pp. 276–301; Bock, Gisela, "Antinatalism, maternity and paternity in National Socialist racism", in: Bock, Gisela; Thane, Pat (eds.), *Maternity and Gender Policies. Women and the Rise of the European Welfare States, 1880s-1950s,* London: Routledge, 1991, pp. 233–255; Pedersen, Susan, *Family, dependence, and the origins of the welfare state. Britain and France, 1914 - 1945,* Cambridge: Cambridge University Press, 1995; Cova, Anne, "Où en est l'histoire de la maternité", *CLIO. Histoire, femmes et sociétés* 21 (2005), pp. 189–211; Andersen, Margaret Cook, "Creating French Settlements Overseas. Pronatalism and Colonial Medicine in Madagascar", *French Historical Studies* 33,3 (2010), pp. 417–444. The historiography on eugenics is even vaster, see, for instance, Weindling, Paul, *Health, Race and German Politics between National Unification and Nazism, 1870 - 1945,* Cambridge: Cambridge University Press, 1989; Adams, Mark B. (ed.), *The Wellborn Science: Eugenics in Germany, France, Brazil, and Russia,* New York/Oxford: Oxford University Press, 1990; Turda, Marius; Weindling, Paul Julian (eds.), *'Blood and Homeland'. Eugenics and Racial Nationalism in Central and Southeast Europe, 1900 - 1940,* Budapest, New York: Central European University Press, 2007 and also the helpful literature review in Dikötter, Frank, "Race Culture. Recent Perspectives on the History of Eugenics", *The American Historical Review* 103,2 (1998), pp. 467–478. For Portugal, see Pimentel, Irene Flunser, "A assistência social e familiar do Estado Novo nos anos 30 e 40", *Análise Social* 34,151-152 (1999), pp. 477–508; Pimentel, Irene Flunser, *Mocidade Portuguesa Feminina,* Lisboa: Esfera dos Livros, 2007; Pimentel, Irene, "O aperfeiçoamento da raça. A eugenia na primeira metade do século XX", *História* 20,3 (1998), pp. 18–27; Pereira, Ana Leonor, *Darwin em Portugal (1865-1914),* Lisboa: Livraria Almedina, 2001; Matos, Patrícia Ferraz de, "Aperfeiçoar a 'raça', salvar a nação. Eugenia, teorias nacionalistas e situação colonial em Portugal", *Trabalhos de Antropologia e Etnologia* 50 (2010), pp. 89–111.

aimed at monitoring and limiting population growth especially in what actors had begun to refer to as the 'Third World'. The two have argued that a small, but powerful transnational epistemic community – supported by US-based organisations like the Population Council, the International Planned Parenthood Federation and the Ford Foundation – had dominated the debate.[51] There is also a growing number of case studies that show how 'family planning' programmes functioned in national contexts, i.e., how they were enmeshed with imperatives of modernization and development or implemented through the distribution of contraceptives and sterilization procedures.[52] And, by paying more attention to geopolitical and environmental concerns, Alison Bashford has retraced the genealogy of the global overpopulation discourse back to the Interwar Period.[53]

Through the analysis of colonial anxieties over population decline and of the population politics in Portuguese Angola, this dissertation addresses the blind spots of these two strands of research. It reveals that debates on fertility decline, pronatalism and eugenics not only occurred in Europe but also in colonial Africa, and that 'colonial' discussions and policies in this matter were often closely connected to those in Europe. And by demonstrating the dominance and persistence of depopulation anxieties in Angola until at least the late 1940s (and by showing that this was not an exceptional case), it cautions against generalizing overpopulation anxieties for that period.

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[51] Connelly, Matthew, "Population Control is History. New Perspectives on the International Campaign to Limit Population Growth", *Comparative Studies in Society and History* 45,1 (2003), pp. 122–147; Connelly, Matthew, *Fatal Misconception. The Struggle to Control World Population,* Cambridge, Mass./London: Belknap Press of Harvard University Press, 2008; Frey, Marc, "Experten, Stiftungen und Politik. Zur Genese des globalen Diskurses über Bevölkerung seit 1945", *Zeithistorische Forschungen/Studies in Contemporary History* 4,1-2 (2007). online http://www.zeithistorische-forschungen.de/16126041-Frey-2-2007; Frey, Marc, "Neo-Malthusianism and development. Shifting interpretations of a contested paradigm", *Journal of Global History* 6 (2011), pp. 75–97; Sharpless, John, "Population Science, Private Foundations, and Development Aid. The Transformation of Demographic Knowledge in the United States, 1945-1965", in: Cooper, Frederick; Packard, Randall (eds.), *International development and the social sciences. Essays on the history and politics of knowledge,* Berkeley, Calif.: University of California Press, 1997, pp. 176–200.

[52] See, for instance, Briggs, Laura, *Reproducing Empire. Race, Sex, Science, and U.S. Imperialism in Puerto Rico,* Berkeley: University of California Press, 2002. For an overview of the literature on population control through contraceptives and surgical interventions, see Olszynko-Gryn, Jesse, "Laparoscopy as a technology of population control. A use-centred history of surgical sterilization", in: Hartmann, Heinrich; Unger, Corinna R. (eds.), *A World of Populations. Transnational Perspectives on Demography in the Twentieth Century,* New York/Oxford: Berghahn Books, 2014 (forthcoming). For family planning, see also Unger, Corinna R., "Family Planning: A Rational Choice? The Influence of Systems Approaches, Behavioralism, and Rational Choice Thinking on Mid-Twentieth Century Family Planning Programs", in: Hartmann, Heinrich; Unger, Corinna R. (eds.), *A World of Populations. Transnational Perspectives on Demography in the Twentieth Century,* New York/Oxford: Berghahn Books, 2014 (forthcoming).

[53] Bashford, Alison, "Nation, Empire, Globe. The Spaces of Population Debate in the Interwar Years", *Comparative Studies in Society and History* 49,1 (2007), pp. 170–201; Bashford, Alison, "Population, Geopolitics, and International Organizations in the Mid Twentieth Century", *Journal of World History* 19,3 (2008), pp. 327–348 and Bashford, Alison, *Global Population. History, Geopolitics, and Life on Earth,* New York: Columbia University Press, 2014 (forthcoming) .

By doing so, this dissertation ties in with a body of literature that has already analysed depopulation anxieties in colonial Africa and the Pacific. With regard to colonial Africa, these studies have shown how, varying in time and place, contemporary European observers attributed population decline to a vast array of causes, most notably deadly diseases, low fertility, high infant mortality, the persistence of native customs, outbound migration as well as the nefarious influence of colonial rule.[54] There are also many studies that analyse the actual *measures* devised by colonial regimes to counter depopulation. Scholars like Nancy Rose Hunt (for the Belgian Congo) and Lynn Thomas (for Kenya), for instance, have provided detailed studies on colonial interventions with regard to African women's reproductive life.[55] There is also a vast body of literature on campaigns against epidemics and other diseases, aimed at reducing mortality.[56] Measures against outbound migration, by

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[54] On depopulation anxieties in the Pacific, see Brantlinger, Patrick, *Dark Vanishings. Discourse on the extinction of primitive races, 1800 - 1930,* Ithaca, NY: Cornell University Press, 2003, pp. 141–163 and the work of Alexandra Widmer on Melanesia, especially Widmer, Alexandra, "Of Field Encounters and Metropolitan Debates. Research and the Making and Meaning of the Melanesian 'Race' during Demographic Decline", *Paideuma* 58 (2012), pp. 69–93. For colonial Africa, see especially Ittmann, Karl, "'Where Nature Dominates Man'. Demographic Ideas and Policy in British Colonial Africa, 1890-1970", in: Ittmann, Karl; Cordell, Dennis D.; Maddox, Gregory H. (eds.), *The Demographics of Empire. The Colonial Order and the Creation of Knowledge,* Ohio: Ohio University Press, 2010, pp. 59–88; Cinnamon, John M., "Counting and Recounting. Dislocation, Colonial Demography, and Historical Memory in Northern Gabon", in: Ittmann, Karl; Cordell, Dennis D.; Maddox, Gregory H. (eds.), *The Demographics of Empire. The Colonial Order and the Creation of Knowledge,* Ohio: Ohio University Press, 2010, pp. 130–156; McCurdy, Sheryl A., "Disease and Reproductive Health in Ujiji, Tanganyika. Colonial Discourse and Missionary Discourses Regarding Islam and a 'Dying Population'", in: Ittmann, Karl; Cordell, Dennis D.; Maddox, Gregory H. (eds.), *The Demographics of Empire. The Colonial Order and the Creation of Knowledge,* Ohio: Ohio University Press, 2010, pp. 174–197; van Beusekom, Monica M., "From Underpopulation To Overpopulation. French Perceptions Of Population, Environment, and Agricultural Development In French Soudan (Mali), 1900-1960", *Environmental History* 4,2 (1999), pp. 198–219; Sanderson, Jean-Paul, "Le Congo belge entre mythe et réalité. Une analyse du discours démographique colonial", *Population* 55,2 (2000), pp. 331–355 and Bendix, Daniel, "The Colonial Fear of 'Underpopulation'. Debates on Health and Population in German East Africa", online http://www.freiburg-postkolonial.de/pdf/2010-Bendix-colonial-fear-of-underpopulation.pdf, last accessed 27.12.2013. For short references, see also Headrick, Rita, "Studying the Population of French Equatorial Africa", in: Fetter, Bruce (ed.), *Demography from Scanty Evidence. Central Africa in the Colonial Era,* Boulder: Lynne Rienner Publishers, 1990, pp. 273–298, here p. 273; Foucrier, Annick, "Populations Coloniales", *Annales de Démographie Historique* 113 (2007), pp. 5–11, here p. 7. In his study on the Bunyoro society in Uganda, Doyle also addresses fears of population decline, but his study is ultimately one that examines the impact of colonialism on health and demography and that tries to reconstruct and explain demographic trends. See Doyle, Shane, "Population Decline and Delayed Recovery in Bunyoro, 1860-1960", *Journal of African History* 41,3 (2000), pp. 429–458.

[55] Hunt, Nancy Rose, "Le Bébé en brousse. European Women, African Birth Spacing and Colonial Intervention in Breast Feeding in the Belgian Congo", *International Journal of African Historical Studies* 21,3 (1988), pp. 401–432; Hunt, Nancy Rose, *A Colonial Lexicon of Birth Ritual, Medicalization, and Mobility in the Congo,* Durham: Duke University Press, 1999; Hunt, Nancy Rose, "Colonial Medical Anthropology and the Making of the Central African Infertility Belt", in: Tilley, Helen; Gordon, Robert J. (eds.), *Ordering Africa. Anthropology, European imperialism and the politics of knowledge,* Manchester: Manchester University Press, 2007, pp. 252–281; Thomas, Lynn, *Politics of the Womb. Women, Reproduction and the State in Kenya,* Berkeley: University of California Press, 2003. Summers, Carol, "Intimate Colonialism. The Imperial Production of Reproduction in Uganda, 1907-1925", *Signs* 16,4 (1991), pp. 787–807

[56] See below.

contrast, have received less attention.[57] My dissertation adopts a comprehensive approach in that it analyses population politics (and anxieties) with regard to fertility, mortality and migration all together.

In comparison to the existing literature, this dissertation also takes a more detailed look at the precise role of demographic knowledge. Indeed, in my analysis of the depopulation discourse in Angola, I will ask how, at different times and by different actors, demographic arguments were constructed and used to provoke and/or legitimise population policies. Historians generally agree that when establishing assumptions about demographic change colonial actors before 1945 only had scarce, mostly unreliable and sometimes even contradictory demographic data at their disposal.[58] Already in 1937, the eminent demographer René Kuczynski rightly criticized the "appalling" extent to which colonial officials were "tempted to draw far-reaching conclusions from the scanty population data at their disposal".[59]

There are two dimensions to this important insight, both of which might call into question the 'scientific' nature of colonialism. First, there is the problem of data production. It will be my task to show how and why different groups of colonial actors in Portuguese Angola produced demographic data and why these data were scarce, often imprecise and inconclusive and at times even contradicted one another. I will therefore look at the rationalities that underpinned data production and the methods used. Second, there is the problem of interpretation and use. How did colonial actors reach their conclusions? Why did they believe and/or use certain data and not others? Why did certain figures circulate and not others, and what were the consequences?

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[57] Often, studies only analyse the reasons for this migration and the corresponding colonial discourse without looking for the countermeasures. See, for instance, Asiwaju, A. I., "Migrations as Revolt. The Example of the Ivory Coast and Upper Volta before 1945", *Journal of African History* 17,4 (1976), pp. 577–594; Manchuelle, François, *Willing migrants. Soninke labor diasporas, 1848 - 1960,* Athens, Ohio: Ohio University Press, 1997, pp. 146–179.

[58] For the difficulties and contingencies of demographic knowledge production in colonial Africa, see especially Gervais, Raymond R., "Contrôler, compter, comparer. La production et la gestion de l'information démographique en Haute-Volta avant 1960", *Histoire et Mesure* 13,1-2 (1998), pp. 59–76; Gervais, Raymond R.; Mandé, Issiaka, "Comment compter les sujets de l'empire? Les étapes d'une démographie impériale en AOF avant 1946", *Vingtième Siècle. Revue d'Histoire* 95 (2007), pp. 63–74, and Gervais, Raymond R.; Mandé, Issiaka, "How to Count the Subjects of Empire? Steps toward an Imperial Demography in French West Africa before 1946", in: Ittmann, Karl; Cordell, Dennis D.; Maddox, Gregory H. (eds.), *The Demographics of Empire. The Colonial Order and the Creation of Knowledge,* Ohio: Ohio University Press, 2010, pp. 89–112. See also van den Bersselaar, Dmitri, "Establishing the Facts. P. A. Talbot and the 1921 Census of Nigeria", *History in Africa* 31 (2004), pp. 69–102 and, for French Indochina, Barbieri, Magali, "De l'utilité des statistiques démographiques de l'Indochine française (1862-1954)", *Annales de Démographie Historique* 113 (2007), pp. 85–126. The inferior quality of colonial demographic data is also widely acknowledged by students of historical demography (see below).

[59] Kuczynski, Robert René, *Colonial Population,* Oxford: Oxford University Press, 1937, pp. xii–xiii.

To contextualize colonial demography, one will have to bear in mind that before the 1940s demography was not yet consolidated as an academic discipline or as a profession in its own right, in Europe as well as in the United States. In the first decades of the twentieth century, population research in Europe and in the US was conducted by scholars from different disciplines, most notably biologists, economists, statisticians and doctors. Only from the late 1920s onwards did demography slowly become a 'proper' science with its own specialized associations and institutions.[60] Professionalization was even slower with regard to Europe's African colonies. Kuczynski was one of the first professional demographers to have studied African populations in the late 1930s and 1940s, first at the London School of Economics and later at the British Colonial Office.[61] For many colonies, this happened only in the 1950s alongside the development of methodologically more refined sample surveys and censuses.[62] The evolution in Portugal and its colonies followed these general trends. A Centre for Demographic Studies *(Centro de Estudos Demográficos – CED)* was established in Lisbon in 1944, with its own journal appearing from 1945 onwards. Yet, colonial populations inspired very little academic research before the mid-1950s regardless of the fact that 'modern' censuses had already been conducted in Angola and Mozambique in 1940.[63]

[60] See Greenalgh, Susanne, "The Social Construction of Population Science. An Intellectual, Institutional, and Political History of Twentieth-Century Demography", *Comparative Studies in Society and History* 38,1 (1996), pp. 26–66, esp. pp. 30; 34-41; Rosental, Paul-André, "Wissenschaftlicher Internationalismus und Verbreitung der Demographie zwischen den Weltkriegen", in: Krassnitzer, Patrick; Overath, Petra (eds.), *Bevölkerungsfragen. Prozesse des Wissenstransfers in Deutschland und Frankreich (1870 - 1939),* Köln: Böhlau, 2007, pp. 255–291; Overath, Petra, "Bevölkerungforschung transnational. Eine Skizze zu Interaktionen zwischen Wissenschaft und Politik am Beispiel der 'International Union for the Scientific Study of Population'", in: Overath, Petra (ed.), *Die vergangene Zukunft Europas. Bevölkerungsforschung und -prognosen im 20. und 21. Jahrhundert,* Köln - Weimar - Wien: Böhlau, 2011, pp. 57–83.

[61] See Kuczynski, *Colonial Population*; Kuczynski, Robert René, *The Cameroons and Togoland. A demographic study,* London: Oxford University Press, 1939 and especially Kuczynski, Robert René, *Demographic Survey of the British Colonial Empire*, 3 vols, London/New York: Oxford University Press, 1948-1953. On Kuczynski's colonial studies, see Ittmann, *'Where Nature Dominates Man',* pp. 67–68.

[62] See Lorimer, Frank, "Introduction", in: Brass, William (ed.), *The demography of tropical Africa,* Princeton: Princeton University Press, 1968, pp. 3–11 and the other articles in this seminal publication. For French surveys in the mid-1950s, see also van Beusekom, *From Underpopulation To Overpopulation* and for the Belgian Congo, see Romaniuk, Anatole, *Démographie Congolaise au milieu du XXe Siècle. Analyse de l'enquête sociodémographique 1955-1957,* Louvain-la-Neuve: Presses Universitaires de Louvain, 2006 [1961] and Fetter, Bruce, "Demography in the Reconstruction of African Colonial History", in: Fetter, Bruce (ed.), *Demography from Scanty Evidence. Central Africa in the Colonial Era,* Boulder: Lynne Rienner Publishers, 1990, pp. 1–22, here p. 12.

[63] For the creation of the CED, see Baptista, Maria Isabel Rodrigues, "A demografia em Portugal. Um percurso bibliográfico", *Análise Social* 42,183 (2007), pp. 539–579, here p. 541. The history of this institute still needs to be studied. Articles on colonial demography were only published in the *Revista do Centro de Estudos Demográficos* from the 1950s onwards. Still in the mid-1950s, Nuno Alves Morgado, who would become one of the most active Portuguese students of colonial demography, lamented that there were no courses on colonial demography in Portugal and that academic research was almost inexistent. See Morgado, Nuno Alves, "A demografia do Ultramar português. Estudo descritivo e crítico da posição actual no que se refere a documentação estatística e estudos relativos à demografia ultramarina", *Revista do Centro de Estudos Demográficos* 9 (1954-55), pp. 71–283, here pp. 165–166. On colonial censuses, see especially Heisel, Donald, *The Indigenous Populations of the Portuguese African Territories* (Ph.D. Dissertation - University of Wisconsin), 1966 and Heisel, Donald, "The Demography of the Portuguese Territories. Angola, Mozambique and Portuguese Guinea",

Of course, it will be necessary to acknowledge the possibility that arguments regarding demographic change were not – or only to a marginal extent – based on numbers. In a case study on shifting demographic discourses in French West Africa, Monica van Beusekom has thus argued that colonial officials based their assessments on under- and overpopulation, and from the mid-1940s on rapid population growth, on their interpretation of local economic and environmental constraints and not on scarce and unreliable demographic data.[64] Even if van Beusekom's view might be somewhat overdetermined by her focus on agricultural officials (and not, for instance, on the more demography-minded medical doctors), her interpretation raises questions about the (cor)relation between demographic assumptions and data. Her article underlines that figures and discourse were not necessarily congruent and that there was a plurality of views.

The question of how colonial actors not only produced, but also interpreted, debated, used and disseminated demographic intelligence is a recurrent theme in this study. It is a question that has rarely been addressed in the historiography on colonial Africa, due perhaps to disciplinary boundaries.

On the one hand, this kind of approach, which is indebted to cultural history and social constructivism, diverges from how Africanist historical demographers have traditionally looked at demography. Scholars like Bruce Fetter and Dennis Cordell have long acknowledged the scarcity of reliable data on African population movements, their analytical focus has neither been on the causes of this problem – that is, the often contradictory rationalities and practicalities of knowledge production in the colonial realm – nor on the uses colonial officials and other contemporaries nevertheless made of these data. Their main interest has instead been to discover and correct the shortcomings of colonial censuses and other demographic sources, so that this "scanty evidence" might still be used to reconstruct demographic 'realities', as well as to examine the influence of colonialism on African demographic regimes (fertility, mortality and migration) and vice versa.[65] This has also been

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in: Brass, William (ed.), *The demography of tropical Africa,* Princeton: Princeton University Press, 1968, pp. 440–465.

[64] van Beusekom, *From Underpopulation To Overpopulation*. According to Beusekom, more reliable data only became available in the mid-1950s.

[65] By way of example, see Cordell, Dennis D., "Où sont tous les enfants? La faible fécondité en Centrafrique, 1890-1960", in: Cordell, Dennis D.; Gauvreau, Danielle; Gervais, Raymond R.; Le Bourdais, Céline (eds.), *Population, Reproduction, Sociétés. Perspectives et Enjeux de la Démographie Sociale, Mélanges en l'honneur de Joel W. Gregory,* Montréal: Les Presses de l'Université de Montréal, 1993, pp. 257–282; Cordell, Dennis D; Gregory, Joel W; Piché, Victor, *Hoe and wage. A social history of a circular migration system in West Africa,* Boulder, Colo.: Westview Press, 1996, esp. pp. 32-35; Fetter, Bruce, "Decoding and Interpreting African Census Data. Vital Evidence from an Unsavory Witness", *Cahiers d'Études Africaines* 27,1/2 (1987), pp. 83–105; Fetter, *Demography in the Reconstruction*.

the dominant perspective of the few studies that have been carried out on colonial demography in Angola, from the early work in the 1960s of Donald Heisel – a scholar connected to the Office of Population Research in Princeton and the Population Council in New York – on the Portuguese colonial census of 1940 and 1950 to the articles by Heywood and Thornton on the demographic notes of a nineteenth-century explorer and twentieth-century administrative censuses on the Ovimbundu.[66]

On the other hand, the debate on the colonial census, initiated in the 1980s by Bernard Cohn and Benedict Anderson, has mostly evolved around censuses in South East Asia, notably British India, and has concentrated on different issues. Above all, scholars have identified the "classifying mind" (Anderson) of the colonial census, criticized its constructivist yet objectifying character of ethnic categories and castes, and drawn attention to the social consequences of these classifications for postcolonial societies.[67] Some scholars have taken this focus and applied it to the classificatory logics of (post)colonial censuses in Africa.[68] Notwithstanding, the same scholars have also raised interesting questions about the rationalities and practicalities of colonial censuses. Whereas Anderson has argued that in colonial South East Asia the census gradually became an instrument of knowledge in the latter half of the nineteenth century, Appadurai has claimed that, in British-ruled India, quantification in general lost its utilitarian character, thus becoming "part of the illusion of

[66] See Heisel, *Indigenous Populations*; Heisel, *Demography*; Heywood, Linda; Thornton, John, "African Fiscal Systems as Sources for Demographic History. The Case of Central Angola, 1799-1920", *Journal of African History* 29,2 (1988), pp. 213–228; Heywood, Linda; Thornton, John, "Demography, Production, and Labor. Central Angola, 1890-1950", in: Cordell, Dennis D.; Gregory, Joel W. (eds.), *African Population and Capitalism. Historical Perspectives,* 2nd ed., Boulder; London: Westview Press, 1994 [1987], pp. 241–254. José Curto, by contrast, has paid greater attention to the rationalities and practicalities of census taking in his analysis of late eighteenth- and early nineteenth-century censuses in Angola. See Curto, José C., "Sources for the pre-1900 Population History of Sub-Saharan Africa. The Case of Angola, 1773-1845", *Annales de Démographie Historique* (1994), pp. 319–338; Curto, José C., "The Anatomy of a Demographic Explosion: Luanda, 1844-1850", *The International Journal of African Historical Studies* 32,2/3 (1999), pp. 381–405; Curto, José C.; Gervais, Raymond R., "The Population History of Luanda during the Late Atlantic Slave Trade, 1781-1844", *African Economic History* 29 (2001), pp. 1–59.

[67] Key texts are Cohn, Bernard S, "The census, social structure and objectification in South Asia", in: Cohn, Bernard S., *An anthropologist among the historians and other essays,* Delhi/Oxford: Oxford University Press 1990 [1987], pp. 224–254 and Anderson, Benedict, *Imagined Communities. Reflections on the Origin and Spread of Nationalism, Revised Edition,* London/New York: Verso, 1991, pp. 164-170 (here quote p. 165). See also the critique in Appadurai, Arjun, "Number in the Colonial Imagination", in: Breckenridge, Carol Appadurai; van der Veer, Peter (eds.), *Orientalism and the postcolonial predicament. Perspectives on South Asia (*New cultural studies), Philadelphia: University of Pennsylvania Press, 1993, pp. 314–339, here pp. 314–316.

[68] See for instance Christopher, A. J., "'To define the indefinable'. Population classification and the census in South Africa", *Area* 34,4 (2002), pp. 401–408; Uvin, Peter, "On Counting, Categorizing and Violence in Burundi and Rwanda", in: Kertzer, David (ed.), *Census and identity. The politics of race, ethnicity, and language in national censuses,* Cambridge: Cambridge University Press, 2002, pp. 148–175 and, to a lesser extent, van den Bersselaar, *Establishing the Facts*. Van den Bersselaar also discusses how demographic data were collected, discussed and even corrected.

bureaucratic control".[69] Peabody, in turn, has drawn attention to the continuity between pre-colonial and colonial forms of census taking and the crucial role of native intermediaries as informants and/or census takers in colonial India.[70] Overall, however, these postcolonialist contributions have not discussed how census results tied in with debates on population growth or decline and corresponding policies.

Colonial Medicine

An important part of this dissertation is devoted to Portuguese health policies in Angola. In order to analyse the Portuguese response to sleeping sickness, the establishment of a rudimentary public health system and the doctors' concern with infant mortality, I made use of a vast and continuously growing body of international literature on colonial medicine in Africa.[71] My analysis draws on three major turns that have been redefining the field since the 1970s and that have mostly parallelled more general turns in the historiography of colonialism.

The first of these turns occurred in the 1970s-1980s, when the often heroic narrative of medical progress, which focussed on the conquest of particular (tropical) diseases and the achievements of 'great European men', gave way, in academic publications, to a more critical view that paid greater attention to the social, political, cultural and economic contexts of health, disease and medicine.[72] Consolidated by the publication in 1988 of two collective volumes, edited by David Arnold and Roy MacLeod respectively, and reaffirmed in 1992 by another collective volume by Steven Feierman and John Janzen, this shift has led historians even today to critically reassess the connection between medicine and imperialism.[73] Drawing upon Daniel Headrick's influential work on the role of technology and infrastructure in nineteenth-century European imperialism, some have questioned the disinterested, humanitarian and benevolent character of colonial medicine and reframed it as a 'tool of empire', needed by colonial powers to penetrate, control and exploit the territories under their

[69] Anderson, *Imagined communities,* pp. 168–169; Appadurai, *Number in the colonial imagination,* pp. 317 (quote here).
[70] Peabody, Norbert, "Cents, Sense, Census. Human Inventories in Late Precolonial and Early Colonial India", *Society for Comparative Study of Society and History* 43 (2001), pp. 819–850.
[71] Here, I refer to the literature cited in Chapter 1 to 3.
[72] For this shift, see also MacLeod, Roy, "Introduction", in: MacLeod, Roy (ed.), *Disease, medicine, and empire. Perspectives on Western medicine and the experience of European expansion,* London: Routledge, 1988, pp. 1–18, here pp. 4–6.
[73] Arnold, David (ed.), *Imperial Medicine and Indigenous Societies,* Oxford: Oxford University Press, 1988; MacLeod, Roy (ed.), *Disease, medicine, and empire. Perspectives on Western medicine and the experience of European expansion,* London: Routledge, 1988; Feierman, Steven; Janzen, John (eds.), *The social basis of health and healing in Africa,* Berkeley: University of California Press, 1992.

rule.[74] At the same time, many have emphasized the violent nature and disruptive effects of colonial medicine in practice.[75] Still others have focused on the confrontation between Western medicine and local systems of healing in Africa, refuting the older assumption that Western epistemes and practices simply eclipsed African 'therapeutic practices' (often dubbed 'traditions'). Instead, they have claimed, this encounter often led to situations of medical pluralism, i.e. the co-existence of practices from different disease causation systems.[76]

The second major shift is closely linked to the first. Supported by the postcolonial turn, historians in recent years have placed emphasis on, and sometimes also analysed, the agency of Africans in the localized practices of colonial medicine. Moving beyond the resistance of patients, which often manifested in terms of flight and disobedience, historians have recently paid particular attention to the indigenous intermediaries working in the colonial health services: African doctors, nurses and midwives. Studies have analysed the establishment of specialized schools and training schemes and the ambivalent position of these 'medical auxiliaries': although they mostly suffered from low salaries and limited career possibilities, they played an essential role in mediating the transmission of biomedical ideas between European doctors and local African communities – ideas which, as a result, were often transformed and adapted to the local belief systems.[77]

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[74] Headrick, Daniel R., *The Tools of Empire. Technology and European Imperialism in the 19th Century,* New York: Oxford University Press, 1981, esp. pp. 3-14 and 58-79.

[75] This is particularly the case in the literature about colonial campaigns against communicable diseases like sleeping sickness, smallpox, bubonic plague or STDs. See, on this, Chapters 1 to 3.

[76] In this respect, the work by John Janzen has been groundbreaking, see Janzen, John, *The Quest for Therapy. Medical Pluralism in Lower Zaire,* Berkeley: University of California Press, 1978. On the concept, see also Vaughan, Megan, "Healing and Curing. Issues in the Social History and Anthropology of Medicine in Africa", *Social History of Medicine* 7,2 (1994), pp. 283–295, here pp. 290–292; Bruchhausen, Walter, "Medical Pluralism as a Historical Phenomenon. A Regional and Multi-Level Approach to Health Care in German, British and Independent East Africa", in: Digby, Anne; Ernst, Waltraud; Muhkarji, Projit B. (eds.), *Crossing Colonial Historiographies. Histories of Colonial and Indigenous Medicines in Transnational Perspective,* Newcastle: Cambridge Scholars, 2010, pp. 99–114. I have borrowed the term 'therapeutic practices' from Janzen, John; Feierman, Steven, "Preface", in: Feierman, Steven; Janzen, John (eds.), *The social basis of health and healing in Africa,* Berkeley: University of California Press, 1992, pp. xv–xviii, here p. xvi, who reject the term 'traditional' for being (or suggesting to be) antithetical to 'modern'.

[77] Lyons, Maryinez, "The Power to Heal. African Auxiliaries in Colonial Belgian Congo and Uganda", in: Engels, Dagmar; Marks, Shula (eds.), *Contesting Colonial Hegemony. State and Society in Africa and India,* London: I.B. Tauris & Co, 1994, pp. 202–223; Iliffe, John, *East African doctors. A history of the modern profession* (African studies series; 95), Cambridge: Cambridge University Press, 1998; Hunt, *Colonial Lexicon*; Turrittin, Jane, "Colonial Midwives and Modernizing Childbirth in French West Africa", in: Allman, Jean Marie; Geiger, Susan; Musisi, Nakanyike (eds.), *Women in African Colonial Histories,* Bloomington, Ind.: Indiana University Press, 2002, pp. 71–91; Barthélémy, Pascale, "Sages-femmes africaines diplômées en AOF des années 1920 aux années 1960. Une redéfinition des rapports sociaux de sexe en contexte colonial", in: Hugon, Anne (ed.), *Histoire des Femmes en Situation Coloniale. Afrique et Asie, XXe siècle,* Paris: Karthala, 2004, pp. 119–144; Kalusa, Walima T., "Language, Medical Auxiliaries, and the Re-Interpretation of Missionary Medicine in Colonial Mwinilunga, Zambia, 1922-51", *Journal of Eastern African Studies* 1,1 (2007), pp. 57–78; Webel, Mari K., "Medical Auxiliaries and the Negotiation of Public Health in Colonial North-Western Tanzania",

And thirdly, a new transnational turn is slowly taking place. Following calls from senior scholars of colonial medicine, such as David Arnold and Warwick Anderson, a few historians have recently started to transcend, in their research, the boundaries of national empires and to look at conduits of medical knowledge and practices that cut across colonial and imperial borders. While the number of empirical studies is still fairly limited, this shift is also in line with the transnational research programme outlined in Ann Laura Stoler and Frederick Cooper's seminal essay.[78]

My analysis, in a somewhat eclectic fashion, draws upon the multiple insights and new perspectives these shifts have generated. By analysing health care provisions in Angola through the lens of population politics, I take a critical stance towards the political, economic and demographic imperatives that underpinned them. Using this lens implies that the perspective of the colonial state usually prevails over the views of local African communities, but, where sources allow me to do so, I examine the role of medical auxiliaries and show how African therapeutic practices interacted with and shaped colonial health programmes. Moreover, throughout my analysis, I consistently adopt a transnational perspective, which allows me to reveal the multiple, varied and changing connections between medical ideologies, programmes and practices in Angola and other parts of the world. I will show, for instance, how leading Portuguese colonial doctors used their knowledge about medical interventions in Europe, other Portuguese colonies and, perhaps even more importantly, other European colonies in Africa – knowledge that they had acquired through readings, conferences, personal exchanges and not least their own professional mobility within the Portuguese Empire – to design, improve or reject health measures. In this vein, I also ask how efforts at improving Africans' health in Angola were connected with the work of international

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Journal of African History 54,3 (2013), pp. 393–416; Digby, Anne, "Early Black Doctors in South Africa", *Journal of African History* 46,3 (2005), pp. 427–454.

[78] See Arnold, David, "Introduction. Tropical Medicine Before Manson", in: Arnold, David (ed.), *Warm Climates and Western Medicine. The Emergence of Tropical Medicine, 1500 - 1900,* Amsterdam: Rodopi, 1996, pp. 1–19, here p. 11; Anderson, Warwick, "Where is the Postcolonial History of Medicine?", *Bulletin of the History of Medicine* 72,3 (1998), pp. 522–530 and, for colonial studies in general, Stoler, Ann Laura; Cooper, Frederick, "Between Metropole and Colony. Rethinking a Research Agenda", in: Cooper, Frederick; Stoler, Ann Laura (eds.), *Tensions of Empire. Colonial Cultures in a Bourgeois World,* Berkeley/Los Angeles: University of California Press, 1997, pp. 1–56, here pp. 13; 28-33. First empirical studies include Neill, *Networks*; Lachenal, Guillaume, *Biomédecine et Décolonisation au Cameroun, 1944 - 1994. Technologies, Figures et Institutions Médicales à l'Épreuve* (Thèse de Doctorat – Paris 7, École Doctorale Savoirs Techniques), 2006, pp. 123–135; Digby, Anne; Ernst, Waltraud; Muhkarji, Projit B. (eds.), *Crossing Colonial Historiographies. Histories of Colonial and Indigenous Medicines in Transnational Perspective,* Newcastle: Cambridge Scholars, 2010; Mertens, Myriam; Lachenal, Guillaume, "The History of "Belgian" Tropical Medicine from a Cross-Border Perspective", *Belgisch Tijdschrift voor Filologie en Geschiedenis* 90,4 (2013), pp. 1249–1272. For transnationally oriented studies on Portuguese colonial medicine, see footnotes 84 and 85.

organisations such as the League of Nations and the Rockefeller Foundation, the involvement of which in health campaigns throughout the globe has been much studied in recent years.[79]

In addition, I look at the role of missionary medicine in Angola, especially with regard to sleeping sickness and maternal and child health. Taking up some of the questions which have recently been debated with regard to other colonies in Africa, I examine to what extent the goals and practices of medical missionaries differed from those of state doctors and examine the relations between these groups of medical practitioners. Whereas Megan Vaughan and Jean Comaroff have, for Uganda and South Africa respectively, emphasized the differences in agenda and approach between these different groups, Nancy Rose Hunt and Michael Jennings have mitigated this view by pointing out the similarities and cooperation that has occurred in the Belgian Congo and British Tanzania.[80] I then go on to ask how the different stances of Catholic and Protestant mission societies towards missionary medicine, recently addressed on a more general level by David Hardiman, played out in Angola.[81]

To implement this multifaceted research agenda, this study relies almost completely on printed and archival primary sources as well as the research literature on other empires. Indeed, while there is a vast and still rapidly growing body of literature on British, French,

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[79] See especially Dubin, Martin David, "The League of Nations Health Organisation", in: Weindling, Paul (ed.), *International Health Organisations and Movements, 1918-1939,* Cambridge: Cambridge University Press, 1995, pp. 56–80; Weindling, Paul, "Philanthropy and World Health. The Rockefeller Foundation and the League of Nations Health Organisation", *Minerva. A Review of Science, Learning and Policy* 35,3 (1997), pp. 269–281; Borowy, Iris, *Coming to Terms with World Health. The League of Nations Health Organisation, 1921-1946,* Frankfurt am Main: Lang, 2009; Sealey, Anne, *The League of Nations Health Organisation and the Evolution of Transnational Public Health* (Ph.D. Dissertation - Ohio State University), 2011; Farley, John, *To Cast Out Disease. A History of the International Health Division of the Rockefeller Foundation (1913 - 1951),* Oxford: Oxford University Press, 2004; Palmer, Steven Paul, *Launching global health. The Caribbean odyssey of the Rockefeller Foundation,* Ann Arbor: University of Michigan Press, 2010; Stepan, Nancy Leys, *Eradication. Ridding the world of diseases forever?,* London: Reaktion Books, 2011.

[80] Compare Vaughan, *Curing their ills*, esp. 55-76 with Hunt, *Colonial Lexicon*; Jennings, Michael, "'A Matter of Vital Importance'. The Place of the Medical Mission in Maternal and Child Healthcare in Tanganyika, 1919-1939", in: Hardiman, David (ed.), *Healing Bodies, Saving Souls. Medical Missions in Asia and Africa,* Amsterdam: Rodopi, 2006, pp. 227–250 and Jennings, Michael, "'Healing of Bodies, Salvation of Souls'. Missionary Medicine in Colonial Tanganyika, 1870s-1939", *Journal of Religion in Africa* 38,1 (2008), pp. 27–56. Comaroff has argued that, in South Africa, missionary healing was eclipsed by state health regimes at the turn of the twentieth century. See Comaroff, Jean, "The Diseased Heart of Africa. Medicine, Colonialism, and the Black Body", in: Lindenbaum, Shirley; Lock, Margaret (eds.), *Knowledge, Power, and Practice. The Anthropology of Medicine and Everyday Life,* Berkeley: University of California Press, 1993, pp. 305–329. See also the overview of recent debates in Hardiman, David (ed.), *Healing Bodies, Saving Souls. Medical Missions in Asia and Africa,* Amsterdam: Rodopi, 2006 and the empirical work in the other chapters of the same volume. On the localized practices of mission doctors and their interaction with local therapeutic practices, see also Ranger, Terence, "Godly Medicine. The Ambiguities of Medical Mission in Southeast Tanzania", *Social Science and Medicine* 15B (1981), pp. 261–277; Ranger, Terence, "Medical Science and the Pentecost. The Dilemma of Anglicanism in Africa", in: Shiels, W. J. (ed.), *The Church and Healing,* Oxford, 1982, pp. 333–367; Landau, Paul S., "Explaining Surgical Evangelism in Colonial Southern Africa. Teeth, Pain and Faith", *Journal of African History* 37,2 (1996), pp. 261–281.

[81] Hardiman, David (ed.), *Healing Bodies,* pp. 22–25.

German and even Belgian colonies, dominions and mandated territories in Africa, health policies in the Portuguese colonies are severely understudied.

The two most important studies on Angola date from the early 1980s. In a seminal article on droughts, famines and disease, Jill Dias has offered a complex analysis of the frail balance between environment and human societies in nineteenth- and early twentieth-century Angola. Although Dias addresses, among other things, smallpox epidemics, sleeping sickness and nutritional problems, the focus of her work is limited to the nineteenth century.[82] Martin Shapiro's unpublished 1983 doctoral dissertation, in turn, provides a general picture of Portuguese health policies, towards both Europeans and Africans, in Angola, Mozambique and Guinea between the Scramble and decolonization.[83] Analytically, it is strongly imbued with the emergent 'tool of empire' debate. Yet the strengths of this study are simultaneously its greatest weaknesses. Given its broad geographical and chronological scope, the discussion does not allow for detailed analyses of the arguments. Moreover, Shapiro uses no archival sources and adopts a strictly national perspective. But the greatest problem with the dissertation is perhaps that Shapiro is so keen on proving that medicine for the Portuguese was indeed a 'tool of empire', used to control and capitalize on the African population and to gain international legitimacy, that he looses sight of the practicalities of health care on the ground. Furthermore, Shapiro fails to substantiate his claim, through comparison studies, that medicine was indeed more important in the Portuguese colonies than in others.

In more recent times, Jorge Varanda has examined the health policies of Diamang, Angola's largest mining company, with regard to its labourers during the colonial period. Varanda's work, which has recently also explored the transnational connections with Belgian mining companies, adds important perspectives, but it is mostly silent on the health policies of the colonial state.[84] On the larger picture of Portuguese colonial medicine, the work carried out by Philip Havik and Cristiana Bastos respectively offers valuable insights. While Havik

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[82] Dias, Jill Rosemary, "Famine and Disease in the History of Angola, c. 1830-1930", *The Journal of African History* 22,3 (1981), pp. 349–378.

[83] Shapiro, Martin Frederick, *Medicine in the service of colonialism. Medical care in Portuguese Africa, 1885-1974* (Ph.D. Thesis - University of California), 1983.

[84] Varanda, Jorge, *"A Bem da Nação". Medical Science in a diamond company in Portuguese Angola* (Ph.D. Dissertation - University College London, Wellcome Trust Centre for the History of Medicine), 2006; Varanda, Jorge, "Um cavalo de Tróia na colónia? As missões de profilaxia contra a doença do sono da Companhia de Diamantes de Angola (Diamang)", in: Pereira, Luís Silva; Pussetti, Chiara (eds.), *Os saberes da cura. Antropologia da doença e práticas terapêuticas,* Lisboa: Instituto Superior de Psicologia Aplicada, 2009, pp. 79–110; Varanda, Jorge, "Crossing Colonies and Empires. The Health Services of the Diamond Company of Angola", in: Digby, Anne; Ernst, Waltraud; Muhkarji, Projit B. (eds.), *Crossing Colonial Historiographies. Histories of Colonial and Indigenous Medicines in Transnational Perspective,* Newcastle: Cambridge Scholars, 2010, pp. 165–184; Varanda, Jorge, "A asa protectora de outros. As relações transcoloniais do Serviço de Saúde da Diamang", in: Bastos, Cristiana; Barreto, Renilda (eds.), *A Circulação do Conhecimento. Medicina, Redes e Impérios,* Lisboa: Instituto de Ciências Sociais on-line, 2011, pp. 339–372.

has published some excellent studies on medicine in Portuguese Guinea, Bastos has mainly focussed on Goa, on the circulation of medical knowledge within the Portuguese empire (notably through doctors educated at the Medical School of Goa), and on the acclimatization debate that occurred in the late nineteenth century.[85] Interestingly, the history of health policies in twentieth-century Portugal is equally under-researched. Among the available studies, the ongoing work of Rita Garnel as well as that of Mónica Saavedra stands out.[86]

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[85] For Bastos' work on Goa and its Medical School, and without being exhaustive, see mainly Bastos, Cristiana, "Doctors for the Empire. The Medical School of Goa and its Narratives", *Identities. Global Studies in Culture and Power* 8,4 (2001), pp. 517–548; Bastos, Cristiana, "Um Centro Subalterno? A Escola Médica de Goa e o Império", in: Bastos, Cristiana; Almeida, Miguel Vale de; Feldman-Bianco, Bianca (eds.), *Transitos Coloniais. Diálogos Críticos Luso-Brasileiros*, Lisboa: Instituto de Ciências Sociais, 2002, pp. 133–149; Bastos, Cristiana, "O médico e o 'inhamessoro'. O relatório do goês Arthur Ignacio da Gama em Sofala, 1878", in: Carvalho, Clara; Cabral, João de Pina (eds.), *A persistência da História. Passado e contemporaneidade em África,* Lisboa: Imprensa de Ciências Sociais, 2004, pp. 91–117; Bastos, Cristiana, "Race, Medicine and the Late Portuguese Empire. The Role of Goan Colonial Physicians", *Institute of Germanic & Romanic Studies* 5,1 (2005), pp. 23–35; Bastos, Cristiana, "Medical Hybridisms and Social Boundaries. Aspects of Portuguese Colonialism in Africa and India in the Nineteenth Century", *Journal of Southern African Studies* 33,4 (2007), pp. 767–782; Bastos, Cristiana, "Borrowing, Adapting and Learning the Practices of Smallpox. Notes from Colonial Goa", *Bulletin of the History of Medicine* 83,1 (2009), pp. 141–163; Bastos, Cristiana, "Medicine, Colonial Order and Local Action in Goa", in: Digby, Anne; Ernst, Waltraud; Muhkarji, Projit B. (eds.), *Crossing Colonial Historiographies. Histories of Colonial and Indigenous Medicines in Transnational Perspective,* Newcastle: Cambridge Scholars, 2010, pp. 185–212. For studies on the acclimatization debate, see Bastos, *Migrants*; Bastos, Cristiana, "Corpos, climas, ares e lugares. Autores e anónimos nas ciências da colonização", in: Bastos, Cristiana; Barreto, Renilda (eds.), *A Circulação do Conhecimento. Medicina, Redes e Impérios,* Lisboa: Instituto de Ciências Sociais on-line, 2011, pp. 25–58. Philip Havik's main studies on medicine in nineteenth- and twentieth-century Guinea are Havik, Philip J., "Bóticas e beberagens. A criação dos serviços de saúde e a colonização da Guiné", *Africana Studia* 10 (2007), pp. 235–270; Havik, Philip J., "Saúde pública, microbiologia e a experiência colonial. O combate à malaria na África Ocidental (1850-1915)", in: Bastos, Cristiana; Barreto, Renilda (eds.), *A Circulação do Conhecimento. Medicina, Redes e Impérios,* Lisboa: Instituto de Ciências Sociais on-line, 2011, pp. 375–416; Havik, Philip J., "Public Health and Tropical Modernity. The combat against sleeping sickness in Portuguese Guinea (1945-1974)", *Manguinhos. História Ciências Saúde* (forthcoming).

[86] See Garnel, Rita, "Poder Intelectual do Médico", *Revista de História das Ideias* 24 (2003), pp. 213–254; Garnel, Maria Rita Lino, *Vítimas e violências na Lisboa da I República* (Universidade de Coimbra, Faculdade de Letras), 2005; Garnel, Rita, "A consolidação do poder médico. A medicina social nas teses da escola médico-cirúrgica de Lisboa (1900-1910)", in: Pereira, Ana Leonor; Pita, João Rui (eds.), *Miguel Bombarda (1851 - 1910) e as singularidades de uma época,* Coimbra: Universidade de Coimbra, 2007, pp. 77–88; Garnel, Maria Rita Lino, "Portugal e as Conferencias Sanitarias Internacionais (em torna das epidemias cholera morbus)", *Revista da História da Sociedade e da Cultura* 9 (2009), pp. 229–251; Garnel, Maria Rita Lino, "Corpo. Estado, medicina e sociedade no tempo da I República", in: Comissão Nacional para as Comemorações do Centenário da Republica (ed.), *Corpo. Estado, medicina e sociedade no tempo da Ia República,* Lisboa: Imprensa Nacional - Casa de Moeda, 2010, pp. 7–58; Garnel, Maria Rita Lino, "Da Régia Escola de Cirurgia à Faculdade de Medicina de Lisboa. O Ensino Médico, 1825-1950", in: Matos, Sérgio Campos; Ó, Jorge Ramos do (eds.), *A Universidade de Lisboa, séculos XIX-XX,* vol. 2, Lisboa, 2013, pp. 538–650; Garnel, Maria Rita Lino, *Prevenir, cuidar e tratar. O Ministério e a saúde dos povos (1834-1957), Unpublished Manuscript (2013)*; Saavedra, Mónica, *"Uma questão Nacional". Enredos da malária em Portugal, séculos XIX e XX* (Doctoral Dissertation - Universidade de Lisboa, Instituto de Ciências Sociais), 2010; Saavedra, Mónica, "Mosquitos envenenados. Os arrozais e a malária em Portugal", in: Bastos, Cristiana; Barreto, Renilda (eds.), *A Circulação do Conhecimento. Medicina, Redes e Impérios,* Lisboa: Instituto de Ciências Sociais on-line, 2011, pp. 417–434. See also Bastos, Cristiana (ed.), *Clínica, Arte e Sociedade. A sífilis no Hospital do Desterro e na Saúde Pública,* Lisboa: Imprensa de Ciências Sociais, 2011 and Quintela, Maria Manuel, "Seeking 'energy' vs. pain relief in spas in Brazil (Caldas da Imperatriz) and Portugal (Termas da Sulfúrea)", *Anthropology and Medicine* 18,1 (2011), pp. 23–35.

Portuguese Colonialism in Angola

Finally, this dissertation also aims to add a new perspective to the existing historiography on Portuguese colonialism in Angola. Overall, it is safe to say that the history of colonial Angola has generally been much under-researched, even in comparison with many other African colonies. That there is no recent and critical general history of Angola during its colonial period clearly illustrates this lacuna.[87] The closest that there is to such a history continues to be the 1971 overview written by Douglas Wheeler and René Pélissier and the chapters by Jill Dias and Aida Freudenthal in the multi-volumed *Nova História da Expansão Portuguesa*, covering the respective periods of 1825-1890 and 1890-1930.[88] Moreover, much of the important work – both recent and less recent – that has been done (still) remains in the form of unpublished doctoral dissertations and is thus hardly visible for the wider community of African historians.[89]

Without repeating the already discussed scarce literature on the colonial state, colonial medicine and demography, I will give a brief outline of recent trends and gaps.

Much recent historiography on Angola – and Portuguese Africa in general – has focused on the issue of colonial labour. Taking a metropolitan perspective, some scholars, like Miguel Jerónimo, have analysed the ideological basis of (forced) labour policies and revealed how these policies were intimately connected with ideas of civilization and hierarchies of race.[90] Others, like Jeremy Ball and Todd Cleveland, have taken a different, more Africanist approach: they have analysed labour policies and practices of some of the colony's biggest

[87] On this, see also Heintze, Beatrix; Oppen, Achim von (eds.), *Angola on the move / Angola em Movimento. Transport Routes, Communications and History / Vias de Transporte, Comunicações e História,* Frankfurt am Main: Lembeck, 2008.

[88] Wheeler, Douglas L.; Pélissier, René, *Angola,* London: Pall Mall Press, 1971. A new edition, with a new bibliographic chapter, has recently appeared in Portuguese, see Wheeler, Douglas; Pélissier, René, *História de Angola,* Lisboa: Tinta da China, 2011. See also Dias, Jill Rosemary, "Angola", in: Alexandre, Valentim; Dias, Jill Rosemary (eds.), *O Império Africano, 1825-1890* (Nova História da Expansão Portuguesa; 10), Lisboa: Editorial Estampa, 1998, pp. 319–556; Freudenthal, Aida, "Angola", in: Marques, A. H. de Oliveira (ed.), *O Império Africano, 1890 - 1930* (Nova História da Expansão Portuguesa; 11), Lisboa: Estampa, 2001, pp. 259–467. The planned volume on the period 1930-1960 was never published.

[89] See particularly Shapiro, *Medicine*; Heywood, Linda, *Production, trade and power. The political economy of Central Angola, 1850-1930* (Ph.D. Dissertation - Columbia University), 1984; Ball, Jeremy, *"The colossal lie". The Sociedade Agricola do Cassequel and Portuguese Colonial Labor Policy in Angola, 1899-1977* (Ph.D. Dissertation - University of California), 2003; Vos, Jelmer, *The Kingdom of Kongo and Its Borderlands, 1880-1915* (Ph.D. Dissertation - School of Oriental and African Studies), 2005; Péclard, Didier, *État colonial, missions chrétiennes et nationalisme en Angola, 1920 - 1975. Aux racines sociales de l'UNITA* (Thèse de Doctorat - Institut d'Etudes Politiques de Paris), 2005; Varanda, *A Bem da Nação*; Cleveland, Todd, *Rock Solid. African Laborers on the Diamond Mines of the Companhia de Diamantes de Angola (Diamang), 1917-1975* (Ph.D. Dissertation - University of Minnesota, Faculty of Graduate School), 2008; Neto, Maria da Conceição, *In Town and Out of Town. A Social History of Huambo (Angola) 1902-1961* (Ph.D. Dissertation - University of London, School of Oriental and African Studies (SOAS)), 2012.

[90] Jerónimo, *Livros Brancos*; Jerónimo, Miguel Bandeira, "The 'Civilization Guild'. Race and Labour in the Third Portuguese Empire, c. 1870-1930", in: Bethencourt, Francisco; Pearce, Adrian (eds.), *Racism and ethnic relations in the Portuguese speaking world,* Oxford/New York: Oxford University Press, 2012, pp. 173–199.

private companies 'on the ground' and given more room to the agency of African labourers.[91] Generally, historians have also devoted much attention to the national and international critique of Portuguese labour policies in Angola. References to the 'slave trade' between Angola and São Tomé and Príncipe in the late nineteenth and early twentieth centuries and to the infamous reports of Edward Ross (1925) and Henrique Galvão (1947) have become standard, and perhaps rightly so.[92] Yet many analyses often fail to link them with other colonial 'labour scandals' elsewhere, and thus tend to reify the exceptionalism of Portuguese

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[91] Ball, *The Colossal Lie*; Ball, Jeremy, "Colonial Labor in Twentieth-Century Angola", *History Compass* 3 (2005), pp. 1–9; Ball, Jeremy, "'I escaped in a coffin'. Remembering Angolan Forced Labor from the 1940s", *Cadernos de Estudos Africanos* 9-10 (2005/2006), pp. 61–75; Ball, Jeremy, "Little Storybook Town. Space and Labor in a Company Town in Colonial Angola", in: Borges, Marcelo J.; Torres, Susana B. (eds.), *Company Towns. Labor, Space, and Power Relations across Time and Continents,* London: Palgrave, 2012, pp. 91–110; Cleveland, *Rock Solid*; Cleveland, Todd, "Working While Walking. Forced Laborers' Treks to Angola's Colonial-Era Diamond Mines, 1921-1948", in: Centro de Estudos Africanos da Universidade do Porto (CEAUP) (ed.), *Trabalho Forçado Africano. O Caminho de Ida,* Porto: Edições Húmus, 2009, pp. 159–174; Cleveland, Todd, "Minors in Name Only. Child Laborers on the Diamond Mines of the Companhia de Diamantes de Angola (Diamang), 1917-1975", *Journal of Family History* 35,1 (2010), pp. 91–110.

[92] See Wheeler, Douglas, "The Forced Labour 'System' in Angola, 1903-1947. Reassessing Origins and Persistence in the Context of Colonial Consolidation, Economic Growth and Reform Failures", in: Centro de Estudos Africanos da Universidade do Porto (CEAUP) (ed.), *Trabalho Forçado Africano. Experiências Coloniais Comparadas* (Colecção Estudos africanos; 1), Porto: Campo das Letras, 2006, pp. 367–393; Wheeler, Douglas L., "The Galvão Report on Forced Labor (1947) in Historical Context and Perspective. The Trouble-Shooter Who Was 'Trouble'", *Portuguese Studies Review* 16,1 (2008), pp. 115–152; Jerónimo, *Livros Brancos,* pp. 211–249; Ball, *The Colossal Lie,* pp. 24–67; Ball, *I escaped in a coffin,* pp. 64–67; Varanda, *A Bem da Nação,* pp. 78-81; 84-85. In his analysis of forced labour recruitment in Angola, Alexander Keese has chareacterized it as not being particularly exceptional within the context of the time, see Keese, *Reluctant Hands*. For the 'slave trade' from Angola to São Tomé and Príncipe, see Duffy, James, *A Question of Slavery. Labour Politics in Portuguese Africa and the British Protest, 1850-1920,* Oxford: Clarendon Press, 1967; Nascimento, Augusto, "Relações entre Angola e S. Tomé e Príncipe na época contemporânea. Esboço de problematização em torno da transferência de mão-de-obra e das relações políticas", *Construindo o passado Angolano. As fontes e a sua interpretação, Actas do II seminário internacional sobre a história de Angola; Luanda, 4 a 9 de agosto de 1997,* Lisboa, 2000, pp. 679–694; Stone, Glyn, "The Foreign Office and Forced Labour in Portuguese West Africa, 1894-1914", in: Hamilton, Keith; Salmon, Patrick (eds.), *Slavery, Diplomacy and Empire. Britain and the Suppression of the Slave Trade, 1807-1975:* Sussex Academic Press, 2009, pp. 165–195; Ball, Jeremy, "'Alma Negra' (Black Soul). The Campaign for Free Labor in Angola and São Tomé, 1909-1916", *Portuguese Studies Review* 18,2 (2011), pp. 51–72; Higgs, Catherine, *Chocolate Islands. Cocoa, Slavery, and Colonial Africa,* Athens: Ohio University Press, 2012. For the transport of Mozambicans, see Nascimento, Augusto, "O recrutamento de serviçais moçambicanos para as roças de São Tomé e Príncipe (1908-1921)", *Actas do Seminário Moçambique. Navegações, comércio e técnicas,* Lisboa: Comissão Nacional para as Comemorações dos Descobrimentos Portugueses, 1998, pp. 173–204; Nascimento, Augusto, *Desterro e contrato. Moçambicanos a caminho de S. Tomé e Príncipe, anos 1940-1960,* Maputo: Arquivo Histórico de Moçambique, 2002 and Kagan-Guthrie, Zachary, "Repression and Migration. Forced Labour Exile of Mozambicans to São Tomé, 1948–1955", *Journal of Southern African Studies* 37,3 (2011), pp. 449–462. For a rare comparative and hence more nuanced view on the flow of labour toward São Tomé and Príncipe and labour conditions there, see Clarence-Smith, William Gervase, "Cocoa Plantations and Coerced Labor in the Gulf of Guinea", in: Klein, Martin A. (ed.), *Breaking the Chains. Slavery, Bondage, and Emancipation in Modern Africa and Asia,* Madison: University of Wisconsin Press, 1993, pp. 150–170 and also Clarence-Smith, William Gervase, "Labour conditions in the Plantations of São Tomé and Príncipe, 1875-1914", *Slavery and Abolition* 14,1 (1993), pp. 149–167. By focusing on agrarian techniques used on the island plantations and their circulation in the Gulf of Guinea, Marta Macedo has recently taken a different perspective: see Macedo, Marta, "Império de Cacau. Ciência Agrícola e regimes de trabalho em São Tomé no início do século XX", in: Jerónimo, Miguel Bandeira (ed.), *O império colonial em questão (sécs. XIX - XX). Poderes, saberes e instituições* (História e sociedade; 10), Lisboa: Edições 70, 2013, pp. 289–316.

labour policies claimed by those who entertained such accusations at the time.[93] Moreover, many branches and forms of colonial labour are still awaiting analysis; for instance, no labour history has been completed of the important fishing industries in South Angola or of the numerous coffee plantations in the north.[94] By the same token, 'independent' African (smallholder) agriculture, including cattle herding and forced cultivation schemes, has been almost completely neglected.[95]

There is also a growing body of scholarly work on missionary societies and religious politics in Angola. Yet the focus has thus far been on American, Canadian and Swiss Protestant missions, and there is only a tiny body of literature on the (British) Baptist Missionary Society (BMS) and the Catholic Fathers of the Holy Ghost in Angola, the two missionary societies that I will look into. Their health policies towards the African population have not yet been analysed.[96]

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[93] Aside from the obvious case of the abuses in King Leopold's Congo Free State, comparisons could be made with André Gide's incisive report on labour practices in French Equatorial Africa, or the condemnation of forced labour in French-ruled Cameroon on the part of Catholic missionaries. See Hochschild, Adam, *King Leopold's Ghost. A story of greed, terror, and heroism in Colonial Africa,* Boston: Houghton Mifflin, 1998; Gide, André, *Voyage au Congo,* Paris: Gallimard, 1927; Orosz, *Catechist War*.

[94] With regard to the coffee plantations, there is only a preliminary study that focuses on the late nineteenth century and a study of the coffee economy in the 1950s: see Birmingham, David, "The Coffee Barons of Cazengo", *Journal of African History* 19,4 (1978), pp. 523–538 and van Dongen, Irene S., "Coffee Trade, Coffee Regions, and Coffee Ports in Angola", *Economic Geography* 37,4 (1961), pp. 320–346.

[95] Thus Pitcher's work on cotton in the Portuguese Empire has mainly concentrated on the government and enterprises in Portugal. See Pitcher, M Anne, *Politics in the Portuguese empire. The state, industry, and cotton (1929-1974),* Oxford: Clarendon Press, 1993. On cotton and forced cultivation schemes, see Chapter 4. The only recent, yet excellent work on cattle herding is Kreike, Emmanuel, *Re-creating Eden. Land use, environment, and society in southern Angola and northern Namibia,* Portsmouth, NH: Heinemann, 2004. Kreike examines the impact of Portuguese and British colonialism on the Cuanhamas, an ethnic group of pastoralists living in southern Angola and northern Namibia, their environment and cattle herding practices. Empirically, he is most concerned with the Cuanhamas who fled to Namibia, however, and not with those who stayed and lived under Portuguese rule.

[96] For American and Canadian missionaries, see particularly the work of Fola Soremekum, David Birmingham, Linda Heywood and Didier Péclard: Soremekun, Fola, *A History of the American Board Missions in Angola, 1880-1940* (Ph.D. Dissertation - Northwestern University), 1965; Soremekun, Fola, "Religion and Politics in Angola. The American Board of Missions and the Portuguese Government, 1880-1922", *Cahiers d'Études Africaines* 11,3 (1971), pp. 341–377; Birmingham, David, "Merchants and Missionaries in Angola", *Lusotopie* (1998), pp. 345–355; Birmingham, David, "Angola e a Igreja", in: Birmingham, David, *Portugal e África,* edited and translated by Arlindo Barbeitos, Lisboa: Vega 2003, pp. 94–113; Heywood, Linda, "Ovimbundo Women and Social Change, 1880-1926", in: Santos, Maria Emília Madeira (ed.), *A África e a Instalação do Sistema Colonial (c. 1885 - c. 1930). Actas da III Reunião Internacional de História de África,* Lisboa: Centro de Estudos de História e Cartografia Antiga, 2000, pp. 441–453; Péclard, Didier, "« Eu sou americano ». Dynamiques du champ missionnaire dans le planalto central angolais au XXe siècle", *Lusotopie* (1998), pp. 357–376; Péclard, Didier, "Religion and Politics in Angola. The Church, the Colonial State and the Emergence of Angolan Nationalism, 1940-1961", *Journal of Religion in Africa* 28,2 (1998), pp. 160–186; Péclard, *État colonial*. See also Ball, Jeremy, "The 'Three Crosses' of Mission Work. Fifty Years of the American Board of Commissioners for Foreign Missions (ABCFM) in Angola, 1880-1930", *Journal of Religion in Africa* 40,3 (2010), pp. 331–357. For case studies on the Fathers of the Holy Ghost, see Vos, Jelmer, "Child Slaves and Freemen at the Spiritan Mission in Soyo, 1880-1885", *Journal of Family History* 35,1 (2010), pp. 71–90; Neto, *In Town and Out of Town,* pp. 178–240. For a general history of the BMS in Angola, written by a missionary, see Grenfell, Frederick James, *The history of the Baptist church in Angola and its influence on the life and culture of the Kongo and Zombo people, 1879-1940* (MA Thesis - University of Leeds, Department of Theology

A third important focal point of historical research has been the role of the 'creolized' or Luso-African elites in Angola (mainly Luanda). However, studies on the late nineteenth and early twentieth centuries have centred around their role in the formation of 'early' forms of nationalism, which eventually led up to the national resistance movements and decolonization.[97] Pimenta's studies on the 'whites' in twentieth-century Angola are imbued with a similar teleology.[98] As a consequence, attitudes and practices of Portuguese and other European settlers towards the African population have been much neglected. A different perspective, by contrast, is taken in the excellent study of Cláudia Castelo, who examines twentieth-century Portuguese migration to Angola and Mozambique and settlement ideologies, thus adding much to the older but still valuable work of Gerald Bender.[99]

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and Religious Studies), 1995. In his Ph.D., Jelmer Vos has analysed the involvement of both mission societies with the Kingdom of Kongo, see Vos, *Kingdom of Kongo*.

[97] Wheeler, Douglas L., "Angola is whose house? Early stirrings of Angolan nationalism and protest, 1822-1910", *African Historical Studies* 2,1 (1969), pp. 1–22; Wheeler, Douglas L., "Origins of African Nationalism in Angola. Assimilado Protest Writings 1859-1929", in: Chilcote, Ronald H. (ed.), *Protest and resistance in Angola and Brazil. Comparative studies,* Berkeley, Los Angeles, London: University of California Press, 1972, pp. 67–87; Corrado, Jacopo, "The Rise of a New Consciousness. Early Euro-African Voices of Dissent in Colonial Angola", *e-JPH* 5,2 (2007), pp. o.S.; Corrado, Jacopo, "The Creole Elite and the Rise of Angolan Proto-Nationalism, 1880-1910", *Portuguese Literary and Cultural Studies* 15/16 (2009), pp. 57–79; Corrado, Jacopo, "The Fall of a Creole Elite? Angola at the Turn of the Twentieth Century: The Decline of the Euro-African Urban Community", *Luso-Brazilian Review* 47,2 (2010), pp. 100–119; Bittencourt, Marcelo, *Dos jornais às armas. Trajectórias da contestação angolana,* Lisboa: Vega Editora, 1999; Andrade, Mário Pinto de, *Origens do nacionalismo africano,* Lisboa: Dom Quixote, 1997 and, for the broader picture, Havik, Philip J.; Newitt, Malyn, "Introduction", in: Havik, Philip J.; Newitt, Malyn (eds.), *Creole Societies in the Portuguese Colonial Empire* (Lusophone Studies; 6), Bristol: Bristol University Press, 2007, pp. 5–23. A different perspective is taken in Rodrigues, Eugénia, *A geração silenciada. A Liga Nacional Africana e a representação do branco em Angola na década de 30* (16), Porto: Afrontamento, 2003.

[98] Pimenta, Fernando Tavares, *Brancos de Angola. Autonomismo e nacionalismo (1900 - 1961),* Coimbra: Minerva, 2005; Pimenta, Fernando Tavares, *Angola, os Brancos e a Independência,* Porto: Edições Afrontamento, 2008.

[99] Castelo, Cláudia, *Passagens para África. O Povoamento de Angola e Moçambique com Naturais da Metrópole (1920-1974),* Porto: Edições Afrontamento, 2007; Bender, Gerald J., *Angola under the Portuguese. The Myth and the Reality,* Berkeley, Los Angeles: University of California Press, 1978.

3. Sources and Archives

This dissertation draws upon a large number and wide variety of published and unpublished primary sources.

The published sources I have used range from official government documents such as administrative and medical reports, law texts and statistical publications to more personal considerations such as memoirs, newspaper articles and travelogues. Within this range are also numerous scientific and more generalist colonialist pieces, presented at national and international conferences or published in journals or as monographs. I have therefore consulted many libraries, the most important of which were the Portuguese National Library, various university libraries in Lisbon and the library of the *Iberoamerikanisches Institut* in Berlin, but also smaller libraries with rare publications such as the library of the *Sociedade de Geografia de Lisboa*, the *Biblioteca Central da Marinha* and the library of the *Instituto de Higiene e Medicina Tropical*, all in Lisbon.

I have also made extensive use of contemporary journals, most notably the *Boletim* of the *Sociedade de Geografia de Lisboa* (1876-), the oldest procolonial journal in Portugal, the semi-official *Boletim Geral das Colónias* (1925-) and a number of medical journals. The most important of these are the *Revista Médica de Angola* (1921-1928), the *Boletim da Assistência Médica aos Indígenas e da Luta contra a Moléstia do Sono* (1927-1929) and, from the late 1930s onwards, the annual *Boletim Sanitário de Angola*. All three journals were edited in Luanda and contain important reports and research articles and, in the case of the *Boletim Sanitário*, also statistical data. Unlike the Societies and Institutes of Tropical Medicine in other colonial metropoles, however, the *Escola de Medicina Tropical* (EMT) in Lisbon only irregularly published its journal, the *Archivos de Higiene e Patologia Exóticas* (7 volumes between 1905 and 1926), until 1943 when it created the fully-fledged journal *Anais de Medicina Tropical*. Consequently, for debates in colonial and tropical medicine, I have also scrutinized generalist medical journals like *A Medicina Contemporânea* and the *Jornal da Sociedade das Sciências Médicas de Lisboa* as well as *África Médica*, a journal edited by a former colonial doctor from 1934 onwards.

To better understand and situate debates within the larger context of Angola's colonial society, I have also consulted several Angolan newspapers held in the National Library in Lisbon, most notably the daily *A Província de Angola*. These newspapers often proved to be valuable sources, because not only did they provide information on local events and institutions they were also the sites where high-ranking colonial officials aired their ideas, explained their policies and debated their results.

However, to analyse the inner life of the colonial state as well as its local practices and transnational connections, archival sources were naturally indispensable. Extensive research in state archives in Portugal and Angola has been complemented with more narrowly directed archival research in Belgium, France, Germany, Great Britain and Switzerland.

Research conducted in the *Arquivo Histórico Ultramarino* (AHU) in Lisbon and the *Arquivo Nacional de Angola* (ANA) in Luanda – the two archives that hold the bulk of archival sources on Portuguese colonial rule in Angola – was aimed at grasping the internal logic, practices and implications of the politics of the Portuguese colonial state in Angola. In addition, I have found important reports on the 1930s and 1940s in the 'personal' archives of António Oliveira Salazar and his successor (and Minister of Colonies between 1944 and 1947) Marcelo Caetano, which are stored in the *Arquivo National da Torre do Tombo* (ANTT).[100] To grasp the connections between Portuguese colonialism and other colonies and international organizations, such as the League of Nations, I have consulted the Foreign Ministry's *Arquivo Histórico-Diplomático* (AHD-MNE). For a few more specific questions, I have also visited the *Arquivo Histórico Militar* (AHM), the *Arquivo Histórico Parlamentar* (AHP), the archives of the *Instituto Camões* (IC) and a small collection of letters from a leading medical doctor, held by his grandnephew Luiz Damas Mora.

Visits to the colonial or national archives in Brussels, London and Berlin and to the archives of the League of Nations in Geneva served to further explore the trans- and international connections of Portugal and Angola. In addition, I have also consulted the archives of the (Protestant) Baptist Missionary Society in Oxford and the (Catholic) Fathers of the Holy Ghost in Chevilly-Larue near Paris, two of the most important missionary societies present in pre-1945 Angola. The aim here was to elucidate the involvement of missionaries in health care and population policies and their relations with the colonial state.

Here, it is important to mention a few structural problems regarding archival work in Portugal and Angola, as they might also help to explain the general paucity of archive-based academic research on late nineteenth- and twentieth-century Portuguese Angola.

Most of the archives I have consulted in Portugal and Angola, including the AHU and the ANA, only possessed very rudimentary and incomplete catalogues. While historians generally expect this to be the case for archives located in Africa, this finding is certainly

[100] Garcia, Maria Madalena, *Arquivo Oliveira Salazar. Inventário e Índices,* Lisboa: Editorial Estampa; Biblioteca Nacional, 1992; Frazão, António; Filipe, Maria do Céu Barata, *Arquivo Marcelo Caetano. Catálogo*, 2 vols, Lisboa: Instituto dos Arquivos Nacionais/Torre do Tombo, 2005.

more surprising for the AHU in Lisbon. The main catalogue, spanning a time period of roughly 140 years (ca.1834-1975) and covering all eight Portuguese colonies, is a 445 page pdf-file with vague, unordered and not seldom erroneous descriptions of *maços* (‘bundles’), *caixas* (‘boxes’) and *livros* (‘books’). This makes research a time-consuming, haphazard and often frustrating experience, despite the goodwill of the archivists. Research in the ANA in Luanda suffers from similar conditions and from the fact that Luanda is one of, if not *the* world’s most expensive city for expatriates.[101]

Perhaps even more dramatic is the fact that many *fundos* (‘archival collections’) relating to twentieth-century colonial Angola have either not yet been localized or not yet been processed by archivists to make them available to historians. This also concerns both the ANA in Luanda and the AHU in Lisbon, where hundreds of meters of documents still await processing.[102] The current state of the archives had serious implications for this study. Most importantly, I was unable to locate the *fundo* of the Angolan Health Services for the time period under consideration here. Detailed scrutiny of the few available catalogues, conversations with colleagues and archivists as well as inquiries made with the respective directors of the archives revealed that these documents had not entered the ANA or the AHU. The same holds true for the Native Affairs Department.[103] If I nevertheless found some scattered reports and correspondence in these and other archives, these were generally copies sent to the Colonial Ministry in Lisbon or to the General Government in Luanda. Consequently, my analysis of health policies had to rely on printed sources to a much greater extent than I would have wished.

Moreover, in Angola many local archives were destroyed during the decolonization and civil wars and even afterwards, or they are nearly inaccessible for (foreign) researchers.[104] In Portugal as well, archives seem to have been destroyed: several institutional archives that could have been important for this dissertation were, when requested, said to be non-existent. This includes the archives of the *Instituto de Higiene e Medicina Tropical* (IHMT), the *Instituto Nacional de Estatística* (INE), the *Sociedade de Geografia de Lisboa* (SGL) and the ISCSP, the successor of the *Escola Superior Colonial (ESC).*

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[101] See, for instance, http://www.forbes.com/sites/andrewbender/2013/07/28/the-worlds-most-expensive-cities-for-expats/ and http://www.mercer.com/costoflivingpr [both last accessed 21.12.2013].

[102] On the situation in the *Arquivo Histórico Ultramarino* in Lisbon, see also Ball, *The Colossal Lie,* pp. 19–20; Castelo, *Passagens para África,* p. 34.

[103] Oral communication by Alexandra Aparício, Director of the ANA, in October 2010 and various conversations with Ana Cannas, Director of the AHU, last in April-May 2012.

[104] Pacheco, Carlos, "Arquivos queimados em Angola!", in: Pacheco, Carlos, *Repensar Angola. Com prefácio de José Carlos Venâncio,* Lisboa: Vega 2000, pp. 33–37; Thompson, Estevam C., "Taking the Graduate Students to Luanda and Benguela. A Brazilian Perspective", *Harriet Tubman Newsletter* 31 (Sept.-Dec. 2012), pp. 14–25. online http://tubman.info.yorku.ca/files/2013/05/Tubman-Newsletter-FINAL-sept-dec-2012.pdf [last accessed 20.12.2013].

There are certainly multiple causes for these archival 'issues'. As far as Portuguese archives are concerned, the problem extends far beyond my research topic. Often seriously understaffed, archives are slow in gathering and organising their documents. With regard to the twentieth century in particular, for 'national' and colonial history alike, this process is often still in its infancy, partly because doing twentieth-century history has long suffered from censorship and taboos.[105]

[105] Compare with, for instance, Pereira, Victor, *L'État portugais et les Portugais en France de 1957 à 1974* (Thèse de Doctorat - Institut d'Etudes Politiques de Paris, Centre d'Histoire de Sciences Po), 2007, pp. 22; 27-29; Domingos, Nuno; Pereira, Victor, "Introdução", in: Domingos, Nuno; Pereira, Victor (eds.), *O Estado Novo em Questão,* Lisboa: Edições 70, 2010, pp. 7–39, here p. 15; Havik, *Public Health*, p. 2

4. Chapter summaries

The organization of this dissertation is both chronological and thematic. While it gradually advances from the 1890s to the 1940s, every chapter highlights different aspects of the depopulation discourse and/or different population policies.

Chapter 1 focuses entirely on the sleeping sickness epidemic that beset Angola from the late nineteenth century onwards. It starts with an explanation as to why the Portuguese response was much stronger around 1900 than when attention was first called to the disease in the 1870s. Portuguese experts in tropical medicine, most notably Ayres Kopke, even played a considerable role in the international efforts to discover the cause and cure for this disease. I also show that biomedical knowledge on sleeping sickness, gained through study missions and laboratory research, was slow to circulate among both the European and African population in Angola and sometimes continued to be contested for many years. In the second half of the chapter, I discuss how Portuguese doctors managed to eradicate sleeping sickness on the West African island of Príncipe, where it raged among plantation labourers and argue that, before the 1920s, the response in Angola was much more hesitant and fragmentary, in spite of widespread fears that sleeping sickness was depopulating some of the colony's most fertile and populous regions. With further evidence from Guinea and Mozambique, I also show that, both between and within Portuguese colonies, health services adopted different approaches depending on epidemiological, ecological and economic conditions.

Chapter 2 explores the establishment of a rudimentary public health service, the *Assistência Médica aos Indígenas* (AMI), in Angola in the 1920s. While the political will to fund this healthcare programme depended on changing national and international constellations, I also show how the results of the first demographic surveys of the total population size in the mid-1920s heightened anxieties about population decline and were used by doctors and others to reinforce their demands for more comprehensive healthcare programmes. By focusing on the career, activities and ideas of the long-time director of the Angolan health services, António Damas Mora, I demonstrate that his deliberate strategy of inter-imperial learning played a crucial role in shaping the contents of this project and health practices on the ground. Fighting sleeping sickness remained a key element in these programmes, but, influenced by ideas of social medicine, these last aimed to cover all health needs of the African population and to promote preventive medicine. I also show that Damas Mora equally favoured more cooperation between the health services of tropical Africa, but that cooperation was often hampered by inter-imperial rivalry and mistrust.

Departing from the focus on disease and mortality in the first two chapters, Chapter 3 examines how, in the 1920s, Portuguese doctors and other colonial officials began to see the depopulation issue through the lens of reproduction. After demonstrating that fears of low fertility and rampant infant mortality in Angola ran parallel to similar concerns in other colonies as well as in Europe, I show that colonial doctors tried to verify these trends by employing new methods of demographic data collection. I argue that these data – and the use doctors made of it – redefined the problem of reproduction, transforming it primarily into one of high infant mortality. Infant mortality was tackled by a variety of measures taken by government doctors, mission societies and private associations of European women, all of which however remained limited in scope before 1945.

Chapter 4 concentrates on a particular, though multifaceted, population improvement project: model villages. Here I examine how, from the mid-1920s to the end of the Second World War, the idea of model villages was discussed in different contexts and at different levels of the colonial administration and how it tied in with medical and demographic concerns as well as with debates on agricultural reform, social disorder and labour migration. I argue that a wide range of colonial actors, notably hygienists, agronomists and administrators, came to view the reformed village as the ideal setting within which to improve the health and well-being of the African population and within which economic production could best be rationalized. Simultaneously, I demonstrate that plans for model villages in Angola were the result of inner- and inter-imperial borrowings and were embedded in a broader debate among European colonial powers.

Chapter 5 explores official anxieties and policies with respect to the problem of African emigration into neighbouring colonies between the 1920s and 1940s. I begin by making a critical analysis of Henrique Galvão's 1947 report on the native question in Angola and Mozambique. I examine how, at different echelons, the colonial administration reacted to Galvão's persistent claims that tens of thousands of Africans were leaving Angola for the neighbouring colonies every year. Thereby I show how difficult it was for the colonial administration to gather exact knowledge about African cross-border mobility. By 1947, the issue of African emigration had already troubled the colonial administration for several decades. Looking at the reasons for this migration as identified by Portuguese colonial authorities at the time, I show that economic disparities – including differential tax levels – often lay at the heart of them. From the 1920s onwards, taxation reduction in border regions became an important policy aim to keep the African population within the colony. Yet, many authorities also feared that Africans were keen on emigrating because they considered other

colonizers, whether they were the civil authorities of neighbouring colonies or the religious missions just across the borders, to be more prestigious. I argue that this anxiety was analogous to the fear that foreign Protestant missions within Angola were (aided by the prestige they allegedly enjoyed 'in the eyes of the natives') 'denationalizing' Angola's native population. Here, I also argue that to curtail emigration Portuguese state authorities tried to convince Catholic missions to establish mission posts in border regions. Finally, I demonstrate that, with the prohibition of cross-border labour migration, Portuguese officials deliberately adopted a different policy for Angola than for Mozambique.

Chapter 1

Between Hesitation and Intervention: Sleeping Sickness, Depopulation and Tropical Medicine, 1870s-1918

Introduction

1. The Making of an African Epidemic
2. Unravelling the Aetiology: Of Bacteria, Parasites and Scientists
3. Contesting Trypanosomes: The Circulation and Acceptance of a Scientific Theory in an African Colony
4. Curing an Incurable Disease: Of Gland Excisions, Testicular Liquids and Magic Bullets
5. An Island, a Testing Ground: Studying and Eradicating Sleeping Sickness on Príncipe
6. Sleeping Sickness Control in Angola: A Fragmentary Response

Conclusion: Reassessing Worboys: National Styles and the Response to Sleeping Sickness in Portuguese Africa

Introduction

At the turn of the twentieth century, the idea that European colonizers needed to provide medical assistance to the 'native' population in tropical Africa began to take root among Portuguese and other European colonialists. Endemic diseases, some of which broke out into deadly epidemics at regular intervals, were believed to take a heavy toll on the African populations. With the question of European acclimatization in the tropics unresolved, colonialists feared that the resulting depopulation of tropical Africa would endanger both its economic exploration, for which a large and vigorous African work force was needed, and the European civilizing mission as such.[1]

In Portugal, the necessity to establish a system of African healthcare in the colonies was forcefully voiced in several contributions at the First National Colonial Congress in Lisbon in 1901. Eminent figures such as the naval doctor Francisco Xavier da Silva Telles, Secretary General of the powerful Geographical Society of Lisbon and organizer of the Congress, and Eduardo da Costa, an influential colonial administrator, who would become Governor-General of Angola between 1906 and 1907, denounced high mortality rates among Africans in Portuguese Africa as highly prejudicial to the country's colonial endeavour.[2]

[1] See Treille, Georges, "Mesures propres à assurer la conservation de la race, à prévenir sa dégénérescence physique, à améliorer ses conditions d'existence", in: Exposition Universelle Internationale de 1900 (ed.), *Congrès International de Sociologie Coloniale tenu a Paris du 6 au 11 août 1900,* vol. 1, Paris: Arthur Rousseau, 1901, pp. 87–113, esp. pp. 108-115 and 121-122. See also the discussion on Treille's paper in the same volume "Condition matérielle des indigènes. Discussion", in: *Congrès International de Sociologie Coloniale tenu a Paris du 6 au 11 août 1900,* Paris: Arthur Rousseau, 1901, pp. 275–324 and the recommendations adopted by the Conference in Exposition Universelle Internationale de 1900, *Congrès International de Sociologie Coloniale. Procès-verbaux sommaires,* Paris: Imprimerie Nationale, 1900, pp. 34–36. From the extensive literature on the question of European acclimatization in the tropics, see especially Livingstone, David N., "Tropical Climate and Moral Hygiene. The Anatomy of a Victorian Debate", *British Journal for the History of Science* 32,1 (1999), pp. 93–100; Grosse, Pascal, *Kolonialismus, Eugenik und bürgerliche Gesellschaft in Deutschland 1850 - 1918,* Frankfurt am Main: Campus-Verlag, 2000, pp. 54–96; Jennings, Eric Thomas, *Curing the Colonizers. Hydrotherapy, Climatology, and French Colonial Spas,* Durham: Duke University Press, 2006; Pols, Hans, "Notes from Batavia, the Europeans' Graveyard. The Nineteenth-Century Debate on Acclimatization in the Dutch East Indies", *Journal of the History of Medicine and the Allied Sciences* 67,1 (2011), pp. 120–148, and for the Portuguese case Bastos, Cristiana, "Migrants, Settlers and Colonists. The Biopolitics of Displaced Bodies", *International Migration* 46,5 (2008), pp. 27–54.

[2] Silva Telles, *These Assistência aos Indígenas*, in: Sociedade de Geografia de Lisboa, *I Congresso Colonial Nacional. Actas das Sessões,* Lisboa: Typ. A. Liberal, 1902, pp. 25–26; Costa, Eduardo Augusto Ferreira da, *Estudo sobre a Administração Civil das Nossas Possessões Africanas. Memoria apresentada ao Congresso Colonial Nacional,* Lisboa: Imprensa Nacional, 1903, pp. 187–189. Soon after, Silva Telles (1860-1930) would be appointed to the position of professor (1902-1910) and later director of the School of Tropical Medicine in Lisbon (1910-1928). On the career of this naval doctor, geographer and anthropologist, see Garcia, João Carlos; Aurindo, Maria José; Pimenta, José Ramiro; Azevedo, Ana Francisca de, "Comemorar Silva Telles e os 100 Anos do Ensino Superior da Geografia em Portugal", *Inforgeo* 18/19 (2003-2004), pp. 9–17 and Garcia, João Carlos; Aurindo, Maria José (eds.), *Francisco Xavier da Silva Telles (1860-1930). Catalogue of the Bio-Bibliographic Exhibition,* Lisboa: Associação Portuguesa de Geógrafos; Sociedade de Geografia de Lisboa, 2004. Eduardo da Costa (1865-1907) died in Angola in 1907. On his life, see Agência Geral das Colónias (ed.), *Eduardo da Costa* (Biblioteca Colonial Portuguesa; 11), Lisboa: Agência Geral das Colónias, 1938.

According to them, it was not only Portugal's moral duty but in its own vested interest to foster, in the words of Eduardo da Costa, "the numerical increase and the improvement of the native race, the indispensable auxiliary of tropical colonization", a notion that was becoming a colonial commonplace.[3] To reach that aim, it was necessary to extend healthcare to the African population.

This doctrinal shift towards African healthcare, labelled *Assistance Médicale aux Indigènes* or *Assistência Médica aos Indígenas* (AMI) in the French, Belgian and Portuguese colonies was a slow process. In the nineteenth century, colonial health services were originally intended to cure the ills of Europeans. There were few doctors and hospitals, and these only assisted those members of the African population who fought in the colonial army or who were living in larger European population centres. In tropical Africa, decision-makers in the French colony of Madagascar were the first to realize the importance of offering healthcare to the native populations and to establish a rudimentary, yet astonishingly broad public health system for its African population. At the turn of the twentieth century, they created a Medical School for African doctors and midwives and began to establish a network of small hospitals and maternities. In most other colonies, however, the investments in African healthcare only started to rise considerably in the years leading up to the First World War.[4]

In many colonies of tropical Africa, the campaign against sleeping sickness or Human African Trypanosomiasis (HAT) – a vector-borne disease caused by a protozoan parasite transmitted through the bite of the tsetse fly (glossina) – would be the testing ground. As Maryinez Lyons has noted, study missions and health campaigns against this disease constituted "the first real effort made by the Europeans to deal with the health of the Africans".[5] Following Lyons' hypothesis, the present chapter will trace the early history of the colonial engagement with sleeping sickness in Portuguese Africa, mainly Angola.

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[3] Costa, Eduardo Augusto Ferreira da, *Estudo sobre a administração,* p. 187. See for instance also Ziemann, Hans, *Über das Bevölkerungs- und Rassenproblem in den Kolonien. Ein koloniales Programm, Vortrag gehalten am 31. Oktober 1912 in der Deutschen Kolonial-Gesellschaft,* Berlin: Wilhelm Süsserott, 1912, esp. p. 3, who (erroneously) claims to have been the first defender of such a programme and the analysis in Grosse, *Kolonialismus,* pp. 125–145.

[4] Headrick, Rita, *Colonialism, Health and Illness in French Equatorial Africa, 1885-1935,* Atlanta: African Studies Association Press, 1994, pp. 55–58; Neill, Deborah Joy, *Networks in Tropical Medicine. Internationalism, Colonialism, and the Rise of a Medical Specialty, 1890-1930,* Stanford: Stanford University Press, 2012, pp. 79–82. For Madagascar, see Paillard, Yvan-Georges, "Les recherches démographiques sur Madagascar au début de l'époque coloniale et les documents de « l'AMI »", *Cahiers d'Études Africaines* 27,105-106 (1987), pp. 17–42, here pp. 23–29. For the transfer of the Madagascar model to other French colonies, see Cooper, Ann Clare, *Public Health, the Native Medical Service, and the Colonial Administration in French West Africa, 1900-1944* (Ph.D. Dissertation - University of Texas at Austin), 2010, pp. 47–85.

[5] Lyons, Maryinez, *The Colonial Disease. A Social History of Sleeping Sickness in Northern Zaire, 1900-1940,* Cambridge: Cambridge University Press, 1992, p. 102. See also WHO, *Trypanosomiasis, Human African*

In the wake of the publication of *The Colonial Disease* (1992) – Maryinez Lyons' seminal study on the fight against sleeping sickness in the Belgian Congo – a body of often-excellent scholarly work on sleeping sickness in colonial Africa has steadily been growing.[6] As often occurs in historical research, this small field has been shaped by particular chronological and geographical choices. Much of the research has focused on European responses to the disease either between 1900 and 1914 or during the Interwar period, thus leaving a gap with regard to the disease in the nineteenth-century and post-Second World War periods.[7] Especially the omission of the nineteenth century is often problematic because this tends to reflect tacit epistemological choices and blind spots. When historians let their stories begin with the much-publicized outbreak of epidemic sleeping sickness in Uganda in 1900 and the British reaction to it, they uncritically (re)produce and naturalize the centrality of the British Empire into their historical research. By conveying the idea that sleeping sickness only reached epidemic proportions (and thus triggered European reactions) in that particular setting, they fail to recognize the long history of sleeping sickness in West and West Central

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(sleeping sickness), Fact Sheet n. 259 (Oct. 2012), http://www.who.int/mediacentre/factsheets/fs259/en/ (last accessed 28.11.2013).

[6] Lyons, *The colonial disease*; Worboys, Michael, "The Comparative History of Sleeping Sickness in East and Central Africa, 1900-1914", *History of Science* 32 (1994), pp. 89–102; White, Luise, "Tsetse Visions. Narratives of Blood and Bugs in Colonial Northern Rhodesia, 1931-9", *Journal of African History* 36,2 (1995), pp. 219–245; Bado, Jean-Paul, *Médecine coloniale et grandes endémies en Afrique 1900 - 1960. Lèpre, trypanosomiase humaine et onchocercose,* Paris: Karthala, 1996; Bell, Heather, *Frontiers of Medicine in the Anglo-Egyptian Sudan, 1899-1940,* Oxford: Clarendon Press, 1999, pp. 127–162; Eckart, Wolfgang U., "The Colony as Laboratory. German Sleeping Sickness Campaigns in German East Africa and in Togo, 1900-1914", *History and Philosophy of the Life Sciences* 24 (2002), pp. 69–89; Hoppe, Kirk Arden, *Lords of the Fly. Sleeping Sickness Control in British East Africa, 1900-1960,* Westport, Conn.: Praeger, 2003; Lachenal, Guillaume, *Biomédecine et Décolonisation au Cameroun, 1944 - 1994. Technologies, Figures et Institutions Médicales à l'Épreuve* (Thèse de Doctorat – Paris 7, École Doctorale Savoirs Techniques), 2006 ; Tantchou, Josiane, *Épidémie et Politique en Afrique. Maladie du Sommeil et Tuberculose au Cameroun,* Paris: L'Harmattan, 2007; Isobe, Hiroyuki, *Medizin und Kolonialgesellschaft. Die Bekämpfung der Schlafkrankheit in den deutschen "Schutzgebieten" vor dem Ersten Weltkrieg,* Münster: LIT, 2009; Varanda, Jorge, "Um cavalo de Tróia na colónia? As missões de profilaxia contra a doença do sono da Companhia de Diamantes de Angola (Diamang)", in: Pereira, Luís Silva; Pussetti, Chiara (eds.), *Os saberes da cura. Antropologia da doença e práticas terapêuticas,* Lisboa: Instituto Superior de Psicologia Aplicada, 2009, pp. 79–110; Bado, Jean-Paul, *Eugène Jamot, 1879-1937. Le médecin de la maladie du sommeil ou trypanosomiase,* Paris: Karthala, 2011; Neill, *Networks*; Tousignant, Nomi, "Trypanosomes, Toxicity and Resistance: The Politics of Mass Therapy in French Colonial Africa", *Social History of Medicine* 25,3 (2012), pp. 625–643; Ehlers, Sara, "Europeanising impacts from the colonies. European campaigns against sleeping sickness, 1900-1914", in: Osmont, Matthieu; Robin-Hivert, Émilia; Seidel, Katja; Spoerer, Mark; Wenkel, Christian (eds.), *Europeanisation in the 20th century. The historical lens,* Bruxelles: Peter Lang, 2012, pp. 111–126; Mertens, Myriam; Lachenal, Guillaume, "The History of "Belgian" Tropical Medicine from a Cross-Border Perspective", *Belgisch Tijdschrift voor Filologie en Geschiedenis* 90,4 (2013), pp. 1249–1272; Amaral, Isabel, "Bacteria or Parasite? The Controversy over the Etiology of Sleeping Sickness and the Portuguese Participation, 1898-1904", *Manguinhos. História Ciências Saúde* 19,4 (2012), pp. 1275–1300; Havik, Philip J., "Public Health and Tropical Modernity. The combat against sleeping sickness in Portuguese Guinea (1945-1974)", *Manguinhos. História Ciências Saúde* (forthcoming). For earlier studies, see mainly Ford, John, *The Role of the trypanosomiases in African ecology,* Oxford: Clarendon Press, 1971; Soff, Harvey G., *A history of sleeping sickness in Uganda. Administrative Response 1900-1970* (Ph.D. Dissertation - Syracuse University), 1971 and Giblin, James, "Trypanosomiasis Control in African History. An Evaded Issue?", *Journal of African History* 31 (1990), pp. 59–80.

[7] For studies that focus on the post-1945 period, see Lachenal, *Biomédecine* and Havik, *Public Health*. See also Hoppe, *Lords of the Fly,* pp. 105–175.

Africa, including Angola. Lastly, to start the history of the disease with Uganda and the Sleeping Sickness Commission, which the British Royal Society sent on location in 1902, implies that the focus lays with an emerging group of experts in tropical medicine rather than with the naval doctors and colonial practitioners who had already dealt with the disease in West (Central) Africa for many years.[8]

By examining the history of sleeping sickness in Angola, and more in general Portuguese Africa, from the 1870s until the end of the First World War, this chapter does not simply offer an empirical analysis of a case that has barely been noticed in historiography.[9] It also aims to address historiographical caveats such as those mentioned above and to render the 'European' history of the fight against sleeping sickness in Africa more complex and heterogeneous than previous national and even transnational histories (with their focus on British, German and French colonies only) imply.

The chapter begins with a comparison of Portuguese reactions to the disease in the 1870s and late 1890s and questions why official anxieties and medical activism were so much stronger in the latter period. It then goes on to analyse Europeans' search for the cause and possible cures of the disease and argues that, although historiography has thus far neglected this, Portuguese experts contributed considerably to this end. This chapter thereby reveals how biomedical knowledge on sleeping sickness, gained through study missions and laboratory research, was slow to circulate in Angolan society and sometimes remained contested for many years. The second half of the chapter discusses the campaigns against sleeping sickness that were set up in the early twentieth century by the health services in Angola as well as in other Portuguese colonies, mainly Príncipe, a small island in the Gulf of Guinea, where the disease ran rampant. It reveals that whereas the disease was successfully eradicated in Príncipe, the response of colonial authorities in Angola, during the same period, was rather half-hearted and fragmentary in spite of widespread fears that sleeping sickness was depopulating some of the most fertile and populous regions in the colony. Lastly, the chapter argues against so-called 'national styles', by showing that both between and within

[8] Despite their intrinsic merits, comparative and transnational approaches in particular have tended to reproduce these blind spots, see Worboys, *Comparative History*; Neill, *Networks*; Ehlers, *Europeanising impacts*.

[9] For Angola, see Dias, Jill Rosemary, "Famine and Disease in the History of Angola, c. 1830-1930", *The Journal of African History* 22,3 (1981), pp. 349–378, here pp. 371–373; Shapiro, Martin Frederick, *Medicine in the service of colonialism. Medical care in Portuguese Africa, 1885-1974* (Ph.D. Thesis - University of California), 1983, pp. 221–230; for Príncipe, see McKelvey, John Jay, *Man against Tsetse. Struggle for Africa,* Ithaca: Cornell University Press, 1973, pp. 107–124 and most recently Higgs, Catherine, *Chocolate Islands. Cocoa, Slavery, and Colonial Africa,* Athens: Ohio University Press, 2012, pp. 60–64. Although limited, it is still telling that none of this anglophone historiography has entered the main body of scholarship on sleeping sickness in Africa.

Portuguese colonies health services adopted different approaches depending on epidemiological, ecological and economic conditions.

1. The Making of an African Epidemic

In the nineteenth century, and very sporadically in even earlier times, European doctors signalled the presence of a new deadly disease among Africans living along the West Coast of Africa, in an area that ranged from the Gulf of Guinea to the Congo basin and Central Angola.[10] In different languages, the disease came to be known under such names as "lethargus/lethargy", "hypnosis" and "sleeping sickness" (Port. *doença do so(m)no*), insofar as its main clinical symptom was "an irresistible tendency to sleep", which grew stronger over time and invariably led to the death of its victims.[11] Many observers believed it to be a typically African disease, as it only seemed to target Africans. The fact that the disease was also observed among Africans who had been transported as slaves or indentured labourers to the Americas seemed to corroborate this conjecture.[12]

In Portuguese medical circles, the disease was discussed for the first time in 1871, after colonial physician Manuel Ferreira Ribeiro informed the powerful Society of Medical Sciences in Lisbon *(Sociedade das Sciências Médicas de Lisboa)* of several cases of the disease on São Tomé and Príncipe, two islands under Portuguese rule in the Gulf of Guinea. In their controversial discussions of the aetiological theories that had been developed primarily by French and British colonial physicians, the members of the Society of Medical Sciences eventually reached the conclusion, however, that they did not have sufficient information to resolve the matter.[13]

When, shortly thereafter, cases appeared in the eastern hinterland of Luanda, the disease, which had probably long been known to the African population, also began to attract the attention of the Portuguese in Angola. In the early 1870s, sleeping sickness began to

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[10] For early European accounts, see Lyons, *The colonial disease,* pp. 64–66; Bado, *Médecine coloniale,* pp. 38–39; Hoppe, *Lords of the Fly,* pp. 29; 50. See also Bettencourt, Annibal; Kopke, Ayres; Rezende, Gomes de; Mendes, Annibal Correia, *La maladie du sommeil. Rapport présenté au Ministère de la Marine et des Colonies par la Mission envoyée en Afrique Occidentale Portugaise,* Lisboa: Imprimerie de Libanio da Silva, 1903, pp. 1–4.

[11] Sociedade das Sciências Medicas, "Relatorio da commissão encarregada de dar um parecer sobre a communicação do sr. Ribeiro acerca da doença do somno", *Jornal da Sociedade das Sciências Médicas de Lisboa* 36 (1871), pp. 251-253; 264-272 (here also quote). For the different names used, see for instance Bado, *Médecine coloniale,* pp. 40–41 and Leitão, Alberto de Souza Maia, *Relatório da visita sanitaria aos concelhos da léste de Loanda mais victimados pela doença do somno,* Porto: Typ. A Vapor da Empreza Litteraria e Typographica, 1901, p. 97.

[12] See, for instance, Guérin, Paul Marie Auguste, *De la maladie du sommeil,* Paris, 1869; Corre, Armand, "Recherches sur la maladie du sommeil. Contribution a l'étude de la scrofule dans la race noire", *Archives de Médecine Navale* 27 (1877), pp. 292–356, here p. 347. See also Bado, *Médecine coloniale,* pp. 38–39 and further on in this chapter.

[13] Ribeiro, Manuel Ferreira, "Molestia de diagnostico obscuro. Communicação lida na sessão de 13 de Maio de 1871", *Jornal da Sociedade das Sciências Médicas de Lisboa* 36 (1871), pp. 204–209; Sociedade das Sciências Medicas, *Relatório da Comissão*; Sociedade das Sciências Medicas, "Acta da sessão ordinaria de 15 de Julho de 1871", *Jornal da Sociedade das Sciências Médicas de Lisboa* 36 (1871), pp. 294–302.

spread along the Cuanza and Bengo rivers, causing epidemic upsurges in various commercial and agricultural centres in the region, such as Dondo and Massangano.[14] In Dondo alone, the local health delegate reported 232 victims between 1872 and 1877.[15] Medical statistics suggest that the disease abated somewhat thereafter, only to manifest in a new epidemic upsurge in the mid-1890s.[16] Such an epidemiological pattern is not improbable, but it can hardly be confirmed given the scarcity of state doctors in the interior of the colony and the severe limitations of their actions: doctors suffered from the lack of transport and the distrust of the African population, who rarely consulted Portuguese doctors and even then only after exhausting the arsenal of their own healers.[17] Other evidence suggests that, between the 1870s and the 1890s, the disease had become an integral part of Angola's pathological landscape. Writing in the late 1880s, António Ramada Curto, the head of the Angolan health services, recounted that sleeping sickness had become "endemic" in Luanda's hinterland, "with more or less frequent upsurges".[18] In the early 1880s, the disease had also begun to encroach upon the district of São Salvador and the Cabinda enclave, regions close to the Congo basin.[19]

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[14] For early accounts, see Dias, *Famine and disease,* p. 371 and, additionally, Monteiro, Joachim John, *Angola and the River Congo*, 2 vols, London: Macmillan, 1875, Vol. I, pp. 143-144. For the spread of the disease and the number of reported cases, see Correia, Alberto Carlos Germano da Silva, "A doença do sono em Angola", *Revista Médica de Angola* 4,4 (1923), pp. 157–176, here pp. 157–162. See also Leitão, *Relatório da visita sanitária,* pp. 97–101, who also conveys the idea that the African population had known the disease before the 1870s, and Bettencourt/Kopke/Rezende/Mendes, *La maladie du sommeil,* p. 5. According to Bado, the Portuguese Aleixo de Abreu already referred to sleeping sickness as "mal de Loanda" in 1623, but this seems to be a mistake, as Zamparoni has identified "mal de Loanda" as scurvy. Compare Bado, *Médecine coloniale,* p. 38 with Zamparoni, Valdemir, "Sobre doenças, terras e gentes de Angola. Um olhar setecentista", *Anais do XXVI Simpósio Nacional de História (ANPUH), São Paulo, Julho 2011.*

[15] Collaço, Luiz Fernandes, "Mappa da mortalidade causada pela molestia do somno na villa do Dondo no periodo decorrido desde 1872 a 1877 (30.01.1878)", *Estatistica Medica dos Hospitaes das Provincias Ultramarinas com referencia ao anno de 1877,* Lisboa: Imprensa Nacional, 1883, p. 100.

[16] Correia, *A doença do sono,* pp. 157–162.

[17] See e.g. Collaço, Luiz Fernandes, "Importancia historica e commercial da povoação do Dondo", *Estatistica Medica dos Hospitaes das Provincias Ultramarinas com referencia ao anno de 1877,* Lisboa: Imprensa Nacional, 1883, pp. 83–87, here p. 85; Xavier, Ignacio Caetano, "Relatório do Serviço de Saúde no Dondo, referido ao anno de 1881", *Estatistica Medica dos Hospitaes das Provincias Ultramarinas com referencia ao anno de 1881,* Lisboa: Imprensa Nacional, 1883, pp. 103–116, here p. 115. On the scarcity of doctors in the interior, see also Chatelain, Héli, "Lettres de Loanda", *L'Afrique explorée et civilisée* 7 (1886), pp. 30-31; 54-56; 182-183; 216-217; 247-249, here pp. 216–217. On African healers, see further on in this chapter.

[18] Curto, António Duarte Ramada, "Relatório do Chefe do Serviço de Saúde de Angola", in: Ministerio da Marina e Ultramar (ed.), *Estatistica Medica dos Hospitaes das Provincias Ultramarinas com referencia ao anno de 1887,* Lisboa: Imprensa Nacional, 1890, pp. 319–348, here pp. 333–334. On the continous ravages caused by the disease, see also Ribeiro, Manuel Ferreira, *Estudos medico-tropicaes durante os trabalhos de campo para o caminho de ferro de Ambaca na província de Angola, 1877-1878,* Lisboa: Imprensa Nacional, 1886, p. 191.

[19] For Congo, see Barroso, António José Sousa de, "Relatório da viagem ao Bembe, 01.01.1884", in: Oliveira, Mário António Fernandes de (ed.), *Angolana II (1883-1887). Documentação sobre Angola,* Luanda: Instituto de Investigação Científica de Angola, 1971, pp. 439–473, here pp. 447; 455; Mense, Carl, *Rapport sur l'état sanitaire de Léopoldville de novembre 1885 à mars 1887* (Publication de l'État Indépendant du Congo; 1), Bruxelles: Vanderauwera, [1890]; Mense, Carl, "Bemerkungen und Beobachtungen über die Schlafsucht der Neger", *Archiv für Schiffs- und Tropenhygiene* 4,11 (1900), pp. 364–368, here p. 364 and the account of the missionary doctor Mercier Gamble in: Sleeping Sickness Committee, *Minutes of Evidence taken by the Inter-Departmental Committee on Sleeping Sickness. Presented to Both Houses of Parliament by Command of his Majesty [= Cd. 7350],* London: H.M.S.O., 1914, p. 189. For Cabinda, see Silva, João de Mattos e, *Contribuição*

It was not until the second half of the 1890s, however, that the disease generated more official and popular concern, when a new epidemic – or what was perceived as such – was signalled in the hinterland of Luanda. Reports from observers in the area now took a very dramatic tone, citing staggering mortality rates and describing empty villages where some years before agriculture and commerce had still thrived. Thus the missionary (and pro-colonial) journal *Portugal em África* wrote: "The majority of the administrative districts *(concelhos)* are depopulating. Mortality is high. Sleeping disease has victimized the indigenous population in the concelhos of Zenza do Golungo, Muxima, Massangano and Icolo Bengo: this disease is a crying shame".[20] The journal's intelligence on sleeping sickness, doubtlessly provided by missionaries in the field, was confirmed in the reports from the local health delegates.[21] Even the British Consul for Angola (and Congo) warned that "if European medicine cannot find a remedy, entire districts of South-West Africa will be either stripped of their present inhabitants or kept in a perpetual state of underpopulation".[22]

In the face of such dramatic accounts, the Health Council *(Junta de Saúde)* in Luanda, the colony's highest ranked medical board composed of the director of the health services and two senior health officials, eventually nominated a doctor to investigate the matter.[23] Between November 1900 and February 1901, Alberto de Souza Maia Leitão (1868-1923) travelled through Luanda's hinterland. Although he recorded information on numerous sleeping sickness cases, his conclusions did not fully corroborate the idea of a mortiferous epidemic. While he did believe that the population was steadily declining, he did not consider sleeping sickness to be the primary cause. According to Maia Leitão, the staggeringly high child mortality rates, the exportation of Angolan workers to the islands of São Tomé and Príncipe and the low fertility rates among the *serviçães* (contract labourers) in the region contributed more to the ongoing depopulation than did sleeping sickness, which he only listed as fourth amongst the depopulating factors.[24] Yet, before his controversial findings were written and

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para o estudo da região de Cabinda. Memoria para o Congresso Colonial Nacional, Lisboa: Typographia Universal, 1904, pp. 394–395. See also Dias, *Famine and disease,* p. 371.

[20] Portugal em África 3,34 (1896), p. 420. *Portugal em África* was edited in Lisbon by the missionaries of the Holy Ghost, the most important Catholic congregation in Angola from the late nineteenth century to decolonization. For more information on the missionaries of the Holy Ghost, see Chapter 5**.**

[21] See, for instance, Luis Fernando Collaço, Relatorio do serviço de saude da villa do Dondo, anno de 1896, in: AHU, SEMU, DGU 942 and the alarming reports from his successor, Alfredo Lopes, referred to in Junta de Saúde (Luanda), Sessão de 25.08.1900, in: ANA, Cód. 1867, fls. 107r-108r.

[22] Consul Casement, *Report on the Trade and Commerce of Angola for the Years 1897 and 1898* (Diplomatic and Consular Reports, Annual Series; 2363), London: H.M.S.O., 1899, pp. 10-11, quote p. 10. For an equally dramatic account, see also Consul Nightingale, *Report on the Trade and Commerce of Angola for the Year 1899* (Diplomatic and Consular Reports, Annual Series; 2555), London: H.M.S.O., 1901, p. 8.

[23] Junta de Saúde (Luanda), Sessão de 25.08.1900, in: ANA, Cód. 1867, fls. 107r-108r.

[24] Leitão, *Relatório da visita sanitária,* pp. 127–128. For the career of Leitão (1868-1923), see *Livro Mestre do Quadro de Saúde de Angola (1858-1913)*, p. 67, in: AHU, SEMU, DGAPC 895.

published, a disturbing foreign report on sleeping sickness in Angola had already jolted the medical community in Portugal into action.[25]

In November 1900, Germany's leading journal of tropical medicine, the *Archiv für Schiffs- und Tropenhygiene*, published two letters that the German Consul in Angola, Otto Gleim, had sent to the colonial department of the Foreign Office in Berlin. Gleim had visited the sleeping sickness-ridden eastern hinterland of Luanda in July and August 1899 and in his letters painted a gloomy picture of decimated populations and deserted villages, accusing Portugal of not undertaking any action to put the disease in check.[26] Gleim's journey had not been a coincidence. During his previous stay in the German colony of Cameroon, the local state doctor Hans Ziemann had informed him about the existence of sleeping sickness in Angola and encouraged him to further investigate it.[27]

Gleim's reports, though not decisive for Germany's later dealings with the disease, had a considerable impact on the German medical community.[28] Nonetheless, these reports did not result in a German medical expedition to Angola to further investigate the disease, as both Gleim and Ziemann had recommended, though this was primarily because the Colonial Department of the Foreign Office in Berlin was not willing to cover the expenses. Ziemann had even obtained the permission of the colonial government in Cameroon to go to Angola to study the disease, but his expedition, scheduled for May 1900, was cancelled at the last minute due to "transport problems".[29] However, upon the demand of the Imperial Health Council *(Kaiserliches Gesundheitsamt)*, the reports were published in the *Archiv für Schiffs- und Tropenhygiene*, together with a more general article on sleeping sickness in Angola and the Congo Free State by the journal's editor, Carl Mense, who had practiced medicine in the Congo in the mid-1880s. These articles were deemed so important that dozens of offprints of

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[25] His report is dated 30 June 1901, see *Ibid.,* p. 128. On the timing of the report, see also Bettencourt, Annibal, "Doença do somno. Trabalhos executados até 6 de agusto de 1902 pela missão enviada a Angola pelo Exmo. Ministro da Marinha", *Revista Portugueza de Medicina e Cirurgia Praticas* 6,139-144 (1902), pp. 193-240; 241-272; 286-303; 323-328; 344-352; 374-382, here pp. 197–198.

[26] Gleim, Otto, "Berichte über die Schlafkrankheit der Neger im Kongogebiete", *Archiv für Schiffs- und Tropenhygiene* 4,11 (1900), pp. 358–363. The original letters from Gleim to Reichskanzler Fürst zu Hohenlohe-Schillingsfürst, 10.08.1899 and 26.04.1900, can be found in Bundesarchiv, Berlin-Lichterfelde (henceforth BArch) R1001/5886, fl. 3r-5r and 12r-16r.

[27] *Ibid.,* p. 358; Ziemann, Hans, "Ist die Schlafkrankheit der Neger eine Intoxikations- oder Infektionskrankheit?", *Centralblatt für Bakteriologie, Parasitenkunde und Infektionskrankheiten* 32 (1902), pp. 413–424, here p. 414.

[28] Gleim's reports and Ziemann's early interest in sleeping sickness are not referred to in the literature on German tropical medicine.

[29] Ziemann, *Ist die Schlafkrankheit der Neger,* pp. 414; 423.

both articles were subsequently sent to Germany's colonies and many of its consulates in Africa.[30]

But above all, the articles caused quite a stir in Portugal. They were reviewed by Miguel Bombarda – an official collaborator of the *Archiv* – in Portugal's leading medical journal, *A Medicina Contemporânea*.[31] In and around 1900, Bombarda was one of the most influential doctors in Portugal. Already the medical superintendent of Lisbon's psychiatric hospital Rilhafolles, he was also the co-founder and long-time director of *A Medicina Contemporânea* and a leading member of the *Sociedade das Sciências Médicas de Lisboa*, the presidency of which he held from 1900 to 1903.[32] With Gleim's observations on hand, Bombarda managed to convince the *Sociedade* as well as the Overseas Ministry of the necessity of sending a study mission to Angola.[33] On-the-spot research, he argued, promised to be more fruitful than further discussions and laboratory research in Portugal, where the previous examination of a few cases had not succeeded in unveiling the nature and origins of the disease. In Bombarda's opinion, study missions were the sign of the time. In the previous two decades, he argued, other colonial powers had multiplied their medical expeditions to Africa and Asia (and even some parts of Europe) and by this means had unravelled the aetiology of other 'tropical' diseases such as malaria. Portugal had no choice but to follow this movement, Bombarda concluded. On the one hand, there were compelling humanitarian and economic reasons for this intervention, as "the race which is the main lever of our colonisation and of our colonial possessions is being destroyed in a cruel manner". On the other hand, national dignity was at stake. Because he (erroneously) assumed that sleeping sickness was ravaging mainly Portuguese possessions, Bombarda warned that it would be

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[30] F.W. (Kolonialabteilung des Auswärtigen Amtes) an den Herrn Präsidenten des Kaiserlichen Gesundheitsamtes, 25.06.1900; Präsident des Kaiserlichen Gesundheitsamtes an den Herrn Direktor der Kolonialabteilung des Auswärtigen Amtes, 13.07.1900, in: BArch R1001/5886, p. 27-27r and 28. For the list of separata, dated 04.01.1901, see BArch R1001/5886, p. 37. For Mense's article, see Mense, *Bemerkungen*. For an overview of the life and work of Carl Mense, see Brethauer, Olaf, *Der Tropenmediziner Carl Mense (1861-1938). Leben und Werk* (Inauguraldissertation - Ruprecht-Karls-Universität Heidelberg), 2001. Unfortunately, Brethauer's work is uncritical and lacks analytical depth.

[31] Bombarda, Miguel, "Doença do Sono em Angola", *A Medicina Contemporânea* 18,50 (16.12.1900), pp. 413–414. Bombarda's name was mentioned amongst the collaborators on the first page of each volume of the *Archiv für Schiffs- und Tropenhygiene*.

[32] For Miguel Bombarda's life and work, see "Obituary Miguel Bombarda", *The British Medical Journal* 2601 (05.11.1910), p. 1473; "Obituário Miguel Bombarda", *A Medicina Contemporânea* 28,41 (1910), pp. 321–330; Araújo, Paulo, *Miguel Bombarda. Médico e político,* Casal de Cambra: Caleidoscópio, 2007 and the contributions in Pereira, Ana Leonor; Pita, João Rui (eds.), *Miguel Bombarda (1851 - 1910) e as singularidades de uma época,* Coimbra: Universidade de Coimbra, 2007.

[33] Bombarda, Miguel, "Doença de somno", *A Medicina Contemporânea* 18,51 (23.12.1900), pp. 421–422, here p. 421 and *Jornal da Sociedade das Sciências Médicas de Lisboa* 64 (1900), pp. 167-169, 259, 263-265.

very embarrassing for Portugal as a “free country” were others to succeed in doing what was Portugal’s responsibility.[34]

Bombarda’s lobbying efforts were quickly crowned with success. In February 1901, the Minister of Marine and Overseas Territories António Teixeira de Sousa, a medical doctor himself, nominated a scientific commission to investigate the aetiology and epidemiology of sleeping sickness. It was comprised of the director of the Royal Bacteriological Institute in Lisbon Annibal de Bettencourt, one of his collaborators Gomes de Rezende, the naval doctor Ayres Kopke and the director of the Bacteriological Laboratory in Luanda Annibal Correia Mendes.[35] Between May and December 1901, this group was commissioned to conduct extensive research in Angola and on the island of Príncipe, where the disease was also running rampant. It was the first European mission of its kind.

By then, sleeping sickness had already initiated its apparent eastbound march across the continent, or what has often been interpreted as such, and a devastating epidemic had already broken out in British Uganda.[36] Although it most likely started in 1900 this epidemic was brought to the notice of the international medical community by missionary doctors only in July 1901. After further dramatic reports, the British Foreign Office charged the Royal Society to send a research commission to the region. Due to the extensive coverage of its work in the powerful British medical press and the apparent further spread of the disease, sleeping sickness succeeded in capturing the attention of all colonial nations to a far a greater extent than the ongoing outbreak in Angola had.[37] In the years leading up to the First World War, sleeping sickness was signalled in many other territories in tropical Africa and all

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[34] "Representação dirigida ao Governo pela Sociedade das Sciencias Medicas", *Jornal da Sociedade das Sciências Médicas de Lisboa* (1900), pp. 167–169. Similarly Bombarda, *Doença de somno (23.12.1900).*

[35] Ministerio da Marina e Ultramar, *Portaria nomeando uma commissão para estudar na provincia de Angola a doença do somno*, 21.02.1901, in: Collecção Official da Legislação Portuguesa 1901, Lisboa 1902, p. 41. On the life of Teixeira de Sousa, see the biographical article in Infopédia (on-line), Porto: Porto Editora, 2003-2012: http://www.infopedia.pt/$teixeira-de-sousa (last accessed 22.11.2013) and the autobiographical Sousa, António Teixeira de, *Responsabilidades históricas. Política contempóranea*, 2 vols, Coimbra: França & Arménio, 1917. On his time as Minister of Marine and Overseas, see also Monteiro, Arménio, *Conselheiro Dr. António Teixeira de Sousa. Ministro e secretário de estado da marinha e ultramar* (Pelo Império; 39), Lisboa: Agência Geral das Colónias, 1937. On Bettencourt’s life and work, see Valente, Pulido, "In Memoriam Prof. Annibal Bettencourt, 1868-1930", *Arquivos do Instituto Bacteriológico Camara Pestana* 6,2 (1930), pp. I–X.

[36] The usual explanation for the appearance of epidemic sleeping sickness in East Africa has long been that it spread from Western Africa, favoured by the expansion of colonial activities and new streams of migrant labour in Central Africa. See, for instance, Morris, K. R. S., "The Movement of Sleeping Sickness across Central Africa", *Journal of Tropical Medicine and Hygiene* 66 (1963), pp. 159–176; Soff, Harvey G., "Sleeping Sickness in the Lake Victoria Region of British East Africa, 1900-1915", *African Historical Studies* 2,2 (1969), pp. 255–268, and with a critical view, Lyons, *The colonial disease,* pp. 40-41; 72. Lyons and later Heather Bell have argued that the epidemic in Uganda was not so much imported from West Africa, but caused by local environmental changes. See the literature cited in footnote 49.

[37] Lyons, *The colonial disease,* pp. 70–73; Haynes, Douglas Melvin, "Framing Tropical Disease in London. Patrick Manson, Filaria perstans, and the Uganda Sleeping Sickness Epidemic, 1891–1902", *Social History of Medicine* 13,3 (2000), pp. 467–493, here pp. 483–491. For the extensive coverage of sleeping sickness research in the British press, see Hoppe, *Lords of the Fly,* pp. 38–40.

colonial powers – even Spain in its tiny possessions in the Gulf of Guinea – organised medical missions to investigate the causes of the disease and possible remedies. The "scientific scramble for sleeping sickness", as Hoppe has termed it, gave way to the formation of at least 20 research commissions between 1901 and 1914.[38]

This chronology of events raises the question as to why, at the turn of the century, the Portuguese responded so differently to the new outbreak of the sleeping sickness epidemic compared to the disease's first manifestation in the 1870s. Why did the indifference (or was it perhaps helplessness) of the 1870s and 1880s give way, at the turn of the twentieth century, to a strong and lasting reaction of the medical establishment in Luanda, Lisbon and eventually in other European colonial empires as well? In the following paragraphs, I will argue that this shift was not only, and probably not even primarily, caused by the greater virulence of the epidemic in the late 1890s – an assumption that is probable but cannot be proved – but that it resulted from important changes in the fields of political and economic occupation, medical science and colonial ideology.

Firstly, the economic transformation of Luanda's hinterland in the final decades of the nineteenth century is an important element in developing an understanding of both the shifting Portuguese reaction to sleeping sickness and the epidemicity of the disease itself. Since the mid-1870s, the *concelhos* situated to the east of Luanda and to the north of the Cuanza River, which had been under Portuguese influence since the seventeenth century, had experienced a tremendous increase in European economic activity, which was most notably agricultural in nature. Clearly, this process had started in the 1850s after the abolition of the transatlantic slave trade (1842), which had until then been the colony's primary economic activity. The transition to 'legitimate commerce' was slow, however, and, agricultural production, more than trade, initially remained largely in the hands of African peasant households. It was only from the 1870s to the 1880s onwards that, partly through new possibilities of obtaining agricultural loans, large coffee and sugar cane plantations under European management began to compete more seriously with an economic system of mainly small-scale African farming. This process was not only marked by massive land expropriation and the importation of

[38] The quote is from Hoppe, *Lords of the Fly,* p. 28. For an overview of the efforts in this domain by the different colonial nations, see *Ibid.,* pp. 11–15. For the generally neglected Spanish efforts, see Corral-Corral, I.; Quereda Rodriguez Navarro C., "Gustavo Pittaluga and the expedition to study sleeping sickness in the Spanish territories of the Gulf of Guinea (1909)", *Revista de Neurologia* 54,1 (2012), pp. 49–58. Helen Tilley lists 17 research commissions, but omits at least three Portuguese sleeping sickness missions, to Angola (1904), Mozambique (1910-1911) and Príncipe (1911-1914). Compare Tilley, Helen, *Africa as a Living Laboratory. Empire, Development, and the Problem of Scientific Knowledge, 1870-1950,* Chicago: Chicago University Press, 2011, pp. 174-176 and Amaral, Isabel, "The Emergence of Tropical Medicine in Portugal. The School of Tropical Medicine and the Colonial Hospital of Lisbon (1902-1935)", *Dynamis* 28 (2008), pp. 301–328, here p. 313.

African slave-like labour, but also by the influx of many hundreds of European farmers and traders.[39] By the late nineteenth century, the area between Cuanza and Bengo had become more than ever the “core of Portuguese colonial occupation”.[40]

This ongoing economic transformation is a crucial element in reaching an understanding of why the recrudescence – or what many contemporaries considered as such – of sleeping sickness in the mid-1890s provoked so much anxiety. The depopulating effects of the disease were perceived, more now than twenty years before, to be a serious threat to the prosperity of European planters and trading companies. Significantly, the new ‘outbreak’ of sleeping sickness was first signalled among African workers on the Cazengo plantations in 1895 at a moment when, partly due to the high coffee price on the international market, the plantation economy was veritably burgeoning and was in need of a large and vigorous workforce.[41] Economic factors also explain, at least in part, why the existence of sleeping sickness in the northern Congo region, for instance around São Salvador, drew far less official attention until well into the twentieth century. In this part of the colony, Portuguese investments remained modest and the economy continued to be dominated by African smallholders and traders as well as northern European export factories.[42]

It is important to add that the economic transformation and political subjugation of the region was probably the very reason why sleeping sickness reached epidemic proportions. In the twentieth century, several colonial doctors would place the blame for the spread of the disease on the flow of migrant labour to the plantations and on colonial infrastructure works, such as the construction of the Ambaca railway, which eventually connected Luanda with Malanje.[43] There is indeed little doubt that this specific increase in African mobility

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[39] Birmingham, David, "The Coffee Barons of Cazengo", *Journal of African History* 19,4 (1978), pp. 523–538; Dias, *Famine and disease*, esp. pp. 367 and 372; Dias, Jill Rosemary, "Changing Patterns of Power in the Luanda Hinterland", *Paideuma* 32 (1986), pp. 285–318; Freudenthal, Aida, *Arimos e Fazendas. A Transição Agrária em Angola 1850-1880* (Raízes de Caxinde; 2), Luanda: Chá de Caxinde, 2005. According to Jill Dias, the number of “white” traders and settlers rose from 600 to 6.000 between 1878 and 1898. See Dias, *Changing Patterns,* p. 305. For the history of Luanda’s hinterland in the 17th century, see Heintze, Beatrix, *Studien zur Geschichte Angolas im 16. und 17. Jahrhundert. Ein Lesebuch,* Köln: Rüdiger Köppe Verlag, 1996.

[40] Dias, *Changing Patterns,* pp. 285 (here quote) and the map p. 286.

[41] Birmingham, *Coffee Barons,* p. 529. On the demographic and economic damages caused by sleeping sickness in the Cazengo region, see also Consul Nightingale, *Report,* p. 8.

[42] Vos, Jelmer, *The Kingdom of Kongo and Its Borderlands, 1880-1915* (Ph.D. Dissertation - School of Oriental and African Studies), 2005, pp. 42-48; 74-80; 183-188; Vos, Jelmer, "The Economics of the Kwango Rubber Trade, c. 1900", in: Heintze, Beatrix; Oppen, Achim von (eds.), *Angola on the move / Angola em Movimento. Transport Routes, Communications and History / Vias de Transporte, Comunicações e História,* Frankfurt am Main: Lembeck, 2008, pp. 85–98; Vos, Jelmer, "Of Stocks and Barter. John Holt and the Kongo Rubber Trade, 1906-1910", *Commodities of Empire. Working Paper* 12 (2009).

[43] On the presumed role of the railway, see e.g. Mora, António Damas, *A luta contra a moléstia do sono em Angola (1921-1934)* (Relatórios da Direcção dos Serviços de Saúde e Higiene de Angola; 2), Luanda, 1934, p. 1; Rocha, Florentino Ramalho da, "O combate à doença do sono em Angola", *O Médico* 753 (1966), here p. 3. While the construction of the Ambaca railway only started in 1886, large prospecting teams with hundreds of African labourers had already crossed the region in the 1870s. See Freudenthal, Aida, "Angola", in: Marques, A.

contributed to the proliferation of the disease. However, Africans had been far from immobile before this, and other aspects of the colonisation process played a role as well.[44] As Jill Dias has shown, the enforcement of Portuguese rule in the region weighed heavily on the local population, as it implied the expropriation of African landholders, the gradual destitution of the old Mbundu elites and the imposition of both hut tax and labour conscription.[45] Africans reacted to these changes in various ways. Many tried to escape Portuguese control by moving into new areas, most notably the densely vegetated and notoriously rebellious Dembos region, situated northeast of Luanda between the Bengo and Dande rivers.[46] Yet, by doing so, they may have come into closer contact with infected tsetse flies than they would otherwise have, since this region was – or at least would become known as – one of the most heavily infected. Flight, but also the expansion of the plantations into formerly uncultivated land, might thus have reduced the physical separation between tsetse flies and the African population that had long protected the latter against infection.

Moreover, the imposition of colonial rule in the region led to the impoverishment of the vast majority of Africans. Malnutrition and famines, caused as much by natural disasters (droughts) as by the failure of the European plantations to cultivate adequate food crops and the socio-economic decline of the Africans, reduced their resistance against disease. Tellingly, both upsurges of sleeping sickness, in the mid-1870s and mid-1890s, coincided with periods of severe drought and famine.[47] Consistent with this view is the fact that older African informants in Angola claimed that the disease, called *hoxa* in Kimbundu, had already existed long before the 1870s.[48] There is therefore good reason to conclude with Lyons, Bell and Ford that colonialism itself, which at the turn of the twentieth century set out to rescue the 'victimized' Africans from a 'new' deadly disease, had turned what was previously an endemic disease into a devastating epidemic by disturbing the "intricate balances among

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H. de Oliveira (ed.), *O Império Africano, 1890 - 1930* (Nova História da Expansão Portuguesa; 11), Lisboa: Estampa, 2001, pp. 259–467, here pp. 325–326 and Ribeiro, *Estudos medico-tropicaes*.

[44] On mobility in Angola, see Heintze, Beatrix; Oppen, Achim von (eds.), *Angola on the move / Angola em Movimento. Transport Routes, Communications and History / Vias de Transporte, Comunicações e História,* Frankfurt am Main: Lembeck, 2008.

[45] Dias, *Changing Patterns,* p. 308.

[46] *Ibid.,* p. 309. On the revolts and military campaigns in the Dembos regions between 1872 and 1919, see Pélissier, René, *História das campanhas de Angola. Resistência e Revoltas (1845-1941)*, 2 vols, Lisboa: Editorial Estampa, 1986 [1977], vol. I, pp. 321-349.

[47] Dias, *Famine and disease,* pp. 353–354 and Dias, *Changing Patterns,* p. 309. See also in a more general way Davis, Mike, *Late Victorian Holocausts. El Niño Famines and the Making of the Third World,* London/New York: Verso, 2001, pp. 99–100. Davis uses Angola as one example among many to demonstrate the connections between the El Niño famines of the 1870s and 1890s, diseases patterns and the consolidation of colonial and imperial power throughout the global tropics.

[48] Leitão, *Relatório da visita sanitária,* pp. 20; 98-99; Silva, João de Mattos e, "Doença do somno em Angola", *A Medicina Contemporânea* 18,51 (23.12.1900), pp. 422–423, here p. 422.

people, flora, fauna, tsetse flies and trypanosomes" that Africans had managed to preserve for decades or even centuries.[49]

Secondly, the acceleration of European economic expansion in the region during the last quarter of the nineteenth century coincided with the 'effective occupation' of Angola and the renewed interest for colonial Africa in Portugal that was triggered by the Scramble for Africa. There has been much debate about the causes of Portugal's participation in the Scramble and especially about the role of Portuguese capital(ists). In the 1960s, Richard Hammond defended the idea that Portuguese imperialism had not been economically driven, but rather motivated by political and cultural factors such as national pride and widely shared colonial enthusiasm.[50] This thesis was subsequently countered in the late 1970s by William Gervase Clarence-Smith, who argued that, on the contrary, "the Portuguese bourgeoisie was almost certainly the most economically motivated of all the European bourgeoisies during the 'Scramble for Africa'".[51] Since then, other historians like Valentim Alexandre, João Pedro Marques and Pedro Lains have continued this debate.[52]

Yet what is not contested (not even by Clarence-Smith) is that, by the 1890s, Portugal's African colonies were "at the forefront of Portuguese public opinion" and that many groups in metropolitan Portuguese society were favourable toward Portuguese colonialism.[53] This procolonial mindset had been both exhibited and reinforced at the occasion of the so-called British ultimatum in 1890: when the British government forced Portugal, through a short memorandum, to give up its claims to the territory between Angola and Mozambique, symbolized in the so-called 'pink map' *(mapa cor-de-rosa)*, Portuguese diplomatic and public indignation was sparked, thus contributing to the "sacralization of the

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[49] Lyons has made a similar ecological argument to explain the outbreak of epidemic sleeping sickness in the Belgian Congo. See Lyons, *The colonial disease,* pp. 3-4; 34-35; 54-56, quote p. 55 and on this also Bell, *Frontiers of Medicine,* pp. 130–135 and Ford, *The Role of the trypanosomiases*, esp. pp. 9-10 for the general argument.

[50] Hammond, Richard, *Portugal and Africa, 1815-1910. A Study in Uneconomic Imperialism,* Stanford: Stanford University Press, 1966.

[51] Clarence-Smith, William Gervase, "The Myth of Uneconomic Imperialism, 1836-1926", *Journal of Southern African Studies* 5,2 (1979), pp. 165–180, here pp. 173 (quote).

[52] Alexandre, Valentim, *Origens do Colonialismo Português Moderno (1822-1891),* Lisboa: Sá da Costa, 1979; Lains, Pedro, "Causas do Colonialismo Português em África, 1822-1975", *Análise Social* 33,146-147 (1998), pp. 463–496. This question also led to a heated debate between Valentim Alexandre and João Pedro Marques on the role of Portuguese metropolitan elites and their economic investments in Africa in the abolition of the transatlantic slave trade, see, for instance, Marques, João Pedro, "Uma revisão crítica das teorias sobre a abolição do tráfcio de escravos português", *Penélope* 14 (1994), pp. 95–118; Alexandre, Valentim, "Projecto Colonial e Abolicionismo", *Penélope* 14 (1994), pp. 119–125; Marques, João Pedro, "Avaliar as provas. Resposta a Valentim Alexandre", *Penélope* 15 (1995), pp. 143–156; Alexandre, Valentim, "'Crimes and Misunderstandings'. Réplica a João Pedro Marques", *Penélope* 15 (1995), pp. 157–168; Marques, João Pedro, *Os sons do silêncio. O Portugal de oitocentos e a abolição do tráfico de escravos,* Lisboa: Imprensa de Ciências Sociais, 1999, pp. 357–451.

[53] Clarence-Smith, *Myth*, pp. 172–173.

empire" and thus strengthening the ties between nationalism and colonialism.[54] The reaction to epidemic sleeping sickness at the turn of the twentieth century must hence also be considered against the backdrop of the new importance the colonies had acquired for political, economic and intellectual elites.

Thirdly, the absence of special health campaigns against sleeping sickness in the nineteenth century partially resulted from the fact that, among European colonizers, other diseases initially occupied more of their attention. Even when sleeping sickness reached epidemic proportions in the late nineteenth century, it was not necessarily considered the most important disease affecting the African population. Other diseases figured prominently in medical reports and statistics as well, notably respiratory diseases such as pneumonia and tuberculosis.[55] Above all, sleeping sickness was matched and probably even outweighed in frequency, extension and mortality by smallpox. Smallpox had been known in Angola since the seventeenth century, when it was most likely introduced by Portuguese soldiers. But due to new commercial networks, mounting labour migration flows and military campaigns as well as the increase in famines, the disease gained still more prominence in the second half of the nineteenth and the early twentieth century. After the devastating epidemic of 1864, the disease became endemic, and from then onwards larger epidemics reportedly occurred every five to ten years in various parts of the colony, often including Luanda and its hinterland, thus claiming the lives of many thousands of Africans.[56] At the time, the demographic impact of smallpox was believed to be quite considerable and, when in the late nineteenth and early

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[54] Teixeira, Nuno Severiano, *O Ultimatum Inglês. Política externa e política interna no Portugal de 1890,* Lisboa: Alfa, 1990; Ramos, Rui, *A Segunda Fundação (1890-1926)* (História de Portugal; 6), Lisboa: Editorial Estampa, 2001, pp. 39–41; Alexandre, Valentim, "A África no imaginário político português (séculos XIX-XX)", *Penélope* 15 (1995), pp. 39–52, here pp. 43 (quote).

[55] See, for instance, Luis Fernando Collaço, *Relatório do serviço de saúde da villa do Donde, anno de 1896*, 31.12.1896, p. 2 and Joaquim Bernardo Cardoso Botelho, *Relatório Médico do Districto Sanitário de Mossamedes para o ano de 1896*, 23.12.1896, pp. 19-20, both in: AHU, SEMU, DGU 942; Joaquim Antonio d'Oliveira, *Relatorio do delegado de saude de Ambrizette*, 1898-1899, 31.12.1899, pp. 8-9, in: AHU, SEMU, DGU 944; and *Resumo do estado da saude publica da Provincia d'Angola no Anno de 1906*, in AHU, SEMU, DGU 943. For a traveller's view, see Kingsley, Mary, *West African Studies,* London: Macmillan, 1899, p. 188.

[56] See Wheeler, Douglas L., "A Note on Smallpox in Angola, 1670-1875", *Studia* 13/14 (1964), pp. 351–362; Alden, Dauril; Miller, Joseph C., "Unwanted Cargoes. The Origins and Dissemination of Smallpox via the Slave Trade from Africa to Brazil, c. 1560-1830", in: Kiple, Kenneth F. (ed.), *The African Exchange. Towards a Biological History of Black People,* Durham/London: Duke University Press, 1988, pp. 35–109 and, for the period from the 1850s onwards, most notably the excellent article by Dias, *Famine and disease*, esp. pp. 359; 362-369; 374. See also the detailed accounts of smallpox epidemics in Angola and its capital Luanda, see Correia, Alberto Carlos Germano da Silva, "A variola em Angola", *Revista Médica de Angola* 4,3 (1923), pp. 232-234; 423-460 and Correia, Alberto Carlos Germano da Silva, "O clima, a nosografia e o saneamento de Loanda", *Revista Médica de Angola* 4,2 (1923), pp. 377–482, pp. 405; 407; 453-459. On smallpox in the 1880s, see also Curto, *Relatório do Chefe do Serviço de Saúde de Angola*, pp. 323-325. For the 1864 epidemic, see also the eye-witness account of a Brasilian doctor: Oliveira, Saturnino de Sousa e, *Relatorio historico da epidemia de variola, que grassou em Loanda, em 1864,* Lisboa, 1866.

twentieth century observers described deserted villages in northern Angola, the cause was attributed to both sleeping sickness and smallpox.[57] Although for different reasons, smallpox, like sleeping sickness, was considered an eminently African disease in Angola. Europeans were mostly spared because they had been vaccinated or had acquired immunity through their contact with milder forms of the disease.[58]

Though irregular and inconsistent, the fight against smallpox had probably been the most important, if not the only, public health campaign carried out in Angola in the nineteenth century. Given the aetiology and prophylactic possibilities were well-known, the Portuguese health services had set up regular vaccination campaigns in the last third of the nineteenth century.[59] Nevertheless, the number of vaccinations remained rather modest for decades. On the one hand, the few health delegates in the interior did not receive enough vaccine lymph for larger campaigns; on the other, many Africans did not entirely believe in the protective power of vaccine injections and only during epidemics did they concede to go in greater numbers to European doctors. Arguably, their disbelief in western biomedicine was confirmed and reinforced by the fact that vaccinations often did not provide effective protection, as vaccines quickly deteriorated in hot climates.[60] Only in the 1920s did the disease begin to be brought under control by mass vaccination campaigns that made use of new freeze-dried vaccines.[61]

One can conclude that throughout the late nineteenth century, the obscure and seemingly incurable sleeping sickness had to compete for the scarce resources of the colonial

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[57] Monteiro, *Angola and the River Congo*, vol. 1, pp. 143-144; Leitão, *Relatório da visita sanitária,* pp. 16; 30; Andrade, Alberto Freire de, "Minas de cobre em Angola. Communicação feita na associação dos engenheiros civis portuguezes em 7 de maio de 1906", *Revista de Obras Públicas e Minas* 37,436-438 (1906), pp. 275–315, here p. 314; Brandão, Paes, "Diario da marcha do chefe do Conselho do Libollo, tenente Paes Brandao, a regiao da Quibala", *Portugal em África* 11 (1904), pp. 76-79, 138-140, 223-227, 287-291, 349-355, 406-412, here pp. 224; 409; João Fernandes Barradas, Diário do chefe da missão, 15.12.1908, in: Relatório da Missão à Quissama, pp. 3-40, here p. 5, included in Governo Geral da Província de Angola, Repartição do Gabinete (ed.), *Relatórios, 1910,* Luanda: Imprensa Nacional, 1910, a volume held in the library of the Instituto Superior de Economia e Gestão (ISEG) in Lisbon.

[58] Dias, *Famine and disease,* p. 362; Correia, *A variola em Angola,* p. 445.

[59] Dias, *Famine and disease,* p. 369. For early vaccination attempts in Luanda, see alsoCoghe, Samuël, "The Problem of Freedom in a Mid Nineteenth-Century Atlantic Slave Society. The Liberated Africans of the Anglo-Portuguese Mixed Commission in Luanda (1844–1870)", *Slavery and Abolition* 33,3 (2012), pp. 479–500, here p. 487

[60] Curto, *Relatório do Chefe do Serviço de Saúde de Angola*, pp. 323-325; Alberto de Vasconcellos, *Relatorio do serviço medico durante o anno de 1895 no concelho de Ambriz*, 31.12.1895, in: AHU, SEMU, DGU 940; *Relatorio sobre o serviço de saúde em Noqui com referencia ao anno de 1896*, pp. 6-7, in: AHU SEMU, DGU 942; Alfredo Martins da Silva Borges, *Circunscrição de Cacongo - Relatório sobre assistência aos indígenas e profiláxia da varíola, paludismo e doença do sono*, 1913, in: ANA, Cx. 3374, pp. 10-16. See also Chatelain, *Lettres de Loanda,* pp. 216–217. On the deterioration of the vaccine in hot climates, see also Correia, *A variola em Angola,* pp. 446–447.

[61] Correia, *A variola em Angola,* pp. 446–450; Mora, António Damas, "Os Serviços de Saúde em Angola e a obra de Assistência Médica aos Indígenas", *Boletim da Assistência Médica aos Indígenas e da Luta contra a Moléstia do Sono* 2,9 (1928), pp. 87–94, here pp. 90–91; António Damas Mora, *Balanço Sanitário*, in: A Província de Angola, 04.03.1929, p. 1.

health services with the extremely lethal but well-understood and controllable smallpox. Later, in the twentieth century, sleeping sickness and smallpox control would go hand in hand, with doctors screening people for sleeping sickness and simultaneously vaccinating them.[62] At first, however, they stood in competition with one another and priority seems to have been given to smallpox. This only changed, as I will argue in the following paragraphs, with the institutionalization of tropical medicine as a new medical specialty and the concurrent formation of a new and powerful group of experts around 1900. Unlike smallpox, which only mattered to public health officers on the ground and was not even a tropical disease, sleeping sickness constituted a real scientific challenge for this emerging group of experts, who would put the disease at the top of their agenda.

Fourthly, as has often been argued, the emergence of tropical medicine as a new medical specialty was mainly the result of two interrelated developments. On the one hand, it was closely linked to the rise to ascendancy of the germ theory of disease, which was revolutionizing 'western' views on disease causation, prevention and treatment. Tropical diseases, or 'diseases of warm climates' as they had long been called, were no longer considered the product of a hostile climate, but rather ailments caused by bacteria, parasites or other microorganisms that could be checked and healed by medical science. Unlike the older European 'medicine of warm climates', which arguably came into being with the European expansion in Early Modern Times, the emerging specialty of tropical medicine thus relied on microbiological knowledge and its inherent research design, which was characterized by the laboratorial and microscopic examination of bodily fluids and tissues. On the other hand, this new strand of research was in itself already the result of an increased interest in tropical pathologies, which dovetailed with the new imperialism of the late nineteenth century. As tropical diseases came to be widely considered "the major impediment to the economic and political development of the tropical empire", combating them became a medical as well as a political priority.[63]

In the late nineteenth and early twentieth century, scientific innovations and the onset of modern colonialism thus helped to define and institutionalize a new field of research. As

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[62] See, for instance, Waldemar Gomes Teixeira, *Relatório da Zona Sanitária do Cuanza para 1930*, Junho de 1931, pp. 34–35, in: AHU, MU, AGC 2336 and Chapter 3.

[63] See, for instance, Arnold, David, "Introduction. Tropical Medicine Before Manson", in: Arnold, David (ed.), *Warm Climates and Western Medicine. The Emergence of Tropical Medicine, 1500 - 1900,* Amsterdam: Rodopi, 1996, pp. 1–19 and, with a strong focus on malaria as a paradigmatic tropical disease, Worboys, Michael, "Germs, Malaria and the Invention of Mansonian Tropical Medicine. From 'Diseases in the Tropics' to 'Tropical Diseases'", in: Arnold, David (ed.), *Warm Climates and Western Medicine. The Emergence of Tropical Medicine, 1500 - 1900,* Amsterdam: Rodopi, 1996, pp. 181–207, quote p. 194.

Deborah Neill has shown, the institutionalization of tropical medicine in Europe was characterized by the establishment of state-funded Schools of Tropical Medicine, specialized journals and medical societies in the metropoles of most colonial empires, and the organization of special sections at international medical conferences. It also gave birth to a transnational epistemic community of medical scientists who shared a set of values and beliefs across nations, and who had, especially through a small group of distinguished gatekeepers, a significant influence on colonial policy-making.[64]

Developments in Portugal were largely congruent with this general European pattern. In the wake of the first Portuguese sleeping sickness expedition, which had resuscitated the debate on the role of (tropical) medicine in the colonization process, a School of Tropical Medicine, the *Escola de Medicina Tropical* (EMT), was founded in Lisbon in 1902, together with the *Hospital Colonial* (Colonial Hospital), where patients with tropical diseases from the colonies would be accommodated, treated and studied. From 1905 onwards, the EMT also published Portugal's first journal of tropical medicine, the *Archivos de Hygiene e Pathologia Exoticas*.[65]

There had been a course in 'exotic pathology' at Lisbon's Naval School *(Escola Naval)* since 1887, but since it was not mandatory for colonial doctors, most did not attend it before leaving for the colonies and, overall, research in tropical diseases had remained marginal in nineteenth-century Portugal.[66] In 1901, the idea of a fully fledged School of Tropical Medicine, which would investigate tropical diseases and train future colonial doctors, was advocated by influential doctors such as Miguel Bombarda, António Ramada Curto and the Overseas Minister himself. Capitalizing on the rising interest in sleeping sickness, they had argued that though it was an expensive endeavour the advantages of such a school would largely outweigh the costs, as it would help to diminish the death rates among colonisers and colonised alike. In their view, international competition constituted a further

[64] Neill, *Networks*, esp. pp. 5-8; 12-72. For the institutionalization of tropical medicine in Germany and Belgium, see also Eckart, Wolfgang U., "From Questionnaires to Microscopes. Founding and Early Years of the Hamburg Institute of Nautical and Tropical Diseases", in: Stuchtey, Benedikt (ed.), *Science across the European Empires, 1800-1950,* Oxford: Oxford University Press, 2005, pp. 309–327; Mertens/Lachenal, *History*.

[65] Ministério da Marinha e Ultramar, "Lei auctorizando o Governo a criar um hospital colonial e o ensino da medicina especial dos climas tropicaes, segundo certas bases", *Collecção Official da Legislação Portuguesa, anno de 1902,* Lisboa: Imprensa Nacional, 1903, pp. 129–130. On the institutionalization of tropical medicine in Portugal, see Amaral, *Emergence* and also Mora, António Damas, "História da Escola de Medicina Tropical", *África Médica. Revista Mensal de Higiene e Medicina Tropical* 7 (1941), pp. 196-206; 231-241; 270-278; 298-307; 338-350, esp. pp. 196-200; Azevedo, J. Fraga de, *Cinquenta anos de actividade do Instituto de Medicina Tropical (24 de Abril de 1902 - 24 de Abril de 1952),* Lisboa, 1952, pp. 9–17; Shapiro, *Medicine,* pp. 21–22 and Abranches, Pedro, *O Instituto de Higiene e Medicina Tropical. Um século de história 1902-2002,* Lisboa: Instituto de Higiene e Medicina Tropical, 2004. The name of the journal would later be respelled as *Arquivos de Higiene e Patologia Exóticas*.

[66] Lencastre, António de, "Ensino da medicina colonial", *Archivos de Hygiene e Pathologia Exoticas* 1,1 (1905), pp. i–xiii, here pp. i–iii. See also de Azevedo, *Cinquenta anos,* p. 10.

motivation. Portugal was bound to follow more advanced colonial powers like Great Britain, France and Germany, which had already recognized the value of tropical medicine in the colonization process and had established their own schools.[67]

Upon the advice of Ayres Kopke, who had been sent to Bordeaux, Marseilles and London to observe local schools or courses of tropical medicine, the EMT was modelled after the London School of Tropical Medicine.[68] It was much smaller, however, with initially only three professors and not even a dozen graduates a year.[69] Nevertheless, the School's statutes and choices of personnel demonstrate that tropical medicine was seen as an important 'tool of empire' in Portugal as well.[70] Not only was the School an integral part of the colonial administration and partly funded by the colonies, its first director, António Ramada Curto, was concurrently the head of the Colonial Ministry's Health Department.[71]

Arguably, the institutionalization of tropical medicine was instrumental in turning sleeping sickness into "a top priority and a focal point for scientific research and colonial intervention".[72] Eminent medical scientists like Patrick Manson, often considered the 'father of tropical medicine', Alphonse Laveran and Robert Koch – and one could add Miguel Bombarda for Portugal – used their medical prestige and political influence to convince colonial administrations to fund sleeping sickness research, and now they were seconded by a growing host of young scientists, whom they had often trained themselves and who were keen to do the necessary field work. Because of the complex aetiology of the disease and the considerable academic and public interest in it, sleeping sickness research promised to be a rewarding career choice for young scientists as well as for their 'mentors', who hoped to

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[67] Bombarda, Miguel, "Criação de uma Escola de Medicina Colonial. Allocução do Presidente na sessão solemne de abertura da Sociedade das Sciencias Medicas, em 26 de Outubro de 1901", *Jornal da Sociedade das Sciências Médicas de Lisboa* (1901), pp. 329–337. The text was reprinted in A Medicina Contemporânea, see Bombarda, Miguel, "A creação d'uma Escola de Medicina Tropical", *A Medicina Contemporânea* 19 (1901), pp. 349–351. See also Ramada Curto in "Acta da Sessão, 09.11.1901", *Jornal da Sociedade das Sciências Médicas de Lisboa* (1901), pp. 405–410, here pp. 408–409.

[68] Kopke, Ayres, "Escola Portugueza de Medicina Tropical", *A Medicina Contemporânea* (1902), pp. 278–280.

[69] For a list of graduates until 1952, see de Azevedo, *Cinquenta anos,* pp. 97–124. Only from 1919 onwards did the number of graduates increase substantially.

[70] With the term "tool of empire", Headrick referred to a number of technical innovations, notably steam engines, improved firearms, new means of communication and medical advances (such as the use of quinine against malaria), which, in his opinion, played an important role in enabling European colonial conquest in the nineteenteenth century. See Headrick, Daniel R., *The Tools of Empire. Technology and European Imperialism in the 19th Century,* New York: Oxford University Press, 1981. On tropical medicine as a tool of empire in Portuguese Africa, see also Shapiro, *Medicine*.

[71] On the career of Ramada Curto, see Martins, António Rita, "Conselheiro António Duarte Ramada Curto", in: Primeiro Congresso da História da Expansão Portuguesa no Mundo (ed.), *Publicações da 4a Secção - Os Portugueses em África,* Lisboa, 1938, pp. 181–189 and Lapa, Albino, *Conselheiro Ramada Curto* (Colecção Pelo Império; 61-62), Lisboa: Agência Geral das Colónias, 1940. See also de Azevedo, *Cinquenta anos,* pp. 12–15.

[72] Hoppe, *Lords of the Fly,* p. 27

further increase their prestige.[73] The "scramble for sleeping sickness" was also the result of the scientists' ability to mobilize nationalist feelings, by invoking rivalry between the emerging national communities of tropical medicine and staging it as part of a larger inter-imperial competition.[74] To a certain extent, this became a self-fulfilling prophecy.

This presumed inter-imperial competition partly explains why the dominance of sleeping sickness research in the field of tropical medicine was particularly strong in the Portuguese case. Before the First World War, all schools of tropical medicine in Europe devoted much attention to sleeping sickness, by organizing expeditions and elaborating sleeping sickness control programmes. But while the research programmes of these schools generally included study missions on other tropical diseases as well, such as malaria, yellow fever and beriberi, the School of Tropical Medicine in Lisbon focused almost entirely on sleeping sickness. The four medical missions that it organised and supervised before 1914 were all on sleeping sickness.[75] Starting with the first Portuguese mission in 1901, Miguel Bombarda and later especially Ayres Kopke legitimized the sleeping sickness expeditions with arguments based on the inter-imperial competition between Portuguese and other national medical communities. Since the fight against sleeping sickness quickly became the most important medical intervention of European colonialism in Africa as well as the standard by which to measure medical progress (and good governance), it made sense for Portugal, whose main colonies were in Africa, to concentrate its scarce resources on this single tropical disease.

Fifthly and finally, international rivalry also underwrote Portugal's novel reaction to epidemic sleeping sickness around 1900 in a more general way. The decision to send a high-profile medical commission to Angola and Príncipe was also driven by the fear that Gleim's accusatory report would provoke an international scandal were Portugal to remain passive. The mutual observation of colonial powers was not a new feature in itself, but sub-Saharan Africa had not previously been a focus of intelligence efforts before the onset of the

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[73] Haynes, *Framing Tropical Disease,* pp. 483–491; Hoppe, *Lords of the Fly,* p. 29. For a critical view on the characterization of Manson as "father of tropical medicine", see Arnold, *Introduction (1996),* pp. 1–4.

[74] Hoppe, *Lords of the Fly,* p. 27 (quote). On the interplay of international rivalry and collaboration between sleeping sickness experts, see Neill, *Networks*.

[75] See the list in Amaral, *Emergence,* p. 313 and more details on these missions further on in this chapter. The programme of the first of these missions, by Ayres Kopke in 1904, also included the study of beriberi on São Tomé, see Ministério dos Negócios da Marinha e Ultramar, *Portaria*, 07.05.1904, in: Collecção Official da Legislação Portuguesa, Anno de 1904, Lisboa 1905, pp. 199–200 and Kopke, Ayres, "Beri-beri em S. Thomé", *Archivos de Hygiene e Pathologia Exoticas* 1,1 (1905), pp. 92–99. By way of comparison, from the 32 missions organized by the Liverpool School of Tropical Medicine, many focused on malaria, yellow fever and general sanitation measures, and only 6 concentrated on sleeping sickness, see *Liverpool School of Tropical Medicine. Historical Record, 1898-1920,* Liverpool: Liverpool University Press, 1920, pp. 73–75.

Scramble. Compared to the 1870s, colonial administrations and especially public opinions now observed much more closely how other colonial powers dealt with the native populations under their rule. While competing nations gained official information through an expanding network of consuls, there were also an increasing number of (mainly British) publicists and explorers who travelled through sub-Saharan Africa gathering information. These individuals often worked for journals, magazines or philanthropic organizations and proved to be particularly sensitive to stories of colonial violence and slavery (or slave-like labour), which naturally contradicted Europe's self-declared civilizing mission. In the early twentieth century, their writings generated the colonial scandals regarding the atrocities committed in the Congo Free State and later also the alleged slavery in Portuguese West Africa.[76]

At the turn of the century, Portugal could not afford to attract much international criticism. Although it was not an exposed imperial 'newcomer' like Germany, Belgium or Italy, its position as a colonial power had been considerably weakened by the persistent economic and financial crisis of the metropole, the country's failure to enforce its claims on the territory between Angola and Mozambique against Great Britain in the late 1880s, as well as repeated accusations of colonial underdevelopment and mismanagement.[77] Many traveller accounts portrayed the Portuguese not only as uncivilized but often as of mixed race as well, and as such they constituted an obstacle to Europe's civilizing mission in Africa.[78] In the late nineteenth century, the legitimacy of Portuguese rule in Africa was seriously called into question by some of its competitors, and in 1898 Germany and England even negotiated a 'secret' treaty in which they partitioned the Portuguese colonies in anticipation of an eventual declaration of bankrupcy by Portugal.[79] When Bombarda wrote that it was Portugal's duty as a "free country" to organise a sleeping sickness commission, his words reflected widespread

[76] See Vangroenweghe, Daniel, *Rood rubber. Leopold II en zijn Kongo,* Brussel: Elsevier, 1985; Hochschild, Adam, *King Leopold's Ghost. A story of greed, terror, and heroism in Colonial Africa,* Boston: Houghton Mifflin, 1998; Burroughs, Robert, *Travel Writing and Atrocities. Eyewitness Accounts of Colonialism in the Congo, Angola and the Putumayo,* London: Routledge, 2010; Stone, Glyn, "The Foreign Office and Forced Labour in Portuguese West Africa, 1894-1914", in: Hamilton, Keith; Salmon, Patrick (eds.), *Slavery, Diplomacy and Empire. Britain and the Suppression of the Slave Trade, 1807-1975:* Sussex Academic Press, 2009, pp. 165–195 and Higgs, *Chocolate Islands*.

[77] Freeland, Alan, "'The Sick Man of the West'. A Late Nineteenth-Century Diagnosis of Portugal", in: Earle, T. F.; Griffin, Nigel (eds.), *Portuguese, Brazilian, and African Studies. Studies Presented to Clive Willis on his retirement,* Warminster: Aris & Phillips Ltd, 1995, pp. 205–216, Teixeira, *O Ultimatum Inglês*. On late nineteenth-century accausations that Portugal was not doing enough to develop its colonies, see also Kingsley, *West African Studies,* pp. 283–284 and Johnston, Harry, "The Portuguese in West Africa", *African Affairs* 12,46 (1913), pp. 113–119, here p. 118.

[78] Newitt, Malyn, "British Travellers' Accounts of Portuguese Africa in the Nineteenth Century", *Revista de Estudos Anglo-Portugueses* 11 (2002), pp. 103–129.

[79] See the extensive account in Tschapek, Rolf Peter, *Bausteine eines zukünftigen deutschen Mittelafrika. Deutscher Imperialismus und die portugiesischen Kolonien,* Stuttgart: Steiner, 2000.

anxieties among Portuguese elites regarding the position of the country in the world and the possible alienation of its colonies.[80]

[80] See footnote 34.

2. Unravelling the Aetiology: Of Bacteria, Parasites and Scientists

In the nineteenth century, a vast array of theories circulated among Europeans about the cause of sleeping sickness. As the disease was widely believed to affect only Africans, many of these theories blamed the supposedly unhealthy habits of the latter, such as the abuse of alcohol and hashish *(liamba)*, excessive exposure to the sun, sexual excesses, the consumption of raw manioc or even their alleged propensity to nostalgia. Others related sleeping sickness to other tropical diseases such as malaria or helminthiasis. Yet by the time the Portuguese sleeping sickness commission was organized, most of these theories were already considered obsolete by a considerable segment of the international medical community.[81]

The emergence of tropical medicine and its inherent paradigm shifts in disease causation theories and research design had already affected sleeping sickness research. Whereas older aetiological assumptions had relied on symptomatological and epidemiological evidence only, new research was based on microbiological advances. It was driven by the search for the disease's pathogenic microorganism and grounded in microscopic examinations of body fluids and tissues. Within this novel framework, different researchers had identified either parasites or bacteria as the probable cause of the disease in the 1890s. These theories were to be the frame of reference for the Portuguese commissioners.

One of the most influential (microbiological) theories of the time was proposed by Patrick Manson in 1891. Manson, who had become an expert on *filaria* worms in the late 1870s and 1880s while practising in China, had detected two new kinds of *filaria* in the blood of a sleeping sickness patient, who had been sent from the Lower Congo to London by the Christ Missionary Church. Although Manson was unable to prove any causal relationship between the worms and sleeping sickness, he believed that one of these worms, *filaria minor* or *perstans*, was the pathogenic agent. Manson did not travel to Africa to test his hypothesis, but as his correspondence with practitioners in the field did not seem to contradict it, he publicized his theory in important journals and handbooks, thus further increasing his fame as one of the world's leading researchers on tropical diseases. The *filaria perstans* theory would

[81] See the critical comments in Corre, *Recherches,* pp. 347–355; Azevedo, Antonio d', *Algumas palavras sobre a doença do somno. Dissertaçõ Inaugural,* Lisboa, 1891, pp. 33–36; Manson, Patrick, "A clinical lecture on sleeping sickness", *Journal of Tropical Medicine* 1 (1898), pp. 121–128, here pp. 125–126; Gleim, *Berichte über die Schlafkrankheit,* pp. 361–362 and Leitão, *Relatório da visita sanitária,* pp. 111–120. See also Castellani, Aldo, *A Doctor in Many Lands. Autobiography,* New York: Doubleday, 1960, p. 60.

eventually be disproved by the First Royal Sleeping Sickness Expedition to Uganda in 1902, which, ironically, Manson had decisively helped to mobilize.[82]

Other researchers in the 1890s maintained, in disagreement with Manson, that specific bacteria were responsible for causing sleeping sickness. Their 'discoveries' must be contextualized within the "bacteriomania" of the last quarter of the nineteenth century, in which scientists proved a host of long-known diseases to be caused by bacterial pathogens and anticipated, often erroneously, further bacterial discoveries for other diseases, many of which would eventually turn out to be caused by viruses and parasites instead.[83] Portuguese scientists played an important role in the emergence of bacterial theories for sleeping sickness. In 1889-1890, the Lisbon-based doctor António Carvalho de Figueiredo detected two unknown bacteria in a young African man who had been sent to Lisbon by his employer in Cazengo, during what may have been the first microscopic examination of the blood and cerebrospinal fluid of a patient with sleeping sickness. However, Figueiredo's discovery, which was announced a year later by another Portuguese doctor, António de Azevedo, did not make an international career. Unlike Manson, Azevedo had been cautious enough to express his doubts on the causal relationship between the bacteria and the disease.[84] More widely discussed was the bacterium isolated by António Olympio Cagigal and Charles Lepierre in Coimbra in 1897. After disseminating their results in Portugal, they also communicated their discovery of the "sleeping sickness bacillus" to the influential *Société de Biologie* in Paris.[85] Although two French researchers, who had asked and obtained a culture of this bacillus from Cagigal and Lepierre, were subsequently unable to confirm its causal relationship with sleeping sickness, the latter's study further paved the way for the bacterial hypothesis.[86] In the

[82] Haynes, *Framing Tropical Disease*. On Manson and his role in developing the discipline of tropical medicine, see Haynes, Douglas Melvin, *Imperial Medicine. Patrick Manson and the Conquest of Tropical Disease,* Philadelphia: University of Pennsylvania Press, 2001; Worboys, *Germs*. For a more critical, *longue durée* perspective, see Arnold, *Introduction (1996),* pp. 1–4.

[83] For an acute analysis, see Worboys, Michael, "Was there a Bacteriological Revolution in late nineteenth-century medicine?", *Studies in History and Philosophy of Biological & Biomedical Sciences* 38,1 (2007), pp. 20–42, here pp. 25-27, quote p. 27.

[84] Azevedo, *Algumas palavras,* pp. 70–92. Azevedo, at least, believed that Carvalho de Figueiredo had been the first to perform microscopical examinations of the blood and other body fluids of a sleeping sickness patient, see *Ibid.,* p. 56.

[85] Cagigal, Antonio Olympio; Lepierre, Charles, "A doença do somno e o seu bacillo", *Coimbra Médica* 17,30-31 (20.10.1897 and 01.11.1897), pp. 465-474; 481-494; Cagigal, Antonio Olympio; Lepierre, Charles, "A doença do somno e o seu bacillo. Trabalho feito no Gabinete de Microbiologia da Universidade de Coimbre e apresentado na sessão de 15 de Dezembro de 1897 pelo socio dr. Eduardo Burnay", *Jornal da Sociedade das Sciências Médicas de Lisboa* (1898), pp. 135–149; Cagigal, Antonio Olympio; Lepierre, Charles, "La maladie du sommeil et son bacille", *Comptes Rendus des Séances de la Société de Biologie* 10ième Série, Tome V (28.01.1898), pp. 89–92.

[86] Brault, J.; Lapin, J., "Note sur l'étiologie et la pathologie du sommeil", *Archives de Parasitologie* 1 (1898), pp. 369–378.

following years, researchers from different nations would claim to have discovered the bacterial pathogen responsible for sleeping sickness.

It is striking that both the *filaria perstans* and the bacterial hypotheses originated in Europe, where they were deduced from a mere handful of cases, and not in the colonies where the disease was endemic and doctors had, at least in theory, the chance to examine far more patients. Haynes has explained the influence and longevity of Manson's *filaria* theory with the centrality of London in medical research in the British Empire. Rather than being an anomaly, he has argued that the case is illustrative of the power relations between the imperial metropole and the colonies in generating scientific knowledge in the late nineteenth century.[87] With some reservations, this argument also applies to the Portuguese bacterial theories. Before 1900, medical doctors in metropolitan Portugal were generally better positioned to produce 'scientific knowledge' in this new field than their colleagues in Africa, not only because they had more direct access to medical journals, societies and networks, but also, what Haynes seems to have overlooked, to laboratories. For the microbiological theories on sleeping sickness that were emerging in the 1890s, laboratories were simply indispensable. Although bacteriological laboratories had been established in Coimbra and Lisbon in 1882 and 1892 respectively, they would only emerge in Portuguese Africa around 1900, the first in Luanda (1899), followed by Lourenço Marques in Mozambique (ca. 1910), São Tomé (ca. 1910) and Bolama in Guinea (1914).[88] Moreover, these laboratories were often poorly equipped. In 1901, the Portuguese commissioners could make use of the bacteriological laboratory in Luanda, but they realized that they would have been unable to conduct their

[87] Haynes, *Framing Tropical Disease*.

[88] For Coimbra, see Amaral, *Bacteria or Parasite* and Lepierre, Charles, "O gabinete de microbiologia da Universidade [de Coimbra]. Sua fundação", *Coimbra Médica* 21,5 (10.02.1901), pp. 78–83. For the establishment of the Royal Bacteriological Institute in Lisbon, see Jorge, Ricardo, "A propósito de Pasteur. Crítica da Sanidade e da Mentalidade Portuguesas. Discurso proferido em Comemoração do Centenário Pastoriano na Faculdade de Medicina de Lisboa aos 25 de Abril de 1923", in: Jorge, Ricardo, *Sermões dum leigo. Discursos e Alocuções,* 2, aumentada ed., Lisboa: Instituto de Alta Cultura [1974], pp. 181–230, here pp. 195–202. Interestingly, Ricardo Jorge equates the establishment of this institute with the introduction of bacteriology in Portugal, thus (consciously?) neglecting the developments in Coimbra. For Luanda, see Bombarda, *Doença do Sono (16.12.1900)* and *Representação dirigida ao Governo*. For Bolama, see Barreto, Sant'Ana, *Sobre a doença do sono na colónia da Guiné. Relatório apresentado em 1927 à Direcção dos Serviços de Saúde e Higiene,* Bolama: Imprensa Nacional da Guiné, 1928, p. 13. For the frustration of the director of Portuguese Guinea's health services vis-à-vis the lack of such a laboratory in the late nineteenth century, see Havik, Philip J., "Saúde pública, microbiologia e a experiência colonial. O combate à malaria na África Ocidental (1850-1915)", in: Bastos, Cristiana; Barreto, Renilda (eds.), *A Circulação do Conhecimento. Medicina, Redes e Impérios,* Lisboa: Instituto de Ciências Sociais on-line, 2011, pp. 375–416, here p. 403. The establishment of a laboratory in Luanda in 1899 was not particularly late for colonial sub-Saharan Africa. According to the same Philip Havik, the first microbiological laboratory in French (sub-Saharan) Africa was established in Senegal in 1896, see Havik, *Saúde pública,* p. 388.

microbiological studies without the additional equipment they had brought.[89]

The Portuguese commissioners followed the bacteriological lead, and after only three months of investigations on the Island of Príncipe and in Angola they announced in August 1901 that they had probably found the causative agent of the disease. In the cerebrospinal fluid of many patients, both *intra-vitam* and *post-mortem*, they had detected a bacterium, which they described as a 'diplo-streptococcus'.[90] This discovery was received with great enthusiasm in the Portuguese medical press. Although the commission's theory was still based on tenuous evidence, most commentators, including the Overseas Minister and Miguel Bombarda, did not doubt that a longstanding enigma was now being deciphered, and they proudly proceeded to celebrate a "colossal triumph for Portuguese medicine", "one of [its] most precious glories".[91] Almost exactly a year later, the commissioners bolstered their claims with a new and more extensive report, in which they stated that additional research, conducted in Angola and at the Royal Bacteriological Institute in Lisbon, had confirmed their initial findings. In all examined patients, they had found the same bacterial microorganism, which they now fancily baptized 'hypnococcus'. The term was derived from hypnosis, a word often used to designate sleeping sickness.[92]

The reports of the Portuguese sleeping sickness commission received much scholarly attention: they were reviewed and some even published in translation in Europe's leading medical journals.[93] In Germany, Carl Mense even presented preparations and cultures of the

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[89] Ministério da Marinha e Ultramar, *Doença do somno. Relatorios enviados ao Ministerio da Marinha pela missão scientifica nomeada por portaria de 21 de Fevereiro de 1901,* Lisboa: Imprensa de Libanio da Silva, 1901, pp. 14–15.

[90] See the second of their reports, dated 10th August 1901, in *Ibid.*, pp. 13-40, esp. pp. 32ff.

[91] António Teixeira de Sousa to Miguel Bombarda, 01.10.1901 and Miguel Bombarda to António Teixeira de Sousa, 07.10.1901, published in *Jornal da Sociedade das Sciências Médicas de Lisboa* 65 (1901), pp. 417-418 (first quote p. 417) and 418-419; Lopes, Alfredo Luiz, "Chronica - Doença do Somno", *Revista Portuguesa de Medicina e Cirurgia Praticas* 6,121 (15.11.1901), pp. 1–4 (second quote). For first, very positive reactions, see also "A doença do somno", *A Medicina Contemporânea* Serie II, 4,40 (06.10.1901), pp. 325–328 and Ferreira, Bettencourt, "A doença do somno", *Jornal da Sociedade das Sciências Médicas de Lisboa* 65 (1901), pp. 301–315, here p. 301.

[92] The report was presented on 6th of August 1902 in Lisbon and subsequently published in episodes in a medical journal, see Bettencourt, *Doença do somno (1902).* For the term 'hypnococcus', see p. 292.

[93] See, for instance, Bettencourt, Annibal, "The Sleeping Disease (Doença do somno). Report sent to the Portuguese Minister of Marine by the Scientific Committee sent to study the Sleeping Sickness in West Africa, on February 21st, 1901", *Journal of Tropical Medicine* 5,10-12 (May-June 1902), pp. 149-151; 171-172; 185-186; "Sleeping-sickness in Prince's Island and the Province of Angola [= Review of 'Ministério da Marinha e Ultramar 1901 - Doença do somno']", *The Lancet* 160,4126 (27.09.1902), pp. 885–888; Martinet, Alfred, "Review of "Bettencourt et al. 1902 - Doença do somno"", *La Presse Médicale* (24.06.1903), p. 468; Bettencourt, Annibal; Kopke, Ayres; Rezende, Gomes de; Mendes, Annibal Correia, "On the Etiology of Sleeping Sickness", *British Medical Journal* 2207 (18.04.1903), pp. 908–910; Bettencourt, Annibal; Kopke, Ayres; Rezende, Gomes de; Mendes, Annibal Correia, "Note on the etiology of sleeping sickness", *The Lancet* 161,4160 (23.05.1903), pp. 1438–1440; Bettencourt, Annibal; Kopke, Ayres; Rezende, Gomes de; Mendes, Annibal Correia, "Über die Aetiologie der Schlafkrankheit", *Centralblatt für Bakteriologie, Parasitenkunde und*

hypnococcus, which he had received from Ayres Kopke, to one of the medical sections of the German Colonial Congress in Berlin in October 1902.[94] To assure an international audience, the commission published its final report directly in French.[95] Although this procedure delayed the dissemination of research results, it ensured that language was not an obstacle for its wider, international circulation. In the following decades, important Portuguese sleeping sickness reports would generally be made available either in French or in English.

However, the international community of tropical medicine experts was not convinced of the Portuguese results. A major reason for the persistence of scepticism was that other researchers were not able to confirm the presence of the ‘hypnococcus’ in their cases. They either did not find any bacterium at all, like Warrington, or they found a different one, like Broden in the Belgian Congo in 1901 and Castellani in Uganda in 1902.[96] Still others stuck to their own competing theories, which did not involve bacteria at all. Hans Ziemann, for instance, continued to believe in his manioc food poisoning theory.[97] Manson, for his part, was not yet disposed to abandon his *filaria perstans* theory. He believed that the Portuguese commissioners’ failure to find *filaria perstans* in their sleeping sickness patients was due “not to absence of parasites, but to unsuitable technique”.[98] The fact that Manson himself could not find the ‘hypnococcus’ in the brain of a deceased sleeping sickness patient in London most certainly did not increase his esteem for the work and skills of his Portuguese colleagues and competitors.[99] In the third edition of his authoritative manual on tropical diseases, published in March 1903, Manson cautiously stated that “until further evidence has been collected, it is impossible to say if either of these bacteria is the germ of sleeping sickness”.[100]

Infektionskrankheiten 35 (1903), pp. 45-61; 212-221; 316-323; "The Pathology of Sleeping Sickness. Review of 'Bettencourt et al. 1903 - La maladie du sommeil'", *The British Medical Journal* 2265 (28.05.1904), p. 1258; "Review 'Bettencourt et al. 1903 - La maladie du Sommeil'", *The Lancet* (28.05.1904), pp. 1507–1508. In Germany, the reports of the Portuguese Commission were reviewed by Carl Mense, the editor of the *Archiv für Schiffs- und Tropenhygiene*, who had good contacts with the Portuguese medical community. See Mense, Carl, "Review of 'Ministério da Marinha e Ultramar 1901 - Doença do somno'", *Archiv für Schiffs- und Tropenhygiene* 6 (1902), pp. 43–44 and further reviews in *Archiv für Schiffs- und Tropenhygiene* 7 (1903), pp. 382; 398-399.

[94] Mense, Carl, "Deutscher Kolonialkongress 1902", *Archiv für Schiffs- und Tropenhygiene* 7 (1903), pp. 53–56, here p. 56.

[95] Bettencourt/Kopke/Rezende/Mendes, *La maladie du sommeil.*

[96] Warrington, W. B., "A note on the condition of the central nervous system in a case of African lethargy", *The British Medical Journal* 2178 (27.09.1902), pp. 929–931. Broden’s bacillus is commented upon in Bettencourt, *Doença do somno (1902),* pp. 227–229. For Castellani, see further on in this chapter.

[97] Ziemann, Hans, "Bericht über das Vorkommen des Aussatzes Lepra, der Schlafkrankheit, der Beri-Beri etc. in Kamerun", *Deutsche Medizinische Wochenschrift* 29,14 (02.04.1903), pp. 250–252. See also further on in this chapter.

[98] See Manson’s introduction to Cook, Albert, "Sleeping Sickness in Uganda", *Journal of Tropical Medicine* (15.02.1902), pp. 49–50, quoted by Haynes, *Framing Tropical Disease,* p. 487.

[99] Upon receiving part of this patient’s brain from Manson, the Portuguese commissioners equally proved unable to find the hypnococcus. See Bettencourt, *Doença do somno (1902),* p. 290.

[100] Manson, Patrick, *Tropical Diseases. A Manual of the Diseases of Warm Climates,* 3rd ed., London: Cassell, 1903, p. 342. See also the review of this manual by F. Mesnil in Bulletin de l’Institut Pasteur 1 (1903), pp. 543-545.

The most serious blow to the hypnococcus and the bacterial hypothesis in general occurred shortly thereafter, in 1903, when Aldo Castellani, a member of the British Royal Society's Sleeping Sickness Commission that had been sent to Uganda in 1902, published his research results. First, Castellani announced the discovery of another streptococcus, clearly distinct from the Portuguese one, as the cause of the disease. The Portuguese commissioners hastened to claim, in the Portuguese and British medical press, that both bacteria were identical, thereby emphasizing the priority of their findings.[101] This discussion, however, was outpaced by new developments before it even got started. In May of the same year, Castellani stated that neither 'his' nor other streptococci, but trypanosomes – a kind of parasitic protozoa – that he had found in 20 out of 34 cases, were responsible for causing sleeping sickness.[102]

Although this trypanosoma theory quickly received support from other researchers such as Bruce, Nabarro, Greig, Sambon and Brumpt, it too initially met with much scepticism, particularly from Manson, who had now ironically become an adept of the bacterial hypothesis and would defend it for a long time yet to come.[103] The Portuguese commissioners were also reluctant to abandon their hypnococcus theory. When, however, they re-examined some of their blood slides, they found trypanosomes in 4 out of 12 cases. In response to this rather inconclusive result, they called for a new Portuguese commission in order to study the role of both hypnococci and trypanosomes in sleeping sickness.[104] When Ayres Kopke, the only member of this new research mission, arrived in Angola in July 1904, however, the most essential parts of the trypanosoma theory had already been proven, including the role of the *glossina palpalis*, a particular type of the tsetse fly, as the vector of the trypanosomes. It was then that the hypnococcus theory died its silent death.

Kopke, who had been appointed professor of bacteriology and parasitology at the EMT in 1902, could merely confirm the veracity of the trypanosoma theory.[105] In

[101] Castellani, Aldo, "Etiology of Sleeping Sickness", *The British Medical Journal* 2202 (14.03.1903), pp. 617–618; Bettencourt, Annibal, "A doença do somno", *A Medicina Contemporânea* 21,12 (22.03.1903), pp. 93–95; Bettencourt/Kopke/Rezende/Mendes, *Etiology*.

[102] Castellani, Aldo, "Trypanosoma in Sleeping Sickness", *The British Medical Journal* 2212 (23.05.1903), p. 1218.

[103] Manson, Patrick; et.al., "Discussion on Trypanosomiasis", *The British Medical Journal* 2229 (19.09.1903), pp. 645–654; Bruce, David; et.al., "Discussion on Trypanosomiasis", *The British Medical Journal* (20.08.1904), pp. 367–379, here p. 379. See also Sambon, Louis W., "The elucidation of sleeping sickness", *Journal of Tropical Medicine* 7 (1904), pp. 61-63, 68-74, 87-91, here pp. 72–73.

[104] Bettencourt, Annibal, "Trypanosoma da doença do somno", *A Medicina Contemporânea* 26 (28.06.1903); Bettencourt, Annibal; Kopke, Ayres; Rezende, Gomes de; Mendes, Annibal Correia, "Trypanosoma na doença do somno", *Jornal da Sociedade das Sciências Médicas de Lisboa* 67 (1903), pp. 159–165. See also, on this, Laveran, A.; Mesnil, F., *Trypanosomes et trypanosomiases,* Paris, 1904, p. 315.

[105] Kopke, Ayres, "Investigações sobre a doença do somno", *Archivos de Hygiene e Pathologia Exoticas* 1,1 (1905), pp. 1–65; Mendes, Annibal Correia, "Glossinas de Angola", *Archivos de Hygiene e Pathologia Exoticas* 1,1 (1905), pp. 66–71. On the same mission, Kopke was also required to investigate beriberi on São Tomé, see in: Collecção Official da Legislação Portuguesa, Anno de 1904, Lisboa 1905, pp. 199–200 and Kopke, *Beri-beri*.

collaboration with Anibal Correia Mendes, who continued on as Director of the Bacteriological Laboratory in Luanda, and António Damas Mora, the health delegate on Príncipe, Kopke examined more than 40 new cases of sleeping sickness and concluded that the existence of trypanosomes in sleeping sickness patients indeed coincided with that of the *glossina palpalis* in the regions where they had probably been infected. In addition to this epidemiological argument, he showed that the diplo-streptococci only invaded the brain long after the trypanosomes had done so, and this in only roughly half of his new cases. With this finding, Kopke implicitly adhered to the emerging consensus that the bacteria that Portuguese and other researchers had identified were not the cause of sleeping sickness, but the result of a secondary infection that often appeared in the final stage of the disease.[106]

In the end, the Portuguese commissioners had failed to add their names to the emerging pantheon of tropical medicine and to bestow glory on Portuguese medicine. This did not mean that their work had been completely in vain. The search for the causative agent of sleeping sickness had only been one part of their investigations. The commission's elaborate descriptions of the symptomatology and anatomical pathology of the disease, which were based on the observation of a far greater number of cases than earlier studies, continued to prove valuable. The work of the commission was still highly praised in 1906 by Carl Mense in his *Handbuch der Tropenkrankheiten*.[107] But this was only a small comfort. In Portugal, critical voices blamed the composition of the commission for what was now widely perceived as a failure.

Had the endeavour been organized by "suitable persons from all three study centres of the country", the Coimbra based bacteriologist Charles Lepierre opined, "one can suppose that in a joint effort they would have thought about the role that protozoa (so high on the agenda) could possibly have been playing in the aetiology of the disease."[108] With this comment, Lepierre made clear reference to the rivalry between the medical schools of Lisbon, Coimbra and Porto and the exclusion of the latter two from the mission. His criticism of Lisbon's dominance was also motivated by his personal disappointment that, despite his path-

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[106] Kopke, *Investigações,* pp. 45–50 and Kopke, Ayres, "Trypanosomiasis humaine", in: Sociedade de Geografia de Lisboa (ed.), *XV Congrès International de Médecine. Lisbonne, 19-26 Avril 1906,* vol. 17 (Médecine Coloniale et Navale), Lisboa: Adolpho de Mendonça, 1906, pp. 233–259, here pp. 238–239. See also Laveran/Mesnil, *Trypanosomes et trypanosomiases (1904),* p. 312; Bruce et.al., *Discussion (20.08.1904),* p. 371; Padua, António de; Lepierre, Charles, *A doença do somno. Revista Crítica, Separata do 'Movimento Médico',* Coimbra: Imprensa da Universidade, 1904, p. 96.

[107] Mense, Carl, "Die menschliche Trypanosomenkrankheit und afrikanische Schlafkrankheit", in: Mense, Carl (ed.), *Handbuch der Tropenkrankheiten,* vol. 3, Leipzig: Johann Ambrosius Barth, 1906, pp. 617–667. For a positive review, see also *The Pathology of Sleeping Sickness*. For the scarcity of microscopical observations of the anatomical pathology of the disease before the creation of the Portuguese Commission, see Sambon, *Elucidation,* p. 68.

[108] Lepierre in Padua/Lepierre, *A doença do somno,* p. 88.

breaking bacteriological study on sleeping sickness and longstanding experience in the field, he had not been chosen to take part in the study mission. From early on, Lepierre had been one the most vociferous critics of the work of the sleeping sickness commission in Portugal, together with António de Padua (1869-1914), professor in medicine at Coimbra University. They had consistently claimed that the hypnococcus of the Portuguese mission was identical to – or at best a small variation of – the diplococcus or 'meningococcus' discovered by Weichselbaum, the causative agent of cerebrospinal meningitis, and as such unlikely to be the cause of sleeping sickness.[109] The harshness with which they contested the ongoing bacteriological studies of the "Lisbon commission" is not necessarily surprising. Deborah Neill has convincingly argued that competition *within* national communities was one of the principal reasons why experts in tropical medicine sought to establish transnational networks.[110]

Lepierre, however, was not necessarily correct in his assumption that the marginalisation of Coimbra and Porto had been a decisive factor in the outcome of the commission's results. Having already acknowledged the long incubation period of sleeping sickness, Miguel Bombarda himself had initially defended the idea of a parasitic disease and advocated the inclusion of a parasitologist on the commission.[111] But it is true that Lepierre arguably had a point in attributing the commission's failure to discover the trypanosomes to their epistemological neglect for parasitology. Although the doctors had also looked for Manson's *filaria perstans*, they were convinced *a priori* that the disease was caused by bacteria. It was this presumption and, as Kopke would later admit, their laboratorial education, in which bacteria and not parasitic protozoa had been the focus, that had prevented them from finding the trypanosomes in the blood and cerebrospinal fluid of almost 70 cases of sleeping sickness during their two years of research.[112]

The Portuguese commissioners were not in poor company, however. Many others, and ironically even Patrick Manson – considered one of the founding fathers of parasitology – had

[109] Padua, António de, "A doença do somno", *Movimento Médico* 1,15-18 (01.12.1901-15.01.1902), pp. 277-286; 297-314; 321-332; 345-351. These articles have been reprinted in Padua/Lepierre, *A doença do somno,* pp. 3–38. See also Padua, António de; Lepierre, Charles, "Subsidio para o estudo do meningococco de Weichselbaum", *Movimento Médico* 1,18 (15.01.1902), pp. 351–357. Lepierre's articles, originally published in the same Coimbra based journal between October 1903 and the end of 1904, were reedited in 1904 in Padua/Lepierre, *A doença do somno,* pp. 39–108. On their critique, see now also Amaral, *Bacteria or Parasite*.
[110] Neill, *Networks,* pp. 29–31.
[111] Bombarda, *Doença do Sono (16.12.1900),* p. 414; Bombarda, *Doença de somno (23.12.1900),* p. 421. See also Neves, João Alberto Pereira de Azevedo, "Discurso presidencial, lido na sesso solene de abertura de 17 de janeiro de 1920", *Jornal da Sociedade das Sciências Médicas de Lisboa* 84 (1920), pp. 124–135, here p. 124.
[112] Kopke, Ayres, "Estudos executados pela missão médica em Moçambique", *Jornal da Sociedade das Sciências Médicas de Lisboa* 92 (1928), pp. 233–273, here p. 234.

systematically overlooked the trypanosomes as well.[113] In his defence, Manson invoked technical difficulties that were closely connected with the "attitude of mind of the observer": while doing blood examinations in search for "parasites, filaria embryos, trypanosomes, malaria parasites, spirilla, bacteria", the observer, he claimed, "must be on the outlook, intent on finding the particular form of organism he is in quest of: he has, so to speak, to focus his mind as well as his microscope, otherwise he is almost sure to fail in his quest."[114] Indeed, research questions and technique did go hand in hand. It was only through his combination of a new aetiological presumption, inspired by Bruce's work on nagana (livestock trypanosomiasis), with a novel technique of centrifuging the cerebrospinal fluid that Castellani had detected and cared to further investigate the trypanosomes under his microscope in Uganda.[115]

By the end of 1904, the basic assumptions of the trypanosoma theory had been accepted by the international medical community in Europe. Some questions regarding the transmission process, however, continued to be discussed for years to come. One of them was whether the *glossina palpalis* was the only vector of the disease or whether sleeping sickness could be transmitted by other bloodsucking insects or even through sexual intercourse.[116] In the early 1910s, the 'discovery' of an allegedly distinct strain of sleeping sickness in East Africa, caused by another trypanosome, labelled *rhodesiense*, and transmitted by another tsetse fly, the *glossina morsitans*, stirred up new controversy. This differentiation also influenced the ongoing debate on the role of domestic animals and game as reservoirs for trypanosomes.[117] These issues would be of utmost importance for the development of disease control measures, but none of them would call into question the general validity of the trypanosoma theory.

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[113] This was also the defence used by the commissioners, see Bettencourt/Kopke/Rezende/Mendes, *La maladie du sommeil,* p. 275.
[114] Manson et.al., *Discussion on Trypanosomiasis,* p. 646.
[115] See, for instance, Boyd, John, "Sleeping Sickness. The Castellani-Bruce Controversy", *Notes and Records of the Royal Society of London* 28 (1973), pp. 93–100, here pp. 102–103.
[116] See, for instance, Martin, Gustave; Leboeuf, Alexis; Roubaud, E., *Rapport de la mission d'études de la maladie du sommeil au Congo français 1906-1908,* Paris: Masson, 1909, pp. 257–258 and "Review of "A.C. Correia Mendes et al. - La maladie du sommeil à l'Ïle du Prince"", *Sleeping Sickness Bureau Bulletin* 2 (1910), pp. 1–7, p. 6-7. See also further in this chapter.
[117] On these questions see Ford, *The Role of the trypanosomiases,* pp. 358–366; White, *Tsetse Visions,* pp. 222–224 and Lyons, *The colonial disease,* pp. 51-53; 61-63.

A Racial disease?

With the growing acceptance of the trypanosoma theory in 1903-1904, the idea that sleeping sickness was an ethnic or racial disease was increasingly dismissed. Based on the observations of doctors and other Europeans living in colonial Africa, many in the nineteenth and early twentieth centuries believed that sleeping sickness only affected Africans.[118] Statistical evidence supported this view: mortality statistics used to list exclusively black – and in rare cases also *mestiço* (mixed-race) – victims. Thus from the 70 sleeping sickness patients the Portuguese commission examined in 1901-1902, 67 were categorized as black and 3 as *mestiços*.[119] Scientists and other observers advanced a broad range of explanations for this racial specificity. As aforementioned, many blamed the supposedly unhealthy habits of Africans. Others linked this exclusivism to biological differences between the races. Thus the commission installed by the Society of Medical Sciences in Lisbon in 1871 suggested that sleeping sickness was caused by melanemia, the presence of dark pigment in the blood, a condition they believed to be much more common in Africans due to their black-pigmented skin.[120]

To be sure, this racial view had never been uniformly accepted by the scientific community. During the discussions at the Society of Medical Sciences in 1871, Manuel Bento de Sousa had firmly refuted the idea of a racial disease and pointed out that there had been cases in white people as well. He accordingly criticized the logic underlying the melanemia theory presented by the Society's commission: "Relying on the wrong idea that hypnosis only affected black people, the commission limited itself to looking for the cause of the disease in the differences between the races."[121] Informed by microbiological disease causation theories, eminent figures like Patrick Manson, Louis Sambon and Hans Ziemann did not believe in an 'ethnic disease' either. Ziemann thus pointed out that there was no known infectious disease caused by a germ that only attacked individuals from a single race.[122] Manson based his rejection of the theory also on epidemiological counter-evidence, invoking that "the negroes of the States, of the West Indies and of Brazil, and the natives of north, east and south Africa

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[118] See the literature in footnote 81.

[119] Bettencourt/Kopke/Rezende/Mendes, *La maladie du sommeil,* p. 33. The former health delegate of Cabinda stated in 1900 that he had never seen a white person affected by sleeping sickness, see Silva, *Doença do somno em Angola,* p. 423. The Portuguese doctor in Dondo had listed 232 victims of sleeping sickness for the period from 1872 to 1877, 227 of which were considered black and 5 mestiço. See Collaço, *Mappa da mortalidade*.

[120] Sociedade das Sciências Medicas, *Relatório da Comissão,* p. 272.

[121] Sociedade das Sciências Medicas, *Acta da Sessão 15.07.1871,* pp. 297–299. On Manuel Bento de Sousa, see Pereira, Artur Torres; Botelho, Luiz Silveira; Soares, Jorge, *A Sociedade das Ciências Médicas de Lisboa e os seus Presidentes (1835-2006),* Lisboa: Fundação Oriente, 2006, pp. 101–104.

[122] Ziemann, *Ist die Schlafkrankheit der Neger,* pp. 420–421. See also Sambon, Louis W., "Sleeping Sickness in the light of recent knowledge", *Journal of Tropical Medicine* 6 (01.07.1903), pp. 201–209, here p. 201.

never, so far as we know, nowadays get the disease." He was convinced that "were the white man exposed to the cause, whatever this may be, he would prove as susceptible as the negro".[123] Nevertheless, many continued to adhere to the idea of a racial disease.

A major reason for the longevity of this theory was the fact that even its opponents had to admit that, as Manson so aptly expressed in 1898, there was "no well authenticated account of the disease in a white man".[124] This was a crucial, yet very tricky point, since it may be argued that the very rules that governed the production of truth in the field of medical microbiology excluded the possibility of scientific proof until the field had agreed upon the pathogenic agent of the disease.

For instance, if one considers the Portuguese case, it is obvious that doctors and other observers had repeatedly referred to fatal cases of sleeping sickness in 'white Europeans'. In fact, the manager of the Sundy plantation on Príncipe, Angelo Bulhões de Maldonado, reported the death of at least six Europeans on the island since 1895. According to his calculations, this amounted to roughly 3% of the European population. Even the official statistics of the hospital in Luanda listed several cases of sleeping sickness among Portuguese men.[125] This information, however, was systematically disbelieved and discredited. By standing by the *a priori* opinion that sleeping sickness was a racial disease, other doctors and self-declared experts refuted such claims with their response that the Europeans could only have died from another disease. To corroborate their position, they either highlighted the observers' lack of medical qualification or, if these last were doctors, assumed that they had not performed the correct analyses and thus misdiagnosed the disease.[126] In some cases, the paradox was solved by casting doubt on the whiteness of the victims, who were denounced as *mestiços*, and therefore had a share of African blood in their veins.[127]

As long as the cause of the disease had not been identified, even doctors had little, if any, chance to 'scientifically' prove that a white European had died from sleeping sickness. This is amply demonstrated by a case that occurred in Luanda in October 1901, where even a detailed autopsy report from Maia Leitão was not sufficient to convince the Portuguese

[123] Manson, *A clinical lecture,* p. 122.
[124] *Ibid.,* p. 122. See also Bettencourt, *Doença do somno (1902),* pp. 209–211.
[125] Ribeiro, *Estudos medico-tropicaes,* p. 191; Maldonado, Angelo de Bulhões, "Doença do somno", *A Medicina Contemporânea* (1901), pp. 96–97; Leitão, *Relatório da visita sanitária,* pp. 100; 110. See also Gleim, *Berichte über die Schlafkrankheit,* p. 360 and Bombarda, *Doença do Sono (16.12.1900),* p. 413.
[126] For the dismissal of the cases in Luanda, see Gleim, *Berichte über die Schlafkrankheit,* pp. 360–361 and Consul Casement, *Report 1897 and 1898,* p. 10. On the dismissal of another case, reported by a missionary, see Brault, J., *Traité pratique des maladies des pays chauds et tropicaux,* Paris: J.B. Baillière et Fils, 1900, p. 505.
[127] See, for instance, Gleim, *Berichte über die Schlafkrankheit,* p. 360 and Bombarda, *Doença do Sono (16.12.1900),* p. 413.

commissioners that the man had died from sleeping sickness.[128] Apparent tensions between the commissioners, who had not been allowed to examine the man alive, and Maia Leitão surely contributed to the disbelief of the former. Generally speaking, scientists based in Europe were more reluctant to accept proof of 'white cases' than most of their colleagues in the colonies. Their insistence on microbiological evidence could hardly be satisfied since nobody knew what exactly that evidence would have to look like.

Within this context, it is not a coincidence that the first 'scientifically proven' case of sleeping sickness in a white European – a British missionary wife who had been stationed in the Congo Free State – was identified in London, by Patrick Manson and two other researchers, and not in an African colony. Nor was it by chance that this confirmation only occurred in November 1903, after trypanosomes had already been linked to sleeping sickness and after the already known trypanosoma fever had been reinterpreted as an early stage of sleeping sickness (instead of a disease in its own right). Suddenly, the missionary's wife in question, who had already been diagnosed with trypanosomiasis in October 1902, at a time when the presence of trypanosomes in the blood was not yet linked to sleeping sickness, became the first confirmed case of sleeping sickness in a white European. The autopsy report constituted additional proof, because the medical community had by then gathered enough knowledge, in part through the Portuguese commissioners and previous histological studies by other Portuguese researchers like Carlos França and Marck Athias, on the typical brain lesions caused by sleeping sickness that the doctors in London were able to recognize them in autopsy.[129] Researchers now knew what to look for, and after this first confirmation, other cases began to appear in medical journals in Europe, also from Portuguese researchers such as Anibal Correia Mendes and Carlos França.[130]

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[128] Bettencourt, *Doença do somno (1902),* pp. 209–211; Bettencourt/Kopke/Rezende/Mendes, *La maladie du sommeil,* pp. 11–12.

[129] Compare Manson, Patrick, "Sleeping Sickness And Trypanosomiasis In A European: Death: Preliminary Note", *British Medical Journal* (05.12.1903), pp. 1461–1462 with Manson, Patrick, "Trypanosomiasis on the Congo", *Journal of Tropical Medicine* 6 (16.03.1903), pp. 85–87 and Manson, Patrick; Daniels, C. W., "Remarks on a Case of Trypanosomiasis", *British Medical Journal* (30.05.1903), pp. 1249–1252. For the importance of studies in anatomical pathology, see Sambon, *Elucidation,* p. 68. For important Portuguese contributions in this field, see Sarmento, Moraes; França, Carlos, "Uma autopsia d'um caso de doença do somno", *Revista Portuguesa de Medicina e Cirurgia Praticas* 6,121 (15.11.1901), pp. 5–14; França, Carlos; Athias, Marck, "Les „Plasmazellen" dans les vaisseaux de l'écorce cérébrale, dans la paralysie générale et la maladie du sommeil", *Comptes Rendus des Séances de la Société de Biologie* 54 (1902), pp. 192–194 and França, Carlos; Athias, Marck, "Histologie de la maladie du sommeil", in: Sociedade de Geografia de Lisboa (ed.), *XV Congrès International de Médecine. Lisbonne, 19-26 Avril 1906,* vol. 3 (Pathologie générale, bactériologie et anatomie pathologique), Lisboa: Adolpho de Mendonça, 1906, pp. 292–293.

[130] Mendes, Annibal Correia, "Caso de doença do somno n'um branco", *A Medicina Contemporânea* (1904), p. 152; França, Carlos, "Um caso de trypanosomiase", *Porto Médico* 2,1 (1905), pp. 16–18; Sã, Dias de, "Mais um caso de trypanosomiase n'um individuo de raça branca", *Porto Médico* 2,2 (1905), pp. 42–44. See also "Doença do somno nos brancos", *A Medicina Contemporânea* (1905), pp. 156–157 and Carvalho, Joaquim Ayres Lopes

Yet lack of evidence alone does not sufficiently explain the persistence of a racial definition of sleeping sickness. The racialized view of sleeping sickness was also an expression of the belief in racial immunities that pervaded 'Western' medical theory in the nineteenth and early twentieth centuries. Particularly in colonial environments, disease susceptibility was strongly linked to racial concepts and the idea that races – and not individuals – had acquired biological immunity to certain diseases over the course of generations.[131] Theories of racial immunity, Warwick Anderson has argued, were often long-lasting because of the "vast ignorance of the actual distribution of disease in colonial populations".[132] Indeed, just as sleeping sickness was long believed to exclusively infect Africans, malaria was widely viewed in the nineteenth century as a white man's disease to which Africans were largely immune, that is, if they stayed in their region of origin. These beliefs were, in reality, two faces of the same coin.[133]

What is particularly striking in the case of sleeping sickness, however, is that it was the 'white Europeans' who were ascribed racial immunity against a disease stemming from Africa. This stood in stark contrast to the usual distribution of immunities, which followed neo-Hippocratic ideas about the adaptation of races to their environment.[134] In this mould, the susceptibility of Africans to imported diseases such as smallpox and tuberculosis ran parallel to the vulnerability of Europeans for tropical diseases. Without the slightest doubt, sleeping sickness was (and still is) a deadly disease that had already caused many thousands of almost exclusively African victims by the early twentieth century. Yet this posited inverse immunity pattern in the initial racial construction of the disease is indicative of a larger shift.

Arguably, the European belief, albeit against the odds, that Africans would succumb much more easily to an endogenous disease than newly arrived and non-acclimatized Europeans reflected a heightened sense of racial superiority among Europeans – and conversely a belief in the biological inferiority of Africans. The way epidemic sleeping

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de, *A doença do somno. Dissertação inaugural apresentada à Escola Médico-Cirurgica do Porto,* Porto, 1906, pp. 43–44.

[131] Anderson, Warwick, "Immunities of Empire. Race, Disease, and the New Tropical Medicine, 1900-1920", *Bulletin of the History of Medicine* 70,1 (1996), pp. 94–118.

[132] *Ibid.,* p. 101.

[133] For the belief in the complete or enhanced immunity of Africans against malaria, see, for instance, Monteiro, *Angola and the River Congo*; Corre, *Recherches,* pp. 349–350; Giraúl, Visconde de, "A prophylaxia do paludismo nas nossas colonias", *Revista Portuguesa de Medicina e Cirurgia Praticas* 6,127 (15.02.1902), pp. 193–207, here p. 201; Roque, Antonio Bernardino, "Sur la prophylaxie du paludisme dans les pays chauds. (Communication présentée à la XVII section du XV congrès de Médecine à Lisbonne)", *Archivos de Hygiene e Pathologia Exoticas* 1,2 (1906), pp. 153–158, here p. 155.

[134] Livingstone, *Tropical Climate*; Pols, *Notes from Batavia,* p. 121; Anderson, Warwick, *Colonial Pathologies. American Tropical Medicine, Race, and Hygiene in the Philippines,* Durham: Duke University Press, 2006, p. 76.

sickness was framed both coincided with and contributed to a larger shift in disease perception in tropical Africa at the turn of the twentieth century. While some began to see the health problems of Europeans in the tropics as surmountable, the African body was more and more frequently equated with disease. As a whole, tropical Africans were increasingly conceptualized as an endangered race that, without the help of European biomedicine, would not survive.[135] This othering not only legitimized colonial intervention, it may also have fulfilled the psychological need of Europeans to claim superiority and to take attention away from the persisting European anxieties regarding health and social order.

[135] For elaborate accounts of the biomedical pathologization of colonial subjects, see Vaughan, Megan, *Curing their Ills. Colonial Power and African Illness,* Cambridge: Polity Press, 1991 and Anderson, *Colonial Pathologies*

3. Contesting Trypanosomes: The Circulation and Acceptance of a Scientific Theory in an African Colony

In the 1980s, Bruno Latour and other sociologists of knowledge began to promote the social contextualization of science, showing that scientific 'facts' are objects of controversies and negotiations and that their acceptance by (scientific) communities does not follow the internal logic of evidence or reason, but is governed by power relations and social struggles for legitimacy.[136] In *The Pasteurization of France*, Latour has thus described how Pasteur's bacteriological theories were accepted to varying degrees in circles of French medicine during the late nineteenth century and how the triumph of his theories, which were fought by clinical (civil) doctors, resulted from alliances with hygienists and military doctors who were eager to use Pasteur's insights to promote their own agenda.[137]

Conversely, Michael Worboys has recently criticized the generally accepted idea that a bacteriological revolution took place in Britain in the 1880s, by highlighting, among other things, that the discovery of the bacterial pathogen of diseases like syphilis, leprosy and gonorrhoea did not quickly provoke a sea change in medical, let alone popular, opinion about the control and treatment of these diseases. Moreover, these pathogens were slow to replace the common "multiple factor aetiologies" of the time, or rather the combination of predisposing conditions and primary and secondary causes.[138] "Epidemiological data and clinical experience", Worboys argued in the case of leprosy, "was, of course, valued far above novel knowledge claims emerging from laboratories."[139]

To be sure, Worboys' critique of the concept of a bacteriological revolution essentially regards the fact that users have projected upon a single decade (the 1880s) "changes that occurred over a much longer period."[140] Indeed, in the long run, the huge influence microbiology had on medical opinion and practice is undeniable. It is safe to say that by the early 1900s, microscope and laboratory techniques already enjoyed a wider acceptance than they had in the 1880s. And, unlike the descriptions Worboys gives of his cases in the 1880s, the identification of the causal agent of sleeping sickness would have, due to pharmacological advances, an enormous impact on treatment and control measures, as I will show further on in this chapter.

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[136] Edler, Flávio Coelho, "Pesquisas em parasitologia médica e circulação do conhecimento no contexto da medicina", in: Bastos, Cristiana; Barreto, Renilda (eds.), *A Circulação do Conhecimento. Medicina, Redes e Impérios,* Lisboa: Instituto de Ciências Sociais on-line, 2011, pp. 173–197, here pp. 173–174.
[137] Latour, Bruno, *The Pasteurization of France,* Cambridge: Harvard University Press, 1988.
[138] Worboys, *Bacteriological Revolution*, quote p. 31.
[139] *Ibid.*, quote p. 32.
[140] *Ibid.*, quote p. 38.

Nevertheless, both Latour's and Worboys' analyses, though they are argued from different disciplinary perspectives and use different analytical methods, are useful reminders of how bacteriological, and more generally microbiological, discoveries were often contested or ignored and how older aetiological views often persisted in medical and lay opinion. In the previous section, I addressed one of these controversies, which placed the partisans of the respective bacteriological and parasitological theories in opposition to each other. This conflict, however, was contained within the disciplinary boundaries of the emerging field of tropical medicine, in which there was no principled antagonism between different types of microbiological research to the extent that researchers shared the same methods and ideas about disease. This conflict was also short-lived, since experts in tropical medicine were quick to accept the trypanosoma theory. Yet, although this issue is usually not addressed in the historiography of sleeping sickness, contestation did, of course, also occur outside of academia. With regard to the Portuguese case in particular, I will show that people from different professional and 'racial' groups in Angola's colonial society, including medical practitioners, continued to adhere, due to ignorance or conviction, to aetiological views that were incompatible with the trypanosoma theory.

First, medical practitioners in the colonies did not accept the trypanosoma theory to the same degree as the tropical medicine experts had. When in early 1905 the health delegates in Angola were asked to describe the major diseases in their district and the best ways to cope with them, some of their responses highlighted the link between tsetse flies and sleeping sickness, but others expressed ignorance, disbelief or even overt rejection of the trypanosoma theory. For instance, the health delegate in Cazengo, a region badly affected by the disease, did apparently still not know what the 'true' causative agent of sleeping sickness was. Moreover, he believed that anti-smallpox vaccination campaigns contributed to the dissemination of the disease. Furthermore, his colleague in Golungo Alto was still convinced that sleeping sickness was contagious, asserting that he had observed how healthy families fell ill after having been in contact with infected people. And the doctor stationed in Dondo actually blamed malnutrition and sexual excesses for a wide range of diseases, including sleeping sickness.[141]

[141] The survey had been ordered by the Colonial Ministry, see Ministério dos Negócios da Marinha e Ultramar, "Portaria regia de 30.11.1904", *Collecção Official da Legislação Portuguesa, Anno de 1904,* Lisboa: Imprensa Nacional, 1905, pp. 525–526. For a positive correlation between tsetse flies and sleeping sickness, see the answer to the questionnaire from Visconde de Giraul (Delegado de Saúde de Mossamedes), 23.03.1905. For the others, see Américo Herculano Campos (Delegado de Saude de Cazengo), [1905]; C.C. Rodolpho Nogueira (Delegado de Saude de Golungo Alto), 09.03.1905 and João da Costa Magalhães (Delegado de Saúde do

Certainly, it may be argued that many doctors in the interior of Angola did not have access to scientific journals and that it was only a matter of time until they would be informed of the 'true' aetiology of the disease. Nonetheless, there is also ample evidence that suggests that there was more at stake. It points at a more fundamental antagonism between colonial practitioners and the growing group of experts in tropical medicine. Quite a few colonial practitioners did not readily accept that their authority with regard to tropical diseases was being challenged by scientists based in Europe and their new methods, nor were they willing to so readily renounce the theories that they had forged upon the basis of their own observations and experiences on the ground.

The way in which high-ranking colonial doctors, like Manuel Ferreira Ribeiro and Visconde de Giraul, had previously framed the 'discovery' of the aetiology of malaria is illustrative of this clash. While they did not reject the idea that the parasitic protozoan transmitted by the *anopheles* mosquito could cause malaria, they were not convinced that this was the only cause of the disease.[142] Among colonial doctors and hygienists, microbiological evidence did not immediately invalidate entrenched ideas about the influence of climate, environment, lifestyle and nutrition. Jennings' work on the persistence of *climatisme*, i.e. climatic explanations for diseases, in French colonial medicine even after Ross' and Grassi's confirmation of the insect-vector theory shows that Portuguese doctors were no exception.[143] Their views rather reflected the antagonism between two paradigms of disease causation and, in consequence, its prevention and treatment: the older broader view on disease as it was linked to the environment and general well-being, for which sanitation and social improvement were the keys to health, and a new, more narrow model for understanding disease, which focused on eliminating microorganisms and their vectors and which "largely excluded from vision the broader social and economic contexts within which malaria occurred."[144]

The case of Francisco da Silva Garcia, the health delegate in Benguela, underlines this antagonism. From 1904 onwards, Garcia became one of the most remarkable opponents of the

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Dondo), 12.03.1905, all in: AHU, SEMU, DGU 3025. See also the general comments upon the responses to the questionnaire, in: Junta de Saúde, *Acta da Sessão*, 19.10.1905, in: AHU, SEMU, DGU 3025.

[142] See, for instance, Ribeiro, Manuel Ferreira, *Os saes de quinina no Paludismo. Meios praticos de se combaterem e de se evitarem as febres biliosas hematuricas e outras manifestaçoes graves da malaria,* 3., muito melhorada ed., Lisboa: A Liberal, 1898, pp. 1-3; 60-61; Ribeiro, Manuel Ferreira, *La lutte contre la malaria dans l'Afrique portugaise. Bases sur lesquelles repose cette lutte et quels sont les meilleurs procédés à employer contre cette grave endémie,* Lisboa: Centro Typographico Colonial, 1906, p. 34 and Giraúl, *Prophylaxia,* esp. pp. 195-197. In a similar vein, Philip Havik has pointed to the skepticism vis-à-vis microbiological (malaria) research reigning among colonial doctors in Portuguese Guinea, see Havik, *Saúde pública,* p. 405.

[143] Jennings, *Curing the Colonizers*, esp. pp. 32-35.

[144] For this conflict, see the excellent summary in Packard, Randall M., *The Making of a Tropical Disease. A Short History of Malaria,* Baltimore: Johns Hopkins University Press, 2007, pp. 115-117, quote p. 115.

trypanosoma theory in Portuguese Africa. Garcia, who also exposed his theories in the medical press in Portugal in 1904-1905, did not deny the presence of trypanosomes in many sleeping sickness cases, but he refused to accept that they entered the body through the bite of tsetse flies, which he had thus far not observed in Angola, or that they were the only causative agent of sleeping sickness. He even suggested that trypanosomes might instead be the "protecting and supporting agent of the resistance which natives have against malaria". Instead, Garcia firmly believed that sleeping sickness was caused by toxic substances in dried fish that had been prepared improperly.[145]

This idea was reminiscent of earlier food intoxication theories. In 1876, the French naval doctor Armand Corre had suggested that the disease might be caused by poisonous cereals and although he rejected this "armchair hypothesis" soon after, for being contrary to the "reality of the facts", it still continued to be cited decades later.[146] In the late nineteenth century, his Portuguese colleague Pereira do Nascimento blamed the consumption of raw manioc, a thesis that was revived by Hans Ziemann in 1902.[147] In the late nineteenth century, food intoxication was a popular explanation for diseases. As Mense recalled, pellagra and beriberi – which are now defined as vitamin deficiency diseases – were at the time also being linked to the consumption of altered food staples, maize and rice respectively.[148] Garcia's theory was the product of this context and of his own longstanding interest in nutritional issues: in his medical dissertation he had dealt with the chemical composition and medical uses, but also abuses and even falsification of port wine.[149]

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[145] Francisco da Silva Garcia (Delegado de Saúde de Benguella), *Resposta ao questionnario*, 24.03.1905, in: AHU, SEMU, DGU 3025; Garcia, Francisco da Silva, "Contribuição para o tratamento da doença do somno", *A Medicina Contemporânea* (1904), pp. 271–273; Garcia, Francisco da Silva, "Apontamentos sobre a etiologia e tratamento da doença do somno", *A Medicina Moderna* 12 (1905), pp. 288–290, quote p. 289. On his career, see also *Livro Mestre do Quadro de Saúde de Angola (1858-1913)*, p. 50, in: AHU, SEMU, DGAPC 895.

[146] Corre, Armand, "Contribution a l'étude de la maladie du sommeil (hypnose)", *Gazette Médicale de Paris* 5,46 (1876), pp. 545-547; 563, here p. 563. A year later, Corre rejected food poisoning theories entirely, because they did were not congruous with the often long incubation period of sleeping sickness. See Corre, *Recherches,* p. 353, and similarly, Corre, Armand, *Traité clinique des maladies des pays chauds,* Paris, 1887, p. 256. For later references to Corre's thesis, see, for instance, Azevedo, *Algumas palavras,* p. 34 and Sambon, *Elucidation,* pp. 62–63.

[147] For Pereira do Nascimento's raw manioc thesis, see the long citations in Leitão, *Relatório da visita sanitária,* pp. 116–119; Bettencourt, *Doença do somno (1902),* pp. 222–224 and Bettencourt/Kopke/Rezende/Mendes, *La maladie du sommeil,* pp. 21–26. See also Consul Casement, *Report 1897 and 1898,* p. 11 and Sambon, *Elucidation,* pp. 62–63. Although both Maia Leitão and the Portuguese commissioners had convincingly discarded the manioc theory, Ziemann clung to it until 1903 at least, see Ziemann, *Ist die Schlafkrankheit der Neger* and Ziemann, *Bericht über das Vorkommen*. In their discussion of Ziemann's manioc thesis, both Isobe and Neill overlook the longer history of the raw manioc and more in general the food intoxication theories, see Isobe, *Medizin und Kolonialgesellschaft,* pp. 24–25 and Neill, *Networks,* p. 106.

[148] Mense, *Bemerkungen,* p. 365. For beriberi, see also Carpenter, Kenneth John, *Beriberi, white rice, and vitamin B. A disease, a cause, and a cure,* Berkeley, CA: University of California Press, 2000.

[149] Garcia, Francisco da Silva, *O vinho do Porto. História, composição, analyse chimica, applicações therapeuticas, falsificações e inconvenientes do seu abuso, Dissertação inaugural apresentada à Escola Médico-Cirúrgica do Porto,* Porto: Imprensa Nacional, 1891.

Garcia grounded his fish intoxication theory in the personal observations he had made in Angola and São Tomé and Príncipe since the start of his colonial career in 1891. Two elements in particular had raised his suspicions and led him to develop his theory: on the one hand the appearance of endogenous sleeping sickness cases in the Benguela district, which he (wrongly) believed to be free from tsetse flies, and on the other, the striking coincidence between the geographical distribution of sleeping sickness in Angola and the areas where the local diet contained a considerable quantity of dried fish. The case of Benguela was particularly illuminating, he argued, since endogenous cases of sleeping sickness had only appeared in the wake of the devastating rinderpest outbreak of 1898, which provoked a shift in local diets from fresh meat to dried fish.[150] Like many earlier theories, for instance Manson's filaria hypothesis, Garcia's aetiological theory relied on geographical distribution patterns and the concurrent presence of sleeping sickness and a specific pathogen in the studied territory. However, Garcia was also able to offer a plausible explanation for how the disease and its symptoms were caused. Similar to nicotine and alcohol, he claimed, the toxins in badly prepared dried fish accumulated and slowly poisoned the human body, thus causing the nervous lesions usually described in sleeping sickness. Interestingly, he did not blame African cooking methods, like Pereira do Nascimento and Ziemann had, but the unhygienic production processes of the Portuguese fishing industry in the coastal cities of southern Angola (Mossamedes, Porto Alexandre and Bahia dos Tigres). Accordingly, he urged the Portuguese government to put a halt to the distribution and consumption of dried fish until the hygienic shortcomings in the fish-drying factories had been resolved. As proof of his theory, Garcia also announced that during 1903 and 1904 he had cured 12 out of 32 sleeping sickness patients in the Benguela hospital with a 'toxin neutralizing' iodine-iodide syrup, cold showers and a rich diet.[151]

Garcia's theory received little support in Angola, however. His colleague António Bernardino Roque, for instance, contested dried fish (and raw manioc) as possible causes, arguing that there were no endogenous cases of sleeping sickness in the coastal cities of southern Angola, although both foodstuffs were an integral part of the costal diet.[152] Moreover, Garcia later complained that he had been silenced by his superiors, who feared that the international reputation of Angola's fishing industries might suffer damage as a result of his assertions. He did not abdicate from his opinion, however, and as deputy head of the

[150] Garcia, *Apontamentos,* p. 290.
[151] *Ibid.,* p. 290.
[152] Roque, Antonio Bernardino, "Doença do somno e beri-beri", *A Medicina Contemporânea* 22 (1904), pp. 285–286.

health services in São Tomé and Príncipe he again defended his ideas before his colleagues and the local governor in 1911, causing great consternation among both his local colleagues and the professors of the School of Tropical Medicine in Lisbon.[153] This scientific conflict would not compromise his career, however, as promotions were generally awarded on the basis of seniority. In 1912-1913, Garcia would serve as director of Angola's health services.[154]

Within this context, it is little wonder that microbiological disease-causation theories were quite slow to affect popular beliefs about sleeping sickness among Europeans and Africans in Angola. Thus eighteen *moradores* (citizens) of Barra do Bengo, a *concelho* (municipality) in the sleeping sickness-ridden hinterland of Luanda, petitioned the Governor General, in March 1905, to prohibit the customs of mourning among the local African population. Unaware of tsetse flies and trypanosomes, they still believed that sleeping sickness was contagious and that local mourning customs, which included protracted bodily contact between the deceased and his or her closest family members, greatly contributed to the spread of the disease.[155] Even more illustrative of the slow dissemination of medical knowledge about sleeping sickness are the cases of several Portuguese soldiers who were infected during the military campaigns in the Dembos region between 1907 and 1909.[156] When interrogated by Ayres Kopke in Lisbon, they stated that they had not been aware of the danger of tsetse-fly bites at the time, until they had seen the educational leaflet composed by the Sleeping Sickness Bureau in London and translated into Portuguese by the EMT in 1910.[157]

Medical authorities in Angola had been aware of the importance of popular education in combating the disease, but they had clearly not been up to the task. Already in 1907, Anibal

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[153] Junta de Saúde Pública de São Tomé, *Sessão extraordinaria de 09.02.1911*; Francisco da Silva Garcia (Sub-Chefe do Serviço de Saúde de São Tomé e Príncipe) to Governador da Província de São Tomé e Príncipe, 06.03.1911 and Francisco Xavier da Silva Telles (Director da Escola de Medicina Tropical) to Director Geral das Colonias, 21.04.1911, all in: AHU, MU, DGAPC 3473.

[154] Quadro de Saúde de Angola e Sam Tomé e Príncipe, *Relação nominal dos oficias médicos e farmaceuticos*, 31.01.1913, in: AHU, MU, DGAPC 3487. See also Direcção Geral das Colónias, 8a Repartição, *Processo 93/1913 – Francisco da Silva Garcia*, in: AHU, MU, DGAPC 3456.

[155] Petition by the residents of Barra do Bengo to the Governor General, 03.03.1905, in: ANA, Cx. 3721. For hygienic reasons, physicians had already condemned and tried to suppress these mourning customs during the smallpox epidemic that swept through Luanda in 1864, see Oliveira, *Relatório histórico,* pp. 93–94.

[156] On these campaigns, see Pélissier, *História das campanhas*, vol. I, pp. 329-337.

[157] Kopke, Ayres, "Escola de Medicina Tropical de Hamburgo", *A Medicina Contemporânea* 32 (1914), pp. 141–145, here pp. 143–144; Kopke, Ayres, *Estudo da doença do sono. Memória premiada no concurso de 1915 e apresentada sob a divisa Therapia Sterilisans Magna pelo autor à Comissão de Protecção aos Indigenas das Colónias Portuguesas,* Lisboa: Typografia da Cooperativa Militar, 1916, pp. 99 and 101. For the leaflet, see *Doença do somno. Como evitar a infecção com uma descriçao da glossina palpalis e illustrações d'esta e de outras moscas picantes para uso dos viajantes e residentes na Africa tropical, Traducção da 1.a edicao inglesa, autorizada pelo "Sleeping Sickness Bureau" de Londres,* Lisboa: Imprensa Nacional, 1910.

Correia Mendes urged the Health Council (Junta de Saúde) to "draw up a leaflet where it explains in a simple and clear language how sleeping sickness spreads through the tsetse fly", as proposed by the International Conference on Sleeping Sickness in London.[158] In order to plant the validity of the trypanosoma theory in the collective mind, the same Health Council proposed to award a small sum of money (1 *real*) for every captured glossina presented to the doctor or other state authorities in infected regions. Therefore, doctors, but also missionaries and administrators would be taught in Luanda how to recognize the flies.[159] While it took several years to compose and distribute the leaflet, there is no indication that Africans received money for collecting glossinae or that the educational program for missionaries and administrators took place.

The trypanosoma theory also clashed with ingrained beliefs in disease causation among the Angolan population. With regard to East Africa, it has been suggested, though from fairly scarce ethnographic information, that in some areas people had already suspected a correlation between tsetse flies and disease.[160] In Angola or West Africa in general, however, there was no parallel stance. European observers sometimes recorded the views of African informants, but in northern Angola as well as in West Africa, Africans either believed that the disease was contagious, with transmission through saliva and clothes, or was hereditary, a "family disease". Where Africans believed in contagion, the diseased were often isolated beyond the confines of the villages.[161] On Príncipe, tsetse flies were well-known under the name of Gaboon flies, as they had probably been introduced together with cattle that had come from Gabon in the early nineteenth century, but although they were infamous for their painful sting and prevented cattle breeding, no connection was made with sleeping sickness.[162]

Although it was crucial for disease control, convincing the African populations that the tsetse fly was indeed responsible for the spread of sleeping sickness turned out to be a

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[158] Mendes, Annibal Correia, "Subsídio para a prophylaxia da doença do somno em Angola. Distribuição geographica das glossinas no districto de Loanda", *Archivos de Hygiene e Pathologia Exoticas* 1,3 (1907), pp. 392–401, here pp. 400–401.

[159] Junta de Saúde, *Acta da sessão extraordinaria de 12.02.1907*, in: Copiador das Actas da Junta de Saúde (1891-1912), ANA, Cód. 1867, p. 135r.

[160] Hoppe, *Lords of the Fly,* p. 49.

[161] For the African idea of a contagious disease, see Curto, *Relatório do Chefe do Serviço de Saúde de Angola,* p. 333 and Bettencourt, *Doença do somno (1902),* pp. 217–218. For the notion of a hereditary disease, apparently prevalent among the Cabinda, see Silva, *Doença do somno em Angola*. For the existence of both ideas in West Africa, see Corre, *Recherches,* p. 355 and Sambon, *Sleeping Sickness,* pp. 207–208.

[162] Costa, Bernardo Francisco Bruto da, *Sleeping Sickness in the Island of Príncipe. Translated by J.A. Wyllie,* London: Baillière, Tindall & Cox for the Centro Colonial, Lisbon, 1913, pp. 1–2. See also Harry Johnston's declarations in Sleeping Sickness Committee, *Minutes of Evidence,* p. 117.

difficult task. Doctors, administrators and missionaries alike complained well into the twentieth century that their attempts to instil this knowledge into the native mind often met with overt and persistent scepticism. Thus Francisco dos Santos Serra Frazão, who served as a local administrator in Angola between 1914 and 1919 before assuming the post of interim director of the Native Affairs Department during his second stay in the 1940s, recorded how "one of the most intelligent and civilized chiefs *(sobas)* of the region" reacted to his teachings by stating: "Well, sleeping sickness does not come from the flies ... It comes from something else against which we cannot fight... The flies, well, the flies do not cause any harm, may the doctor say what he wants... The others, however, the others, yes." By 'the others', as Serra Frazão explains, the chief meant the spirits of the dead.[163]

[163] Serra Frazão, *Reabilitação dos Negros. Estudo crítico sobre diversos aspectos de Angola*, 1942, in: AHU, T 215, p. 133. On Frazão's career, see Frazão, Francisco dos Santos Serra, *Porto de Mós. Breve Monografia, Revista e anotada por Maria Madalena V. S. Rodrigues Tabau,* Edição da Câmara Municipal de Porto de Mós, 1982, pp. 205ff. See also the complaint by the British missionary Mercier Gamble in Sleeping Sickness Committee, *Minutes of Evidence,* p. 188.

4. Curing an Incurable Disease: Of Gland Excisions, Testicular Liquids and Magic Bullets

Before the causative agent was discovered, European doctors already employed a wide variety of therapeutic measures to try to cure their sleeping sickness patients. A doctor's therapeutic choices were generally related to their view on the nature and cause of the disease. However, since their interventions had little effect, many ended up trying all kinds of medications.[164] A profound sense of helplessness ran through many medical reports on the issue. In 1887, the head of the Angolan health services, António Duarte Ramada Curto, lamented that he had used "antiseptics, alterants, tonics, stimulants, etc.", but that none had prevented his patients from dying.[165] In a similar vein, the administrator of the Sundy plantation *(roça)* on Príncipe, Angelo de Bulhões Maldonado, desperately enumerated, almost fifteen years later, all the medications that had been tried on his ill *serviçães*: "Following the instructions of our doctor, we have applied tonics in all their forms, cauterization, stimulants like coffee, hydrotherapy, electricity, caustics in the back of the neck and the spine, changes of air, baths in the sea, baths of sand, stays at low and high altitude, modifications of diet, gold and silver salts, subcutaneous injections of stimulants, quinine, etc."[166]

The members of the Portuguese sleeping sickness commission were equally powerless. One after the other, their patients in the hospital of Luanda died, mostly within a few weeks or months. On their voyage back to Portugal in December 1901, six of the 27 patients with whom they embarked died while all the others passed away within a year after their arrival to Lisbon. Most of the drugs used by the commissioners targeted merely the symptoms of the disease and some of its complications. In Lisbon, the members of the commission also tried experimental medications on their African patients, who were accommodated in a small clinic *(enfermaria)* annexed to the Bacteriological Institute. Yet even the repeated injections of dead hypnococcus cultures and of the anti-streptococcic serum of Marmorek, performed from April 1902 onwards on a few surviving patients, at best relieved the symptoms but only for some time.[167] In the early 1900s, European doctors still viewed sleeping sickness as an incurable disease, or as Louis Sambon, an experienced lecturer at the London School of Tropical Medicine and close collaborator of Manson, stated, "the

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[164] See, for instance, Corre, *Recherches,* p. 357; Azevedo, *Algumas palavras,* pp. 65–69.

[165] Curto, *Relatório do Chefe do Serviço de Saúde de Angola,* p. 334.

[166] Maldonado, *Doença do somno,* p. 97.

[167] See the detailed patient histories in Bettencourt/Kopke/Rezende/Mendes, *La maladie du sommeil,* pp. 116–270. See also, with slightly different numbers, Bettencourt to Governor-General, 23.12.1901 and Bettencourt to Minister of Marine & Overseas, 07.01.1903, in: Missão da doença do somno – Copiador 1901-1904, pp. 148-150, 276, in: Arquivo do Instituto Bacteriológico Câmara Pestana (henceforth AIBCP), Lisbon. On the serum, see Cobbett, Louis, "Anti-streptococcic serum", *The Lancet* 3893 (09.04.1898), pp. 986–992.

physician that cures is death."[168]

Indeed, some had announced a cure, but these eventually proved ineffective or were dismissed for epistemological reasons. A good example of the first category is the case of João Novaes, the Portuguese health delegate in Landana, a coastal town in the Cabinda enclave. In 1893, he reported to have cured a native employee of the local Catholic Mission with repeated hypodermic injections of the testicular liquid extracted from a ram.[169] Novaes, however, did not invent this medication. After its rejuvenating effects had been described and praised by the renowned physiologist Charles Brown-Séquard in 1889, the injection of testicular extracts had become a fancy, though highly contested, treatment in Europe and the United States against nervous diseases and the general effects of ageing. Brown-Séquard's sensational findings had provoked many scathing reactions in the medical community, but they had also prompted many others, like Novaes, to conduct further experiments with this "elixir of life", as some had dubbed it.[170] In Angola, Ramada Curto received Novaes' report with a mixture of enthusiasm and caution. He praised the application of Brown-Séquard's method to sleeping sickness as a most rational decision, given the nervous nature of the disease (and the lack of contraindications for this kind of medication), but he also warned that a single case in which a patient was declared cured did not yet constitute scientific proof of the validity of the treatment. Further testing was necessary, and he encouraged all other doctors in the colony to repeat the experiment.[171] In consequence, 300 grams of testicular liquid was sent from Europe to Angola, but I have found no further references to any other further testing. Novaes himself was entrusted with bacteriological studies by the Colonial Ministry, but he had to retire to Europe for reasons of health. Years later, Novaes publicly admitted that his 'cured' patient had died following a period of apparent recovery.[172] By then, however, the notice of his 'cure' had already circulated among European medical experts for

[168] Sambon, *Sleeping Sickness,* p. 208. On Sambon, see "Obituary Louis Sambon", *British Medical Journal* (1931), pp. 514–515.

[169] João Chrystosomo Baptista Alves Novães to António Duarte Ramada Curto (Director of the Angolan Health Services), 01.12.1893, published in Boletim Official de Angola, 10.03.1894, pp. 150-151.

[170] Brown-Séquard, C. E., "Des effets produits chez l'homme par des injections sous-cutanées d'un liquide retiré des testicules frais de cobaye et de chien", *Comptes Rendus des Séances de la Société de Biologie* 41 (1889), pp. 415-419; 420-422. For the context and impact of Brown-Séquard's study and its role in founding modern endocrinology and hormone replacement therapy, see Olmsted, James Montrose Duncan, *Charles-Édouard Brown-Séquard. A nineteenth century neurologist and endocrinologist,* Baltimore: John Hopkins Press, 1946, pp. 205–233; Aminoff, Michael Jeffrey, *Brown-Séquard. An improbable genius who transformed medicine,* Oxford: Oxford University Press, 2011, esp. pp. 235-260.

[171] Ramada Curto to Novaes, 26.12.1893; Ramada Curto, *Circular*, 22.12.1893, both published in Boletim Official de Angola, 10.03.1894, p. 151.

[172] Novaes, João, "Doença do somno em Angola", *A Medicina Contemporânea* 19 (1901), pp. 16–18. See also Silva, *Doença do somno em Angola,* p. 422.

some years and even found its way into the first edition of Patrick Manson's manual on tropical diseases in 1898.[173]

Epistemological reasons, then, seem to have prevented local African treatments from incorporation into the emerging knowledge system of western biomedicine. It is indeed remarkable that European doctors did not adopt, or only rarely adopted, indigenous healing practices, despite the constant failure of their own methods. As early as the 1870s and well into the twentieth century, European observers reported that African healers from around the Gulf of the Guinea used to remove the enlarged cervical lymphatic glands from the sleeping sick, as these were considered to be the cause (and a premonitory sign) of the disease.[174] Although these operations were invariably said to be successful, European doctors seem to have been very reluctant to perform them themselves. The main hindrance was probably that academic medicine did not believe in the success of such a treatment. Manson, for instance, firmly dismissed the possibility of developing a cure in this manner.[175] The Portuguese commissioners showed great scepticism as well. In the instances in which they did remove cervical glands from a few of their patients, this seems to have been carried out only in order to study the glands and not to cure their patients.[176]

It cannot be excluded, however, that colonial practitioners who were less afraid of medical crossovers may have resorted more systematically to such operations, because they believed in it or because they were pressured by their patients.[177] Some may also have been encouraged to do so by an important article written by Louis Sambon in 1903 in which this last revealed himself to be more open-minded than Manson when he recommended that this "bold surgical interference" ought to be more closely investigated.[178] This might explain why,

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[173] Manson, Patrick, *Tropical Diseases. A Manual of the Diseases of Warm Climates,* New York: William Wood & Company, 1898, pp. 255–256. In the second edition, the reference was removed, see Manson, Patrick, *Tropical Diseases. A Manual of the Diseases of Warm Climates,* 2nd ed., London et al.: Cassell, 1900, p. 286. Novaes' treatment was also referenced in Jornal da Sociedade das Sciências Médicas de Lisboa 57 (1893), p. 204. For a detailed and still supportive account of the treatment, see Mense, *Bemerkungen,* pp. 367–368.

[174] See, for instance, Corre, *Recherches,* p. 356 and further references in Azevedo, *Algumas palavras,* p. 68 and Sambon, *Sleeping Sickness,* pp. 208–209. See also Barbosa, Cesar Gomes, "Relatorio do serviço de saude da Guiné portugueza, durante o anno de 1891", in: Ministério dos Negócios da Marinha e Ultramar (ed.), *Estatistica Medica dos Hospitaes das Provincias Ultramarinas, com referencia ao anno de 1891,* Lisboa: Imprensa Nacional, 1900, pp. 129–158, here p. 134; Maldonado, *Doença do somno,* p. 97; Mense, *Die menschliche Trypanosomenkrankheit,* p. 650; Sleeping Sickness Committee, *Minutes of Evidence,* p. 189. This practice continued to be mentioned by doctors in Portuguese Guinea in the 1920s and 1930s, see Havik, *Public Health,* pp. 6 and 8.

[175] Manson, *A clinical lecture,* p. 128.

[176] Bettencourt/Kopke/Rezende/Mendes, *La maladie du sommeil,* pp. 61–62 and for the operations pp. 128, 136 and 141.

[177] For an operation performed by a doctor in Portuguese Guinea in 1886, see Barreto, *Sobre a doença do sono (1928),* p. 7.

[178] Sambon, *Sleeping Sickness,* pp. 208-209, quote p. 208.

soon after, Ayres Kopke reported that the Portuguese health delegate on Príncipe, António Damas Mora, had performed this kind of operation in 1904.[179]

In Angola, African healing techniques probably did not include the excision of cervical glands. At least, such cases were not reported. Local healers were said instead to put pepper or the juice of certain leaves in the eyes of the sick to keep them awake, or to prepare concoctions with similar ingredients. Believing that the disease was caused by spirit possession, they also recurred to necromantic practices.[180] Like in other Bantu regions, the use of both (spiritual) purification rituals and herbs to combat disease was not considered a contradictory practice by the natives. Instead, it was a reflection of the coexistence of two groups of healers: those who diagnosed (and treated) disease by communicating with the spirits of ancestors, usually called *advinhos* or *feiticeiros* (diviners/witchdoctors), and those who subsequently treated and healed through the use of herbs and other medicines, usually called *curandeiros* or *quimbandas* or *ngangas* (healers). Sometimes, the same individuals did both.[181]

Although this issue has received increasing historiographical attention in recent decades, there are no critical studies on indigenous healing methods in late nineteenth and early twentieth century Angola nor on how these methods clashed with European biomedicine.[182] Nevertheless, it seems safe to say that with the rise of tropical medicine and western biomedicine in general, indigenous knowledge about the treatment (and causation) of diseases was increasingly marginalised.[183] European doctors not only dismissed the Africans' belief that spirits caused diseases, but they progressively lost interest in 'traditional' healing methods as well. A good example of this regards the indigenous medicinal herbs and plants. Until the late nineteenth century, Portuguese colonial doctors had shown great interest in local medicinal plants. They obtained their knowledge from indigenous informants and naturalists

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[179] See Kopke, *Investigações,* pp. 26–28.

[180] Joaquim Antonio d'Oliveira, Relatorio do delegado de saude de Ambrizette, 1898-1899, 31.12.1899, p. 9, in: AHU, SEMU, DGU 944; Mercier Gamble in: Sleeping Sickness Committee, *Minutes of Evidence,* p. 189; Weeks, John, *Among the primitive Bakongo. A record of thirty years' close intercourse with the Bakongo and other tribes of equatorial Africa, with a description of their habits, customs & religious beliefs,* London: Seeley, Service & Co., 1914, p. 228.

[181] Santos, Francisco Ferreira dos, "Assistência médica aos Indígenas e processos práticos da sua hospitalisação", *Revista Médica de Angola* 4,2 (1923), pp. 51–71, here p. 57; Diniz, José de Oliveira Ferreira, *A missão civilisadora do estado em Angola,* Lisboa: Centro Tipograpfico Colonial, 1926, p. 12. For a similar division in Zulu society in South-Africa, see Flint, Karen, "Competition, Race and Professionalisation. African Healers and White Medical Practitioners in Natal, South Africa in the Early Twentieth Century", *Social History of Medicine* 14,2 (2001), pp. 199–221, here p. 203.

[182] For theoretical perspectives and case studies on other colonies, see the contributions in Feierman, Steven; Janzen, John (eds.), *The social basis of health and healing in Africa,* Berkeley: University of California Press, 1992 and in Digby, Anne; Ernst, Waltraud; Muhkarji, Projit B. (eds.), *Crossing Colonial Historiographies. Histories of Colonial and Indigenous Medicines in Transnational Perspective,* Newcastle: Cambridge Scholars, 2010.

[183] Flint, *Competition,* p. 200.

who collected, described and systematized the flora of the Portuguese Empire.[184] In the first half of the twentieth century, however, the advent of microbiological disease causation theories and the development of modern pharmacology would lead to a precipitous drop in the level of interest directed toward local plants and healing methods. Occasionally, some would call for the inventorization and study of medicinal plants, but this proved to be in vain.[185] While knowledge about local therapeutic practices was still included in ethnographic writings, it was generally excluded from academic treatises and discussions about how European colonial doctors should combat (tropical) diseases.[186]

Of course, this scientific marginalization did not mean that indigenous healers lost the influence they had over local African communities. There is even little doubt that some Europeans continued to 'go native' and to consult African healers as well. However, since European doctors, missionaries and administrators believed that 'witchdoctors' were the main obstacle to the diffusion of western biomedicine and to socio-cultural progress at large, circumscribing their influence was to be part of the colonial project in the twentieth century. Inasmuch as a general ban would be impossible to implement anyway, Portuguese decision-makers in Angola believed that the best way to achieve this aim would be to develop a

[184] For the nineteenth century, see Roque, Ana Cristina, "Breves Noções sobre a Medicina Cafreal do Districto de Sofala ou sobre o conhecimento que os portugueses tinham dos usos e virtudes das plantas e ervas medicinais na costa Sul Oriental de África na segunda metade do século XIX", *Anais de História de Além-Mar* 2 (2001), pp. 211–272; Bastos, Cristiana, "O médico e o 'inhamessoro'. O relatório do goês Arthur Ignacio da Gama em Sofala, 1878", in: Carvalho, Clara; Cabral, João de Pina (eds.), *A persistência da História. Passado e contemporaneidade em África,* Lisboa: Imprensa de Ciências Sociais, 2004, pp. 91–117; Bastos, Cristiana, "Medical Hybridisms and Social Boundaries. Aspects of Portuguese Colonialism in Africa and India in the Nineteenth Century", *Jounal of Southern African Studies* 33,4 (2007), pp. 767–782; Havik, Philip J., "Bóticas e beberagens. A criação dos serviços de saúde e a colonização da Guiné", *Africana Studia* 10 (2007), pp. 235–270. For early modern times, see Walker, Timothy, "Acquisition and Circulation of Medical Knowledge within the Early Modern Portuguese Colonial Empire", in: Bleichmar, Daniela; De Vos, Paula; Huffine, Kristin; Sheenan, Kevin (eds.), *Science in the Spanish and Portuguese Empires, 1500-1800,* Stanford: Stanford University Press, 2009, pp. 247–270. For the interest Portugal's most eminent naturalists dedicated to medicinal plants in Portuguese Africa, see Ficalho, Conde de Francisco Manuel de Melo, *Plantas úteis da África portuguesa,* Lisboa: Sociedade de Geografia de Lisboa, 1884; Henriques, Júlio, *Contribuições para o estudo da flora d'Africa. Catalogo dos plantas de S. Thomé,* Coimbra: Imprensa da Universidade, 1886; Moller, Adolphe, "Subsidios para o estudo das plantas medicinaes de Africa occidental", *Gazeta de Pharmacia* (1897); Andrade, António Alberto Banha de, *O naturalista José de Anchieta* (24), Lisboa: Instituto de Investigação Científica Tropical, 1985, pp. 44–50 and Junior, João Cardoso, *Subsidios para a matéria medica e therapeutica das possessões ultramarinas portuguezas*, 2 vols, Lisboa: Typographia da Academia Real das Sciencias, 1902-1905.

[185] Correia, Alberto Carlos Germano da Silva, "Os processos práticos de hospitalização dos indígenas e a sua assistência médica em Angola", *Revista Médica de Angola* 4,2 (1923), pp. 179–200, here pp. 191–194; Humberto Valmor da Silva, *Resposta ao questionario linguistico, etnografico e de assistencia medica aos indigenas pelo Chefe do Posto da Séde do Concelho de Andulo (Província do Bié)*, 01.1935, p. 65, in: AHU, MU, AGC 2336.

[186] See, for instance, Sousa, António Figueiredo Gomes de Sousa, "Notícia sobre algumas plantas de uso gentílico do distrito do Moxico", *Revista Médica de Angola* 5 (1927), pp. 103–111; Almeida, Gomes de, "Plantas venenosas e medicinais dos indigenas da colonia de Moçambique", *III Congresso Colonial Nacional de 8 a 15 de Maio de 1930. Actas das Sessões e Teses,* Lisboa: Tip. e Pap. Carmona, 1934; Cruz, José Ribeiro da, *Notas de Etnografia Angolana,* Lisboa, 1940, pp. 133–135; Mendes, Sargento-Mór Afonso, *Angola - Medicina Indígena Antiga. Caderno que trata dos paus, ervas, raízes, cáscas e óleos vegetais e animais, que serviam em Angola para curar certas e determinadas doenças, Separata, completa, da Revista Diogo-Cação,* Lisboa, 1935.

competing system of *Assistência Médica aos Indígenas* (African healthcare), the efficacy in combating disease of which would eventually eclipse the 'traditional' healing methods.[187]

For Western biomedicine, sleeping sickness therapy changed dramatically when the trypanosoma gambiense was identified as the causative agent of the disease. Doctors and pharmaceutical researchers in Europe, aided by colleagues in Africa upon whom they relied for clinical tests, began to focus their energy on developing drugs that would destroy these particular protozoa in the human body. As Neill, Mertens and Lachenal have recently shown, sleeping sickness drug therapy research in the early twentieth century was an eminently transnational endeavour, in which networks between research institutes, doctors and colonial health services from different nations developed.[188] In the beginning (and perhaps even afterward), it was also a transdisciplinary endeavour between human medicine and veterinary science. In their quest for an adequate drug against human trypanosomiasis, researchers benefited from previous and ongoing experiments with animals that suffered from other trypanosomic diseases, such as nagana, mal de Caderas and surra, which were now known to be related.[189] As I will discuss below, Portuguese pharmaceutical science did not contribute to the development of trypanocidal drugs, but some Portuguese doctors, most notably Ayres Kopke, played an important role in testing them on humans and developing (new) treatment methods.

A major breakthrough was made in 1906, when several doctors reported the very encouraging effects of the arsenical drug atoxyl on cases of human trypanosomiasis.[190] Arsenical compounds had long been recognized to have a positive effect on sleeping sickness and other trypanosomic diseases in both humans and animals. But while they were widely believed to ease symptoms and to slow the progression of the disease, arsenical compounds,

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[187] See, for instance, Correia, *Processos práticos,* pp. 191–194; Diniz, *A missão civilisadora,* p. 12 and Lebre, António, "Costumes gentílicos dos povos de além Cunéne", *Trabalhos do 1.° Congresso Nacional de Antropologia Colonial, Porto, Setembro de 1934,* vol. 2, Porto: Edições da 1.a Exposição Colonial Portuguesa, 1934, pp. 76–192, here p. 191. In 1931, the director of the health services in Angola proposed that 'traditional' healers be explicitly allowed to practice, but that their practice be limited to non-asssimilated Africans, see Gôverno Geral de Angola, *Regulamento do exercício da arte de curar em Angola*, 07.05.1931, in: *Boletim Oficial da Colónia de Angola, Série II*, 2.° Suplemento ao n. 18, pp. 1–22, art. 6.

[188] Neill, Deborah, "Paul Ehrlich's Colonial Connections. Scientific Networks and Sleeping Sickness Drug Therapy Research, 1900–1914", *Social History of Medicine* 22,1 (2009), pp. 61–77; Mertens, *Chemical Compounds*; Mertens/Lachenal, *History*.

[189] For this nexus, see, for instance, Thomas, Wolferstan, "Some experiments in the treatment of trypanosomiasis", *British Medical Journal* 2317 (27.05.1905), pp. 1140–1143 and van Hoof, L., "Thérapeutique de la maladie du sommeil et des trypanosomiases animales africaines", *Revista Médica de Angola* 4,4 (1923), pp. 85–128. On animal trypanosomiasis, see Ford, *The Role of the trypanosomiases,* pp. 61-65; 71-76.

[190] Kopke, *Trypanosomiasis humaine (Congrès)*; Broden, A.; Rodhain, J., "Le traitement de la trypanosomiase humaine (Maladie du sommeil)", *Archiv für Schiffs- und Tropenhygiene* 10,22 (1906), pp. 693–707.

such as Fowler's solution, were known to be very toxic in high doses.[191] Atoxyl proved to be a solution to this problem, as it contained a high level of arsenic but with much reduced toxicity. Furthermore, atoxyl was not a new drug. It had already been described in the 1860s, but it was not until 1905 that two researchers from the Liverpool School of Tropical Medicine, Wolferstan Thomas and Anton Breinl, tested its efficiency against trypanosomes on infected animals and obtained very promising results.[192]

Between 1905 and 1907, atoxyl quickly advanced to the position of "medicine of choice" in the fight against sleeping sickness, and it would remain the most widely used drug until well in the 1920s.[193] Ayres Kopke played an active role in the drug's 'success story'. After having read Thomas' article, he began almost immediately, i.e. in July 1905, to treat ten of his sleeping sickness patients at the Colonial Hospital with hypodermic (or subcutaneous) injections of atoxyl. Kopke was not the only one who was eager to test atoxyl on human patients. Using the Congo Free State's connections with the Liverpool School – which had just conducted a two-year sleeping sickness research mission for Leopold II – bacteriologists in Leopoldville established a drug-testing scheme.[194] Furthermore, Robert Koch most famously conducted extensive experiments with atoxyl during his research mission in East Africa in 1906-1907.[195] There is little doubt, however, that Kopke was the first to use atoxyl in humans and to report on it. In his presentation of his findings at the 15th International Congress of Medicine in Lisbon in April 1906, he described how atoxyl made the trypanosomes disappear temporarily from the peripheral blood circulation of his patients. Kopke was far from euphoric, however, because the drug had proved incapable of eradicating the trypanosomes in the cerebrospinal fluid.[196] For many years, Kopke was to emphasize in his articles and public lectures that he had been the first to conduct such experiments on patients. It is symptomatic of the disregard that current historiography has of Portugal's work on sleeping sickness that Kopke's claim, which was widely recognized by his contemporaries,

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[191] See e.g. Manson, *Tropical Diseases - Manual (1898),* p. 255; Forde, R. M., "Some clinical notes on a European patient in whose blood a trypanosome was observed", *Journal of Tropical Medicine* 5 (01.09.1902), pp. 261–263; Bettencourt/Kopke/Rezende/Mendes, *La maladie du sommeil,* p. 63.

[192] Thomas, *Some experiments*. See also Riethmiller, Steven, "From Atoxyl to Salvarsan. Searching for the Magic Bullet", *Chemotherapy* 51 (2005), pp. 234–342, here pp. 236–237.

[193] On the further use of atoxyl after World War I, see Chapter 2.

[194] Mertens/Lachenal, *History,* pp. 1256-1257. On the Liverpool research mission in the Congo Free State, see Lyons, *The colonial disease,* pp. 76–101.

[195] See next paragraph.

[196] Kopke, *Trypanosomiasis humaine (Congrès).* A summary was also published in *A Medicina Contemporânea*, see Kopke, Ayres, "Tratamento da doença do somno", *A Medicina Contemporânea* 24,41 (14.10.1906), pp. 321–322.

has systematically been overlooked in recent historiography and in some cases even attributed to others.[197]

Yet more than to Kopke's 'first', atoxyl's ascension was linked to the authoritative reports produced by Robert Koch (1843-1910), one of the most eminent medical scientists of his time. During his sleeping sickness research mission in British and German East Africa in 1906-1907, Koch conducted extensive experiments with atoxyl.[198] Although his initial hope that atoxyl would be for sleeping sickness what quinine was for malaria was eventually quashed, there was in his opinion no better medication available.[199] From Uganda, Koch praised the drug as a "tremendous weapon in fighting sleeping sickness" and firmly recommended its use.[200] In addition to the curative effects of atoxyl, Koch also invoked the epidemiological advantages of its use. By destroying the trypanosomes in the patients' peripheral blood circulation, atoxyl minimized the risk of contagion and was hence also a powerful preventive drug.[201] His writings from East Africa received extensive coverage in the medical press in Europe, including Portugal.[202] Due to his enthusiasm and that of other 'gatekeepers' like Manson and Laveran, atoxyl was proclaimed the standard drug to administer against sleeping sickness at the First International Conference on Sleeping Sickness in London in 1907.[203]

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[197] For Kopke's claim see, for instance, *Proceedings of the First International Conference on the Sleeping Sickness, held at London in June 1907,* in: British Parliamentary Papers, Session 1908, [Cd 3778], p. 27; Kopke, Ayres, "A Conferência Internacional sôbre a doença do sono, maio 1925. Relatório apresentado a Sua Ex.a o Ministro das Colónias pelo Delegado do Govêrno Português", *Archivos de Hygiene e Pathologia Exoticas* 7 (1925), pp. 501–566, here p. 503. For the international recognition of his claim, see, for instance, Mense, *Die menschliche Trypanosomenkrankheit,* p. 653; Laveran, A.; Mesnil, F., *Trypanosomes et trypanosomiases,* 2nd ed., Paris, 1912, p. 189; van Hoof, *Thérapeutique,* pp. 87; 100; Mora, *História da Escola de Medicina Tropical,* p. 204. Lyons erroneously ascribes development, first use and discovery of the drug's side effects to Robert Koch, see Lyons, *The colonial disease,* pp. 280-281, note 19. Even 'first use' is impossible, since Kopke presented his findings in Lisbon even before Robert Koch had arrived in East Africa (end of May 1906), see Eckart, Wolfgang U., *Medizin und Kolonialimperialismus. Deutschland, 1884-1945,* Paderborn: Schöningh, 1997, p. 342. According to Neill, Greig had already tested atoxyl in Uganda in 1904, but it is unclear if these tests were on animals or humans and whether Greig reported them, see Neill, *Paul Ehrlich,* p. 67.

[198] On Koch's expedition, see Eckart, *Medizin und Kolonialimperialismus,* pp. 343–346.

[199] See Koch's report from 5 November 1906, in: Koch, Robert, "Über den bisherigen Verlauf der deutschen Expedition zur Erforschung der Schlafkrankheit in Ostafrika", in: Schwalbe, J., *Gesammelte Werke von Robert Koch,* Leipzig: Georg Thieme 1912, pp. 509–524, here p. 524.

[200] Koch, Robert, "Schlussbericht über die Tätigkeit der deutschen Expedition zur Erforschung der Schlafkrankheit [1907]", in: Schwalbe, J., *Gesammelte Werke von Robert Koch,* Leipzig: Georg Thieme 1912, pp. 534–546, quote p. 544. See also Bauche, Manuela, *Robert Koch, die Schlafkrankheit und Menschenexperimente im kolonialen Ostafrika,* http://www.freiburg-postkolonial.de/Seiten/robertkoch.htm (last accessed 30.12.2013).

[201] According to Kopke, Koch had been the first to air this idea, see Kopke, Ayres, "Traitement de la maladie du sommeil. Rapport présenté au XIVe Congrès International d'Hygiène et Démographie, Berlin, Septembre 1907", *Archivos de Hygiene e Pathologia Exoticas* 1,3 (1907), pp. 299–347, here p. 299.

[202] For Portugal, see for instance "Os últimos trabalhos de Koch. A doença do somno vencida", *A Medicina Contemporânea* 24,52 (30.12.1906), pp. 409–411.

[203] *Proceedings of the First International Conference on the Sleeping Sickness, held at London in June 1907,* in: British Parliamentary Papers, Session 1908, [Cd 3778], pp. 29; 58

By that time, however, it was already clear that atoxyl was not an ideal drug. Kopke was among the first who openly pointed out the limitations and perils of the drug.[204] First, further experiments had confirmed his early assumption, which he had already voiced in Lisbon in 1906, that atoxyl was unable to destroy the trypanosomes once these had entered the cerebrospinal fluid. Once this stage was reached, the trypanosomes would invariably trigger the nervous lesions and hence the symptoms characteristic of the second phase of the disease, and eventually cause the death of the patients. The problem was that many patients were only diagnosed with the manifestation of these very symptoms. In such patients, injections with atoxyl would not heal, but 'merely' prolong life.[205] In addition, atoxyl increased the risk of severe ocular lesions. Before his international colleagues in London, Kopke revealed that of the 29 patients he had treated with atoxyl, six had developed serious eye complications. Of those six, four had gone blind. For Kopke, there was little doubt that these 'accidents', which were analysed as atrophy of the optic nerve, were at least in part caused by atoxyl. His warning against the use of the drug, however, was dismissed by future Nobel Prize winners Laveran and Ehrlich. In their opinion, these were inevitable risks that in no way outweighed the advantages.[206]

Nevertheless, these problems needed to be solved and pharmacists, chemists and doctors continued their search for treatments that would cause fewer (and less severe) side effects than atoxyl and would also be able to heal second stage patients. The German microbiologist Paul Ehrlich (1854-1915), a former student of Robert Koch and winner of the Nobel Prize for his work on immunology in 1908, was doubtlessly one of the most important figures in this endeavour, and historians have recently paid much attention to his research.[207]

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[204] For other critical voices, see Mertens, *Chemical Compounds*, p. 10.

[205] Kopke, *Trypanosomiasis humaine (Congrès),* pp. 243–245; Magalhães, José de, "Etude au point de vue thérapeutique de la perméabilité méningée dans la trypanosomiase humaine", *Archivos de Hygiene e Pathologia Exoticas* 1,2 (1906), pp. 189–193; Mastbaum, Hugo, "Recherche de l'atoxil dans le liquide céphalo-rachidien des maladies atteints de trypanosomiase", *Archivos de Hygiene e Pathologia Exoticas* 1,3 (1907), pp. 348–349.

[206] *Proceedings of the First International Conference on the Sleeping Sickness, held at London in June 1907,* in: British Parliamentary Papers, Session 1908, [Cd 3778], p. 28. On this episode, see also Neill, *Paul Ehrlich,* pp. 70–71. Kopke repeated this at the 14th International Congress of Hygiene and Demography in Berlin a few months later, see Kopke, *Traitement (1907),* pp. 345–346. Although most accepted that arsenical medicaments played an important role in causing these eye complications, their precise cause (and ways to prevent them) would remain subject to debate for decades, see e.g. Magalhães, José de, "Altérations du nerf optique dans quatre cas de trypanosomiase traités par l'atoxyl", *Archivos de Hygiene e Pathologia Exoticas* 2 (1909), pp. 45–57; Pinto, J. da Gama, "Troubles visuels dans la trypanosomiase humaine", *Archivos de Hygiene e Pathologia Exoticas* 3 (1910), pp. 1–18; Kopke, Ayres, "Les troubles oculaires dans la maladie du sommeil", *Bulletin de la Société de Pathologie Exotique* 15 (08.02.1922), pp. 139–146; van den Branden, F.; Appelmans, M., "Les troubles visuels dans la trypanosomiase humaine", *Annales de la Société Belge de Médecine Tropicale* 14 (1934), pp. 91–107; Mora, António Damas, "L'emploi de la voie intracarotidienne dans le traitement des périodes avancées de la maladie du sommeil. L'action de la tryparsamide, injectée dans la carotide sur les troubles visuels des trypanosomes", *Annales de la Société Belge de Médecine Tropicale* 14,1 (1934), pp. 25–48.

[207] Riethmiller, Steven, "Ehrlich, Bertheim and Atoxyl. The Origins of Modern Chemotherapy", *Bulletin for the History of Chemistry* 23 (1999), pp. 28–33; Riethmiller, *From Atoxyl to Salvarsan*; Hüntelmann, Alex, *Paul*

Ehrlich, in fact, had already designed various trypanocidal chemical dyes in the first years of the twentieth century, such as Trypanrot, Tryparosan and Parafuchsine. From 1906 onwards, he and his research teams in the Institute for Experimental Therapy and the Georg-Speyer-Haus for Chemotherapy (both located in Frankfurt) increasingly focused on creating new arsenical compounds derived from atoxyl. By proving that the chemical composition of atoxyl was different from what had thus far been assumed by the medical research community, Ehrlich and his collaborator Bertheim successfully opened the door for this new kind of research.[208]

What historians of sleeping sickness have often overlooked is that Ehrlich not only wanted to target trypanosomes with these drugs, but also bacterial spirochaetes. Some spirochaetes had just been proven, around 1905, to cause syphilis as well as yaws and relapsing fever. As both types of microorganisms revealed a similar sensitivity to arsenical compounds, Ehrlich had the same 'arsenobenzols' tested on both groups of diseases.[209] His aim was to create a "magic bullet", a substance that could kill pathogenic microorganisms without damaging the host – or at least with far less damaging side effects than atoxyl. In order to avoid the emergence of resistant strains, as happened with the prolonged use of atoxyl as Ehrlich had himself discovered, the drug should preferably cure with a single 'shot' or dose, i.e. what he referred to as *therapia magna sterilisans*. Ehrlich's systematic search for this miracle therapy received worldwide attention at the time and he has come to be considered the "founder of modern chemotherapy".[210]

When it came to testing his compounds on sleeping sickness, Ehrlich not only collaborated with German colonial doctors, like Robert Koch for instance, but also sent his newest drugs to selected doctors and laboratories in the British, French and Belgian colonies for clinical testing.[211] Kopke, who had built his reputation upon his experiments with atoxyl, was also part of Ehrlich's transnational network. Kopke and Ehrlich corresponded on drug research and met in person at the International Sleeping Sickness Conference in London in

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Ehrlich. Leben, Forschung, Ökonomien, Netzwerke, Göttingen: Wallstein-Verlag, 2011; Neill, *Paul Ehrlich*; Mertens/Lachenal, *History,* pp. 1260–1261; Isobe, *Medizin und Kolonialgesellschaft,* pp. 98–118.

[208] Riethmiller, *Ehrlich, Bertheim and Atoxyl*; Riethmiller, *From Atoxyl to Salvarsan*; Bäumler, Ernst, *Paul Ehrlich. Forscher für das Leben,* 2nd ed., Frankfurt am Main: Societäts-Verlag, 1980 [1979], pp. 192–195. On chemical dyes, see particularly *Ibid.,* pp. 176ff and Benda, L., "Chemie (mit Ausschluss der Arsenverbindungen)", in: Apolant, H.; et.al. (eds.), *Paul Ehrlich. Eine Darstellung seines wissenschaftlichen Wirkens, Festschrift zum 60. Geburtstag des Forschers (14.03.1914),* Jena: Verlag von Gustav Fischer, 1914, pp. 417–446, esp. pp. 420-421.

[209] Bäumler, *Paul Ehrlich,* pp. 197–199.

[210] Riethmiller, *From Atoxyl to Salvarsan,* p. 234.

[211] Gradmann, Christoph, *Krankheit im Labor. Robert Koch und die medizinische Bakteriologie,* Göttingen: Wallstein-Verlag, 2005; Isobe, *Medizin und Kolonialgesellschaft,* pp. 98–118; Neill, *Paul Ehrlich*; Mertens/Lachenal, *History*.

1907. In 1913, Kopke also visited Ehrlich's Institute for Experimental Therapy in Frankfurt on behalf of the School of Tropical Medicine in Lisbon.[212] Capitalizing on these personal and institutional connections, Kopke was able to test most of Ehrlich's drugs on his patients at the Colonial Hospital in Lisbon. Beyond the dyes trypanroth and parafuchsine, this included the promising arsenobenzols: Arsacetine ('306'), Arsenophenylglycin ('418'), Salvarsan ('606') and Neosalvarsan ('914').[213] The ban on Arsenophenylglycin in the German colonies demonstrates that it was also advantageous for Ehrlich to have foreign researchers testing his drugs.[214]

Of course, Ehrlich was not the only player in the field. Kopke eagerly read about all of the new chemotherapeutical substances being proposed or developed to fight sleeping sickness and, if necessary, contacted researchers to obtain their newest drugs for testing purposes. He thus used several medications that had been proposed by Alphonse Laveran, the French discoverer of the malaria parasite who had started working on trypanosomes in the early 20th century. He also obtained new experimental drugs such as Acide p. amino-phényl-stibinique from Anton Breinl, an Austrian researcher employed at the Liverpool School of Tropical Medicine, and Galyl from the French doctor Mouneyrat.[215]

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[212] On this visit, see Kopke, *Escola de Medicina Tropical de Hamburgo,* pp. 144–145. Kopke and Ehrlich had been in contact before the Conference in London, see Ayres Kopke to Paul Ehrlich, Lisbon, 17.04.1907, in: Handschriftenabteilung Staatsbibliothek zu Berlin, Slg. Darmstadt 3d 1906: Kopke, Ayres.

[213] Kopke, *Trypanosomiasis humaine (Congrès),* pp. 240–241; Kopke, Ayres, "Traitement de la trypanosomiase humaine. Rapport présenté au XVIe Congrès International de Médecine (à Budapest)", *Archivos de Hygiene e Pathologia Exoticas* 2 (1909), pp. 219–270, here pp. 223; 226; Kopke, Ayres, "Traitement de quelques cas de trypanosomiase humaine par le salvarsan et le neosalvarsan. Communicaçõ presente ao XVII Congresso Internacional de Medicina, Londres, Agosto de 1913", *A Medicina Contemporânea* 31,37 (14.09.1913), pp. 289–292; Kopke, *Estudo (1916),* pp. 104–108. For Kopke's use of arsenophenylglycin, see Kopke, Ayres, *Sobre a doença do somno. Progressos na etiologia, tratamento e prophylaxia, Separata da Medicina Contemporânea,* Lisboa: Typographia Adolpho de Mendonça, 1911, p. 14 and Kopke to Silva Telles (director EMT), 27.10.1911, in: AHU, MU, DGAPC 3473.

[214] On the experiments with arsenophenylglycin in the German colonies and the prohibition of this drug, see Bauche, Manuela, *Medizin und Kolonialismus. Schlafkrankheitsbekämpfung in Kamerun, 1900-1914* (Magisterarbeit - Humboldt-Universität zu Berlin, Seminar für Afrikawissenschaften), 2005, pp. 99–101; Isobe, *Medizin und Kolonialgesellschaft,* pp. 92-93; 104-114. On the use of the drug in Brazzaville, see Neill, *Paul Ehrlich,* pp. 69–70.

[215] On his contacts with these researchers and the use of their drugs, see Kopke, *Investigações,* p. 30; Kopke, *Trypanosomiasis humaine (Congrès),* p. 241; Kopke, *Traitement (1909),* pp. 226–227; Kopke, Ayres, "Trypanosomiase gambiense. Sur la résistance du trypanosome gambiense à l'atoxyl et le traitement de la trypanosomiase humaine par l'acide p aminophényl-stibinique", *A Medicina Contemporânea* 27 (1909), pp. 232–234; Kopke, *Estudo (1916),* pp. 108–112. On Anton Breinl, see: Douglas, R. A., 'Breinl, Anton (1880–1944)', Australian Dictionary of Biography, National Centre of Biography, Australian National University, http://adb.anu.edu.au/biography/breinl-anton-5342/text9031 (last accessed 28.11.2013).

The location of research

Kopke's drug experiments in the Colonial Hospital annexed to the School of Tropical Medicine in Lisbon reveal important differences with those conducted in other colonial empires. Before World War I, Kopke observed and treated more than 150 patients in Lisbon, a number far exceeding that of his colleagues in other European metropoles. And whereas hospitals in London and Paris seem to have admitted European sleeping sickness patients only, the Colonial Hospital in Lisbon accommodated mainly Africans.[216] In my opinion, these differences do not support lusotropical ideas regarding Portugal's supposedly more benevolent colonialism with less racial discrimination than that of other colonial nations.[217] Portugal's 'exceptionalism' in this matter did not result from a different attitude towards race, but rather from a different configuration of the research infrastructure in the Portuguese empire. While other colonial powers used research institutions in the colonies, like the Institut Pasteur in Brazzaville (French Equatorial Africa) or the Bacteriological Laboratories in Léopoldville (Belgian Congo) and Entebbe (British Uganda), to do the bulk of sleeping sickness drug therapy research, Portuguese research remained centralized under Kopke's direction at the School of Tropical Medicine in Lisbon.[218]

A major reason for this centralization might have been Kopke's desire for control and prestige, which is quite apparent from his life-long rather obsessive references to his own 'firsts'.[219] Yet it was also probably the result of the failure to establish research institutes in the colonies. Even Kopke was aware that there were very good reasons to relocate drug testing to the colonies. Like in other European metropoles, drug therapy testing in Lisbon

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[216] In addition to the patients who were accomodated in the Bacteriological Institute in early 1902, Kopke lists about 135 cases, often with detailed descriptions, in his publications. See Kopke, *Investigações*; Kopke, Ayres, "Trypanosomiasis humaine. (Rapport présenté à la XVII section do XV congrès international de Médecine, à Lisbonne)", *Archivos de Hygiene e Pathologia Exoticas* 1,2 (1906), pp. 159–188; Kopke, *Traitement (1907)*; Kopke, *Traitement (1909)*; Kopke, *Traitement de quelques cas (1913)*; Kopke, *Estudo (1916)*. For a few further cases after World War I, see Kopke, *Troubles oculaires* and Kopke, Ayres, "Tratamento da doença do sono", *Revista Médica de Angola* 4,4 (1923), pp. 49–61. Up until 1910, the Hôpital Pasteur in Paris had only hosted 26 patients, and up until 1912 only 17 patients had been treated in England, see Martin, Louis; Darré, Henri, "Résultats éloignés du traitement dans la trypanosomiase humaine", *Bulletin de la Société de Pathologie Exotique* 3 (1910), pp. 333–341 and Daniels, C. -W, "Cases of trypanosomiasis in England, mainly at the London School of Tropical Medicine", *Journal of the London School of Tropical Medicine* 1 (1911-1912), pp. 67–80. Similarly, the Seemannskrankenhaus in Hamburg seems to have hosted only a limited number of sleeping sickness patients and to not have conducted any systematic research, except with Bayer 205 just after the First World War. See Mannweiler, Erich, *Geschichte des Instituts für Schiffs- und Tropenkrankheiten in Hamburg,1900-1945*, Keltern-Weiler: Goecke & Evers, 1998, esp. pp. 145; 151-152 for Bayer 205.

[217] For a critique of lusotropicalism, see Castelo, Cláudia, *"O modo português de estar no mundo". O luso-tropicalismo e a ideologia colonial portuguesa (1933-1961),* Porto: Edições Afrontamento, 1998.

[218] For the laboratories in Léopoldville, Brazzaville and Entebbe, see Mertens/Lachenal, *History* and Neill, *Paul Ehrlich*.

[219] In addition to the references in footnote 197, see also Kopke, *Sobre a doença do somno,* pp. 3-4; 9 and *Dados relativos à vida professional de Ayres Kopke, Professor e Director da Escola de Medicina Tropical de Lisboa*, [1928], typescript consulted in the library of the Instituto de Higiene e Medicina Tropical in Lisbon, the successor of the Escola (since 1935: Instituto) de Medicina Tropical.

suffered fundamentally from the limited number of patients that could be observed and from the fact that many of them were already in the second, still incurable, phase of the illness. For Kopke and the direction of the EMT, finding a solution to these problems was twofold.

On the one hand, they sought to secure a steady flow of patients to the Colonial Hospital in Lisbon. Research missions constituted good opportunities for this. Like he and the other Portuguese commissioners had done in 1901, Kopke brought a dozen patients with him when he returned to Lisbon after his mission in 1904.[220] Furthermore, during the School's research mission to Príncipe in 1907-1908, which will be treated more extensively in the next section, more than twenty African patients were sent to Lisbon.[221] Patients used to die quickly, however, and Kopke had to use administrative channels and connections to befriended doctors in the colonies as well. The Colonial Ministry was generally receptive to their argument that the School's scientific reputation was at stake and repeatedly urged the governors of Angola and São Tomé and Príncipe to send more – and preferably early-stage – sleeping sickness patients to Lisbon for study and (experimental) treatment. Fragmentary as they are, records show that such shipments did occur, but that colonial administrations were not always eager to comply.[222] Whether colonial administrations were allowed to send off patients against their will was a contested issue. In 1903, for instance, the Governor General of Angola prohibited the use of force to compel those who, supported by their families and employers, did not want to leave their native country.[223] On another occasion, however, the use of force was condoned.[224] Although his articles often contained detailed case descriptions, Kopke kept his silence on this particular issue.

On the other hand, Kopke and the EMT also promoted drug experiments in the colonies themselves.[225] Conducting large-scale experiments with atoxyl and a few other drugs was one of the main tasks of the School's sleeping sickness mission to Príncipe in 1907-

[220] Ayres Kopke, Relação dos doentes que seguem para Lisboa abordo do paquete Benguela, 09.09.1904, in: ANA, Cx. 1546. See also Kopke, *Investigações,* pp. 6–35.
[221] Twenty-one patients from Príncipe were admitted to the Colonial Hospital in January and October 1908, see the detailed case descriptions in Kopke, *Traitement (1909),* pp. 240–269.
[222] With regard to the shipment of eight Angolans in October 1906, see Processo 225/6 da Secretaria Geral do Governo, 1906, in: ANA, Cx. 4784. For the lack of compliance between 1909 and 1911, see Silva Telles (Director EMT) to Director Geral do Ministerio das Colonias, 27.03.1911 and 16.05.1911; José Serrão (Chefe da Repartição de Saúde da MC), Parecer, 24.05.1911, all in: AHU, MU, DGAPC 3473.
[223] Director Geral do Ultramar, F.F. Dias Costa, to Governador Geral Interino de Angola, Lisbon, 14.09.1903; Delegado de Saúde, Sergio Moreira da Fonseca, to Chefe do Concelho do Alto Dande, 03.11.1903, in: ANA, Cx. 98.
[224] Chefe do concelho de Golungo Alto, Alvaro José d'Almeida, to Secretaria Geral do Governo Geral d'Angola, 10.10.1906, in Processo 225/6 da Secretaria Geral do Governo, 1906, in: ANA, Cx. 4784.
[225] Silva Telles (Director EMT) to Director Geral do Ministerio das Colonias, 27.03.1911, in: AHU, MU, DGAPC 3473.

1908.[226] Kopke also sent new experimental drugs to the regular health services in Angola as well as São Tomé and Príncipe, notably to his former mission colleague Annibal Correia Mendes, the director of the bacteriological laboratory in Luanda.[227] Yet, apart from the experiments on Príncipe in 1907-1908, little is known about drug testing in the Portuguese colonies before World War I. Unlike their counterparts in Entebbe, Léopoldville or Brazzaville, the bacteriological laboratories in Luanda and elsewhere in Portuguese Africa did not flood European medical journals with drug test reports.[228] On the contrary, Correia Mendes and his colleagues did not publish even a single report on drug testing in Angola before the 1920s.

While this does not necessarily mean that such experiments did not take place at all, it is hard to conceive that they did in a comprehensive and systematic manner. Limited access to new drugs was certainly one of the reasons. Kopke might have been part of European research networks, but the laboratories in Portuguese Africa were clearly not. Yet, more important still might have been the fact that Portuguese medical authorities were rather slow in establishing so-called segregation or concentration camps for sleeping sickness patients. Many colonies had started to establish such camps already in the 1900s. They not only served curative and preventive purposes, but were also the preferred places in which to conduct drug therapy research, as recent historiography has emphasized.[229]

It was not until 1910 that both the Health Council *(Junta de Saúde)* in Angola and the School of Tropical Medicine, when inspired by foreign examples, started to advocate the establishment of concentration camps in Luanda and the city of São Tomé. The choice of both cities obeyed scientific reasoning. Both were deemed most appropriate for therapeutic experiments: they were free from *glossinae*, which would prevent the sick from being re-infected during treatment, and were much closer than Lisbon to endemic sleeping sickness areas, which facilitated transport and allowed patients to remain in the same climatic conditions.[230] Yet the major advantage, from a scientific perspective, of creating concentration camps *in the colonies* was probably left implicit: not only would doctors have access to a far greater number of cases than could ever be sent to Portugal, colonial rule

[226] See the next section.
[227] See, for instance Castro, Ferreira de, "Cura(?) da doença do somno pelo atoxyl", *A Medicina Moderna* 14 (1907), pp. 123–125 and Kopke, *Sobre a doença do somno,* p. 14.
[228] See the references cited in footnote 218.
[229] For German Africa, the use of concentration camps for drug therapy 'experiments' have been extensively described by Isobe, *Medizin und Kolonialgesellschaft,* pp. 71-117; 178-201; 238-265. For Entebbe and Brazzaville, see Neill, *Paul Ehrlich*. For the Belgian Congo, see Mertens/Lachenal, *History*.
[230] Junta de Saúde (Luanda), *Sessão Extraordinário*, 30.05.1910, in: Copiador de actas da Junta de Saude (1891-1912), p. 165v, in: ANA, Cód. 1867; F. A. Silva Telles (Director EMT) to Director Geral do Ministério das Colonias, 27.03.1911, in: AHU, MU, DGAPC 3473.

would also allow them to keep their patients under supervision for a much longer period of time. This was apparently not possible in Lisbon. In 1923, Kopke complained that of the 115 cases he had treated with atoxyl and other medications in Lisbon since July 1905, he had only been able to follow the progress of seven of them long enough to consider them cured. Of the others, 67 had died, and he had lost track of the remaining 41. Many of these patients had not wished to continue treatment in Lisbon, and Kopke was obliged to discharge them from the Colonial Hospital. Interestingly, Europeans and Africans alike were entitled to leave the hospital at their wish.[231]

In 1912 or 1913, a special lazaret for sleeping sickness patients was eventually created next to the Bacteriological Laboratory in Luanda. This however did not lead to a fundamental boost in drug therapy research – at least there is no information about drug experiments having been conducted there.[232] Lack of time and personnel might have contributed to this absence. In 1913, the laboratory's long-time director, Annibal Correia Mendes, complained that a continuous series of other assignments had kept him away from scientific research and that he had lost two of his three assistants without replacement.[233]

Nonetheless, the marginalization of the Portuguese colonies and their laboratories in sleeping sickness drug therapy research cannot be wholly attributed to such temporary obstacles. Due to a lack of interest and investment, this became a perpetual condition, which became still more visible after World War I. Portuguese laboratories were not invited to take part in inter-colonial drug testing schemes. In the early 1920s, the German doctor Kleine chose Northern Rhodesia and the Belgian Congo to test Bayer's 'miracle drug', Bayer 205, and Louise Pearce from the Rockefeller Institute for Medical Research preferred the laboratory in Leopoldville to conduct trials with its new chemical compound tryparsamide.[234] Moreover, in the early 1940s, pentamidines were first tested in Belgian, French and British colonies, before they were introduced in Angola and Guiné in 1948.[235] Certainly, Portuguese doctors sometimes recorded their results with these and other new drugs once these were already in circulation, but being latecomers, their trials usually went unnoticed by the

[231] Kopke, *Tratamento (1923),* p. 60. See also Kopke, *Traitement (1909),* p. 269.
[232] The lazaret was reported to be functional in 1913, see Anibal Celestina Correia Mendes to Chefe da Repartição de Gabinete, Governo de Angola, 05.01.1914, in: ANA, Caixa 391 (here also quote).
[233] Correia Mendes to Minister of Colonies, 26.06.1913, in: AHU, MU, DGAPC 3456.
[234] See Kleine, F. K.; Fischer, W., "Bericht über die Prüfung von 'Bayer 205' in Afrika", *Deutsche Medizinische Wochenschrift* 48,51 (22.12.1922), pp. 1693–1696; Kleine, F. K., "2. Bericht über die Prüfung von 'Bayer 205' in Afrika", *Deutsche Medizinische Wochenschrift* 49 (10.08.1923), pp. 1039–1041; Kleine, F. K., *Ein deutscher Tropenarzt,* Hannover: Schmorl & von Seefeld, 1949, pp. 78–97. See also BArch, R1001/6055-6056. From a Belgian perspective, see also Mertens/Lachenal, *History,* pp. 1263-1265.
[235] See Lachenal, *Biomédecine,* pp. 127–135, and for its introduction in Angolaand Guiné, see Fonseca, L. Pinto da, "Suplemento às instruções elaboradas para orientação dos médicos chefes dos sectores sanitários", *Boletim Sanitário de Angola* 8 (1945 [printed 1948]), pp. 155–162, here pp. 155–156 and Havik, *Public Health,* p. 13.

international community.[236] Generally speaking, one can conclude that the introduction of new trypanocidal drugs in the Portuguese colonies increasingly relied on the clinical tests that had been conducted in other colonies.

Finally, when it comes to assessing the drug experiments and the general search for a cure prior to the end of the First World War, the conclusion is fairly negative. Whereas Salvarsan and Neosalvarsan revolutionized the treatment of syphilis, none of the drugs developed before the 1920s would eventually prove any more efficient than atoxyl was in curing second and third stage sleeping sickness patients. Until the Interwar Period (and in many cases even beyond), the disease continued to be almost incurable when it was not diagnosed in its early stages.[237]

[236] Compare for instance Almeida, Eurico de, "Valor comparativo dos tripanocidas empregados pela zona sanitária do Cuanza", *Boletim da Assistência Médica aos Indígenas e da Luta contra a Moléstia do Sono* 2,10 (1928), pp. 183–189 and Pearce, Louise, *The Treatment of human trypanosomiasis with tryparsamide. A critical review*, New York: The Rockefeller Institute for Medical Research, 1930. While Almeida refers to tests with tryparsamide in Angola, Pearce does not list any.
[237] Even today, the treatment of second-stage patients is difficult. See WHO, *Trypanosomiasis* (footnote 5).

5. An Island, a Testing Ground: Studying and Eradicating Sleeping Sickness on Príncipe

Drug therapy was only one element of the colonial response to sleeping sickness. In accordance with the vector-borne nature of the disease, colonial governments throughout Africa designed anti-sleeping sickness programmes that incorporated both preventive and therapeutic measures, or, as has often been stated, measures that targeted either the vectors (i.e., the flies), the parasites or the fly-human transmission process.

Once the aetiology of the disease was more or less understood, the School of Tropical Medicine in Lisbon conceived, in 1907, of a two-phased plan to tackle sleeping sickness in Príncipe and Angola, the Portuguese colonies where sleeping sickness was known to be endemic at the time. In the first phase, the EMT would send a study mission to Príncipe in order to test modes of prophylaxis and treatment and to clarify some remaining doubts regarding the transmission of the disease. In a second step, measures that had proven successful on Príncipe would also be applied to Angola.[238]

According to the scientific logic underlying the EMT's decisions, the mission to Príncipe was considered above all a "large-scale experiment". For Ayres Kopke, who had elaborated the instructions for the mission, Príncipe offered nearly ideal conditions for such an experiment: sleeping sickness ran rampant; the island was small (126 km²); and it had a limited number of inhabitants who, moreover, could easily be monitored over a long period of time, given that most of them served long-time labour contracts as *serviçães* on the island's cocoa plantations. Furthermore, the prevalence of sleeping sickness on Príncipe stood in sharp contrast with the absence of endogenous cases on the nearby island of São Tomé. About ten times as big and populous as Príncipe, São Tomé had very similar climatic, environmental and socioeconomic features, including a large influx of indentured labourers mainly from Angola. To identify the reasons for the different disease incidence would mean to either confirm or dismiss current aetiological theories.[239]

In addition to the inner-imperial nature of the experiment, the mission was also framed by a broader international context. At the London Conference, Kopke emphasized that the

[238] Ministerio da Marina e Ultramar, *Portaria nomeando uma missão medica para ir estudar o tratamento da doença do somno na Ilha do Principe*, 01.06.1907, in: Collecção Official da Legislação Portuguesa, Anno de 1907, Lisboa 1908, pp. 422–424. See also Mendes, Annibal Correia; Mora, António Damas; Monteiro, Alfredo Silva; Costa, Bernardo Francisco Bruto da, "La maladie du sommeil à L'Île du Prince. Rapport présenté au Ministère de la Marine et des Colonies (Reçu pour publication le 8 juin 1909)", *Archivos de Hygiene e Pathologia Exoticas* 2 (1909), pp. 275–350, here preamble and Kopke's speech in *Proceedings of the First International Conference on the Sleeping Sickness, held at London in June 1907,* in: British Parliamentary Papers, Session 1908, [Cd 3778], pp. 26–29.

[239] Ministerio da Marina e Ultramar, *Portaria nomeando uma missão medica,* pp. 422–424, quote p. 422.

study mission to Príncipe was Portugal's contribution to the ongoing European efforts to better understand and control the disease.[240] The mission's instructions reflect this very clearly. Not only were they based on the study programme that Laveran had elaborated for the French mission to Congo-Brazzaville (1906-1908), Kopke had also introduced minor adaptations in order to address new questions, for instance that of arseno-resistance, which had been raised in the meantime.[241]

Beyond scientific reasons of scale, the priority given to Príncipe was probably economically and politically motivated as well. By the early 1900s, the islands of São Tomé and Príncipe had become one of the world's leading exporters of cocoa and the most prosperous colony in the Portuguese Empire.[242] This prosperity was not only threatened by epidemic sleeping sickness on Príncipe, but also by an emerging British campaign against labour conditions on the 'cocoa islands'. Since the official abolition of the slave trade (1842) in Portuguese West Africa, British diplomats had repeatedly accused the Portuguese government that it continued to send Angolan 'contract labourers' *(serviçães)* to the cocoa islands against their will and to keep them there in slave-like conditions.[243] Yet, as the British Foreign Office did not want to put too much strain on its oldest European ally, journalists, humanitarians and chocolate manufacturers like William Cadbury had begun to mount their own investigations in the early 1900s.[244] In 1906, the publication of Nevinson's travelogue *A Modern Slavery* brought the issue before the public eye and ignited a broader campaign in Great Britain against Portuguese labour policies in West Africa.[245] Other British eyewitness accounts and investigative reports soon followed. These actions would result in the boycott of São Tomé and Príncipe cocoa by the British chocolate manufacturer Cadbury and its allied enterprises in 1909, and it was not until 1916 (and Portugal's entry in the First World War on

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[240] *Proceedings of the First International Conference on the Sleeping Sickness, held at London in June 1907,* in: British Parliamentary Papers, Session 1908, [Cd 3778], pp. 26–27.

[241] Ayres Kopke to António Duarte Ramada Curto (Director da EMT), 24.04.1907 and 14.05.1907, in: AHU, SEMU, DGU 3368. Compare also the instructions included in Ministerio da Marina e Ultramar, *Portaria nomeando uma missão medica*, pp. 422–424 and Martin/Leboeuf/Roubaud, *Rapport,* pp. 8–17.

[242] Clarence-Smith, William Gervase, "Cocoa Plantations and Coerced Labor in the Gulf of Guinea", in: Klein, Martin A. (ed.), *Breaking the Chains. Slavery, Bondage, and Emancipation in Modern Africa and Asia,* Madison: University of Wisconsin Press, 1993, pp. 150–170, here pp. 151–152; Higgs, *Chocolate Islands,* p. 9. According to Higgs, the islands were the world's third largest cocoa exporter at the time, after Ecuador and Brazil.

[243] The best and most complete account remains Duffy, James, *A Question of Slavery. Labour Politics in Portuguese Africa and the British Protest, 1850-1920,* Oxford: Clarendon Press, 1967.

[244] On the position of the British Foreign Office in late nineteenth and early twentieth centuries, see Stone, *Foreign Office*. On the early inquiries by Cadbury and British humanitarians, see Higgs, *Chocolate Islands,* pp. 9–25.

[245] Nevinson, Henry W., *A Modern Slavery,* New York: Schocken, 1906. On Nevinson's report, see Duffy, *A question of slavery,* pp. 186–190; Stone, *Foreign Office,* p. 170 and Burroughs, *Travel Writing,* pp. 98–121.

the side of the Allies) that British humanitarians would release their unrelenting pressure on the British Foreign Office and the Portuguese government.[246]

Virtually all of these reports drew attention to appalling mortality rates among the *serviçães*, attributing these to bad hygienic and labour conditions, the strains from the recruiting process and, in the case of Príncipe, where mortality was still much higher than on São Tomé, to sleeping sickness.[247] Undoubtedly, Portugal's study mission (1907-1908) and later dealings with sleeping sickness on Príncipe were also meant, along with other rationales, to show to the world that international criticism was unjustified and that Portugal did care about the health and lives of its contract labourers. Some critics, like Cadbury himself, would indeed praise the efforts made by the study commission and local Portuguese doctors to bring the disease under control.[248]

The Portuguese study mission arrived on Príncipe in October 1907 and stayed until November 1908. It was headed by Anibal Correia Mendes and included three further doctors. In the last months of 1908, two of them also worked on São Tomé.[249] Significantly, these doctors, whose names had been proposed by Ayres Kopke, did not come from research institutes in metropolitan Portugal, but were colonial practitioners with proven experience in microbiology. António Damas Mora – the official health delegate on Príncipe – aside, the team was comprised of the directors of the Bacteriological Laboratories in Luanda (Correia Mendes), São Tomé (Bernardo Bruto da Costa) and Praia on the Cape Verde Islands (Arnaldo José Villela).[250] They remained in direct contact with Kopke and the EMT, but the fact that, unlike British or French sleeping sickness missions, the team did not have in its ranks a single professor from research institutes in Portugal is indicative of the paucity of trained microbiologists with colonial experience in metropolitan Portugal, and hence of the institutional weakness of the country's tropical medicine research.

Nevertheless, from a scientific perspective, the mission was a clear success. By following the instructions given them, the commissioners were able to gather valuable

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[246] For an overview, see Duffy, *A question of slavery,* pp. 186–229; Higgs, *Chocolate Islands*; Ball, Jeremy, "'Alma Negra' (Black Soul). The Campaign for Free Labor in Angola and São Tomé, 1909-1916", *Portuguese Studies Review* 18,2 (2011), pp. 51–72.

[247] See Nevinson, *A Modern Slavery,* pp. 190–192; Cadbury, William, *Labour in Portuguese West Africa,* 2nd ed., London: Routledge, 1910 [1909], pp. 11-14; 55-56; 93 and the 1907 report by Burtt, reprinted in *Ibid.,* pp. 103-131, here pp. 109-112.

[248] Cadbury, *Labour,* pp. 12–13.

[249] The study mission published two reports: Mendes, Annibal Correia; Monteiro, Alfredo Silva; Mora, António Damas; Costa, Bernardo Francisco Bruto da, "Relatorio preliminar da missão de estudo da doença do somno na Ilha do Príncipe, datado de 30 de Abril de 1908", *Archivos de Hygiene e Pathologia Exoticas* 2,1 (1909), pp. 1–45 and Mendes/Mora/Monteiro/Costa, *Maladie du sommeil.*

[250] Kopke to Ramada Curto, 14.05.1907, in: AHU, SEMU, DGU 3368. Arnaldo Villela would soon be replaced by Alfredo da Silva Monteiro.

information on the prevalence and distribution of the disease, on pending aetiological issues, and on the efficiency of specific drugs and administering methods. Of the 1,836 individuals they were able to examine, which was about half of the island's population, 23.5% were diagnosed with trypanosomiasis. The morbidity rate was shown to be highest in the northern part of the island, which was also the part most heavily infested with *glossina palpalis*.[251] Conversely, the coincidence between the absence of both this glossina and endogenous cases of sleeping sickness in the most southern part of Príncipe and the whole of São Tomé was further proof for the glossina vector theory. Moreover, during their time on the islands, the commissioners had found all other blood-sucking insects living on Príncipe on São Tomé as well, which constituted very strong evidence in support of the idea that the *glossina palpalis* was the *only* vector of the pathogenic trypanosomes.[252] This observation was not without importance. The mission's data, in fact, contradicted new and still controversially debated theories postulating that sleeping sickness could also be transmitted through sexual intercourse (Koch) and the bite of the stegomyia mosquito (Martin).[253] These theories, naturally, had ignited fears that the disease could also spread to and become endemic in Europe. Kopke, for instance, had previously cautioned the Lisbon Society of Medical Sciences against these alternative ways of infection in 1908, given the presence of the stegomyia around the Colonial Hospital and the return of diseased men to their families in Portugal. In the wake of the Príncipe mission, however, he actively downplayed these dangers.[254]

The commissioners also conducted many experiments with atoxyl. In order to find the ideal treatment, they varied doses, intervals and ways to administer the drug. They also tested atoxyl in association with other compounds, such as afridol blue and mercury, and evaluated the effects of parafuchsine, one of Ehrlich's most promising dyes.[255] The best treatment, they concluded, consisted in double hypodermic injections of 0.5 or 0.6 grams of atoxyl alone, with an interval of 48 hours, every ten days, for about six months.[256] A slight variation of

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[251] Mendes/Mora/Monteiro/Costa, *Maladie du sommeil,* pp. 276–280.
[252] *Ibid.,* pp. 340-341; 347-348.
[253] See Koch, *Schlussbericht,* pp. 540–541 and, for Martin's theory his article in La Semaine médicale 35 (1907). On the debate about these alternative ways of transmission, see also Martin/Leboeuf/Roubaud, *Rapport,* pp. 257–258 and *Review of A.C. Correia Mendes et al.*, pp. 6-7. Correia Mendes, even before he left for Príncipe, did not believe in these alternative ways of infection, see Mendes, *Subsídio,* p. 393. See also *Proceedings of the First International Conference on the Sleeping Sickness, held at London in June 1907,* in: British Parliamentary Papers, Session 1908, [Cd 3778], p. 30.
[254] Compare Sessions of the Sociedade das Sciências Médicas de Lisboa of 23 March and 6 April 1908, in: Jornal da Sociedade das Sciências Médicas de Lisboa 72 (1908), pp. 197-200 with Kopke, *Sobre a doença do somno,* p. 20.
[255] Mendes/Mora/Monteiro/Costa, *Maladie du sommeil,* pp. 282–318. On parafuchsine, see also Mendes, *Subsídio,* p. 399.
[256] Mendes/Mora/Monteiro/Costa, *Maladie du sommeil,* pp. 306–309.

what Robert Koch had proposed, this mode of therapy would become the standard treatment in Príncipe and Angola for many years.[257]

Finally, the commissioners also drew up a set of prophylactic measures, which would, in their opinion, rapidly reduce the incidence of the disease and eventually lead to its eradication on the island.[258] While some of these measures aimed at exterminating the vector of the disease, the *glossina palpalis*, others were designed to reduce man-fly contact as much as possible, by preventing human and animal carriers of the parasite to set foot on the island and by isolating those who had contracted the disease. The suggested recommendations to combat the *glossina palpalis*, in particular, deserved much attention, since Correia Mendes and his colleagues believed that, on an island as small as Príncipe, it would be possible to eradicate the flies and hence the disease. In addition to destroying the flies' habitat (near-water brushes) and food supply (all kinds of mammals), they also recommended the direct capture of flies through a procedure that had been developed and successfully applied on one of the island's cocoa plantations. In 1906, Angelo Bulhões de Maldonado, the manager of the Sundy plantation who had already showed his interest in the disease previously, had ordered that some of his *serviçães* cover their back with black cloths coated with a layer of bird-lime. This idea was based upon the frequently observed predilection of the fly for dark colours. By the end of 1907, the *serviçães* had thus captured more than 130,000 flies. Because of its success, a few other *roças* had already copied the procedure, but the commissioners now wanted to make this a mandatory procedure for all *serviçães* on the island.[259]

Yet despite the urgency of the situation, the eradication plan was not immediately put into practice. For almost three years, the recommendations would be stored in Lisbon. It was only when pressured by the new governor of São Tomé and Príncipe, Miranda Guedes, in 1911 that the central government in Portugal officially issued a decree containing most of the

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[257] Bernardo Francisco Bruto da Costa, *3. Relatório. Execução das principaes medidas de prophylaxia da doença do somno*, 06.07.1911, in: Boletim Oficial do Governo da Província de S. Thomé e Príncipe, 18.07.1911, pp. 368-369; McCowen, "A Note on Sleeping Sickness in Principe Island and Angola, West Coast of Africa", *Proceedings of the Royal Society of Medicine* 6 (Section of Epidemiology and State Medicine) (1913), pp. 191–194, here p. 193; Rebêlo, Frederico, *O Atoxil no tratamento da doença do sono. Tese de Doutoramento apresentada à Faculdade de Medicina do Porto,* Porto: Enciclopédia Portuguesa, 1921, pp. 43–56. Koch had proposed equally dosed double injections every 15 days, see Isobe, *Medizin und Kolonialgesellschaft,* p. 92.

[258] Mendes/Mora/Monteiro/Costa, *Maladie du sommeil,* pp. 341–346.

[259] "Maneira prática de destruir as glossinas palpalis (moscas de Gabão)", *Archivos de Hygiene e Pathologia Exoticas* 1,2 (1906), pp. 291–292; Mendes/Mora/Monteiro/Costa, *Maladie du sommeil,* p. 342. On the glossina's attraction to dark colours, see also Koch, Robert, "Bericht über die die Tätigkeit der zur Erforschung der Schlafkrankheit im Jahre 1906/07 nach Ostafrika entsandten Kommission [1909]", in: Schwalbe, J., *Gesammelte Werke von Robert Koch,* Leipzig: Georg Thieme 1912, pp. 582–645, here pp. 513–514.

mission's recommendations.[260] In the meantime, the government's hesitation had taken a heavy toll. Between 1908 and 1911, another 550 people had officially died from sleeping sickness alone. Moreover, according to Bruto da Costa, both the number of people to have contracted the sickness and the mortality rates were on the rise, given that most plantations had not yet begun to execute even some of the proposed measures.[261] The planters countered this criticism, by stating that the measures had not been compulsory and that they had not received any support from the local government to implement them. Such government support was indispensable, they claimed, as they all suffered from a shortage of manpower.[262]

On the surface, the hesitation of both the central and local governments, as well as the behaviour of the island's planters may seem irrational. The number of sleeping sickness casualties was very considerable compared to the island's total population of roughly 3,500. The disease thus contributed heavily to the appallingly high mortality rates on the island, which necessitated the continuous recruitment of new labourers just to replace those who had died. In addition to the relatively high recruitment expenses, which averaged £30 to £35 for an Angolan *serviçal* by the mid-1900s, planters also had to face not only the lower productivity of their workers when they fell ill, but also to bear their medical costs. In economic terms, sleeping sickness thus considerably increased the total costs of labour and "contributed not a little to the lower profitability of plantations" on Príncipe compared to São Tomé.[263]

The continuous need to replace sleeping sickness victims also exacerbated the chronic labour shortage on the island. In July 1909, the Colonial Ministry in Lisbon suspended recruitment in Angola. Although this suspension was originally designed to last only a couple of months, it would not be until 1913 that Angolan labourers would again be shipped to the islands.[264] This ban was the result not only of Cadbury's cocoa boycott and the increased pressure from British humanitarians and the Foreign Office, but also of the pressure from entrepreneurs and state officials in Angola, who had been protesting this labour drain from

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[260] Ministério da Marina e Colónias, *Decreto*, 17.04.1911, in: *Diário do Governo, Série I,* 18.04.1911, pp. 1567–1568; Costa, *Sleeping Sickness (1913),* p. 3. Govenor Miranda Guedes independently passed a decree with a list of measures that were to be carried out on São Tomé, see Provincia de São Thomé e Principe, *Medidas principaes contra a propagação da doença do somno na Ilha do Principe. Separata do Boletim Oficial da Provincia n.° 7 de 18 de Fevereiro de 1911,* S. Thomé: Imprensa Nacional, 1911.

[261] Costa, Bernardo Francisco Bruto da, "Estudos estatísticos sobre a mortalidade geral e sobre a doença do sono na Ilha do Príncipe desde 1908 até Julho de 1911", *Archivos de Hygiene e Pathologia Exoticas* 4 (1913), pp. 63–76, here p. 74. See also Bernardo Francisco Bruto da Costa, *1. Relatório sobre a prophylaxia e a propagação da doença do somno na Ilha do Príncipe*, 18.03.1911, in: *Boletim Oficial do Governo da Província de S. Thomé e Príncipe*, 18.07.1911, pp. 360-363.

[262] See the letter by Pedro Augusto da Rocha, 24 February 1911, enclosed in Francisco Mantero to Dr. Serrão (Health Department of the Colonial Ministry), 11.04.1911, in: AHU, MU, DGAPC 3473.

[263] Clarence-Smith, William Gervase, "The hidden costs of labour on the cocoa plantations of São Tomé and Príncipe, 1875-1914", *Portuguese Studies* 6 (1990), pp. 152–172, esp. pp. 155; 157 (quote); 163-164. For mortality and total population figures, see Costa, *Estudos estatísticos*, p. 74.

[264] Duffy, *A question of slavery,* pp. 206-207; 211.

their own economy for years.[265] From 1909 to 1917, Mozambique replaced Angola as the main supplier of contract labourers for the cocoa islands. Due to sleeping sickness, however, the colonial government in Mozambique only allowed its labourers to work on São Tomé, and only after 1915, when sleeping sickness had been eradicated on the island, were they permitted to go to Príncipe.[266]

This hesitation to take action was also a public relations disaster. While Cadbury had praised the work of the Portuguese sleeping sickness commission on the island, other more radical humanitarians now capitalized on Portuguese reluctance to carry out the mission's recommendations. John Harris, the new secretary of the Anti-Slavery and Aborigines Protection Society, was one. After having visited Príncipe in 1911, he characterized the island as being "doomed". While the "whites [were] leaving the island" to flee the ubiquitous "horror of sleeping sickness", he wrote, many of the "slaves" on the *roças* were "stricken by disease, with emaciated bodies and gaunt features" and were well-aware that they were "confined in a death-trap".[267]

Yet many plantation owners and their managers may not have thought about sleeping sickness in economic terms of long-term costs and productivity. Their hesitation to participate in the eradication campaign and the continued resistance of quite a few after 1911, was most likely the result of other rationales, such as the avoidance of short-term costs, the general dislike for state interference or the disbelief in the efficiency of particular measures or the eradication endeavour as a whole. Moreover, while Europeans on Príncipe had generally adhered to the trypanosoma theory over the years, many indigenous planters continued to disbelieve that sleeping sickness was transmitted by the bite of the tsetse fly.[268] A scenario in which the planters successfully managed to block government action is not at all unlikely. While plantation managers exercised a great deal of influence over local politics, many of the

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[265] *Ibid.,* pp. 184-185; 207-208. See also Harris, John, *Dawn in darkest Africa,* London: Smith, Elder & Co, 1912, pp. 137–138.

[266] Nascimento, Augusto, "O recrutamento de serviçais moçambicanos para as roças de São Tomé e Príncipe (1908-1921)", *Actas do Seminário Moçambique. Navegações, comércio e técnicas,* Lisboa: Comissão Nacional para as Comemorações dos Descobrimentos Portugueses, 1998, pp. 173–204, esp. pp. 183-184 and 192. For numbers see also Duffy, *A question of slavery,* pp. 211; 228-229.

[267] Harris, *Dawn in darkest Africa*, quotes pp. 82; 133; 181 and 191. The Anti-Slavery and Aborigines Protection Society (ASAPS) had been formed in 1909, when the British and Foreign Anti-Slavery Society had merged with the Aborigines Protection Society. John Harris would remain secretary until his death in 1941. On Harris and the ASAPS, see Duffy, *A question of slavery,* pp. 212-214; 219-224 and Miers, Suzanne, *Slavery in the Twentieth Century. The Evolution of a Global Problem,* Walnut Creek: Altamira Press, 2003, pp. 62–65.

[268] For the (dis)belief of planters in the trypanosoma theory, see Junta de Saúde Pública de S. Thomé, Acta da Sessão Extraordinária, 09.02.1911, in: AHU, MU, DGAPC 3473 and Bernardo Francisco Bruto da Costa, *2. Relatório. Inspecção ao serviço da prophylaxia da doença do somno na Ilha do Principe*, 24.05.1911, in: *Boletim Oficial do Governo da Província de S. Thomé e Príncipe*, 18.07.1911, pp. 363-367, here pp. 363-364.

plantation owners lived in Lisbon, where they were well connected to Lisbon's economic and political elites.[269]

Diverging scientific views had probably added to the status quo. Over time, Correia Mendes had grown more pessimistic about the chances of eradicating sleeping sickness. By 1911 at the very latest, he believed that it would be necessary to kill all mammals and to remove all human beings from the island for at least a year.[270] Kopke, however, did not agree with Correia Mendes' radical ideas, which he characterized as impracticable.[271] Whether Kopke's opposition was influenced by economic reasoning or not, there is little doubt that the planters of Príncipe had mobilized their resources to prevent a measure that may have brought some of them to ruin, and most certainly would have deprived the Portuguese treasury of important tax revenues. Correia Mendes' refusal to lead an eradication mission if he was not given complete control might thus have brought the decision-making process in Lisbon to a halt for some time.[272] When, eventually, a new medical mission arrived on the island in August 1912 to intensify the efforts that had been initiated as a result of the 1911 legislation, it was led by Bernardo Francisco Bruto da Costa, and Correia Mendes did not figure among its members.

Against all odds, this second commission (1912-1914) would succeed in eradicating the disease from Príncipe by exterminating the tsetse flies. This was something even the Sleeping Sickness Bureau in London had not deemed possible.[273] To achieve its aims, the commission followed the original recommendations of its predecessor, without the later radical adjustments.

Plantation owners were obliged to execute a series of sanitation measures on their domains. Their *serviçães* were aided by a state-sponsored sanitary brigade of 100 (1911) to 300 (1914) men, mainly Angolan and Indian prisoners of war as well as convicted *serviçães* from São Tomé. Together, they cleared brushes and drained swamps across the island, thus destroying the preferred habitat of the glossina. In addition, almost all pigs and dogs on the island were killed, as the glossina were proven, by blood examinations and other

[269] For the influence of the 'plantocracy' on local state representatives, see, for instance, Clarence-Smith, *Hidden Costs,* pp. 166–167. For their place in Lisbon's elite circles, see for instance Higgs, *Chocolate Islands,* pp. 15–19.
[270] See Robert Smallbones (British Consul in Angola) to Governor-General of Angola, 16.08.1912, in ANA, Cx. 2946; McCowen, *Note,* p. 194.
[271] Kopke, *Sobre a doença do somno,* p. 18.
[272] On Correia Mendes' position, see McCowen, *Note,* p. 194.
[273] See the letter from the Bureau's director Bagshawe to the British Foreign Office, quoted extensively in: Robert Smallbones (British Consul in Angola) wrote to Governor-General of Angola, 16.08.1912, in ANA, Cx. 2946.

observations, to feed off of them. Moreover, on each plantation, groups of contract workers were dressed with black bird-lime-coated cloths, trapping in total nearly 500,000 flies between 1911 and 1914. By then, the Maldonado method had received much international attention and had been copied by other colonial powers. Compared to the other measures, however, Bruto da Costa did not credit fly trapping with much influence on the extinction of the tsetse fly. According to him and his colleagues, the number of trapped flies was above all an indicator of the sanitation level. Over the course of 1913, this number declined rapidly, and the last fly was caught in April 1914.[274]

Simultaneously executed, other measures had reduced the risk of new infections. Ill inhabitants were isolated in the local hospital and treated with atoxyl. Atoxyl was also given preventively to people who had been bitten by tsetse flies and to the members of the sanitary brigade, who were continually exposed to them. Moreover, no – potentially infected – Angolan *serviçães* were allowed to come to the island between 1911 and 1913. When the first were hired towards the end of 1913, they were subjected to microscopic blood tests upon arrival and those who tested positive were sent back.[275]

Arguably, the struggle against the tsetse flies and trypanosomes may not have been the hardest part of the eradication campaign. For the reasons discussed above, the doctors on Príncipe were repeatedly confronted with the stubborn resistance of plantation managers and the lack of support from local officials. Some planters refused to execute the costly sanitation measures imposed on them by the 1911 decree, and until fines were introduced in July 1912 the sanitary authorities had little leverage to make them comply with the law. Even then, local courts were hesitant to implement these fines, often leaving resistance unpunished. Moreover, the local government on the islands – Miranda Guedes had been replaced in 1911 – did not back the campaign in a consistent matter, as it took much time to raise the number of doctors and sanitary brigade members on the island.[276] This resistance was a reflection of the power relations on the island. As the ruling class, plantation managers and owners had a profound influence over the local colonial administration and courts, whose representatives were often

[274] Costa, Bernardo Francisco Bruto da; Sant'Anna, José Firmino; Santos, A. Correia dos; Alvares, M. G. Araújo de, *Sleeping sickness. A record of four years' war against it in Principe, Portuguese West Africa, Translated by John Alfred Wyllie,* London: Baillière, Tindall & Cox, 1916, pp. 56–138. For fly trapping, see especially pp. 103-108 and 126-139. For the use of the Maldonado method in other colonies, see, for instance, "Methods of destroying tse tse flies", *Sleeping Sickness Bureau Bulletin* 2 (1910), pp. 26–27; Austen, E. E.; Hegh, Émile, *Tsetse-flies; their characteristics, distribution and bionomics, with some account of possible methods for their control,* London: Imperial Bureau of Entomology, 1922, pp. 142–145.
[275] Costa/Sant'Anna/Santos/Alvares, *Sleeping sickness (1916),* pp. 68-69; 112; 116; 120.
[276] *Ibid.,* pp. 60–62.

recruited from amongst their ranks. Moreover, most of them were more concerned about their profits than the well-being of their employees.[277]

At the end of the campaign, Bruto da Costa especially put the blame on a small group of plantation employees and managers. Given that these last were in an economically precarious position, he claimed, they were only interested in short-term profits and thus opposed to investing money in sanitation measures from which they might not reap the long-term benefits.[278] They, he added, had also brought their opposition to a more personal level: through pamphlets and anonymous newspapers, this group had mounted a campaign to slander the medical mission and in particular its leader. These people, Bruto da Costa concluded bitterly, were "more redoubtable and harmful for the economic development of this land than the eradicated glossina palpalis has been."[279]

In sum, the eradication of sleeping sickness on Príncipe was a remarkable achievement, from a humanitarian, economic, as well as scientific perspective. It had proven, for the first time that, under certain favourable conditions, the eradication of the vector and hence the disease was possible. Although he was still sceptical as to whether the flies had really been completely eradicated, the director of the Sleeping Sickness Bureau and editor of the Tropical Disease Bulletin Arthur Bagshawe praised the Portuguese accomplishment as a valuable experiment that British sanitary officers should study. Bagshawe and others also emphasized, however, that the experience would not be easy to replicate, given the special circumstances of Príncipe as a small and isolated island, where the inhabitants were under firmer control than in most places on the African continent.[280] Nevertheless, the dealings with sleeping sickness on Príncipe would have an important impact on the fight against the disease in Angola.

[277] For an account of virulent exploitation and abuses, see Carvalho, Jerónimo Paiva de, *Alma negra! Depoimento sobre a questão dos serviçais de S. Tomé,* Porto: Tipografia Progresso, 1912, and on this account Ball, *Alma Negra*.
[278] Bernardo Francisco Bruto da Costa, *Breves considerações contra a campanha caluniosa e acintosa levantado por alguns empregados agrícolas sobre o procedimento da Missão Médica do Sono e Brigada Oficial*, 4 July 1915, pp. 3-4, in: AHU, FM 4442.
[279] *Ibid.*, pp. 6-7, quote p. 7.
[280] Bagshawe, A. G., "Review of "Bruto da Costa et al - Sleeping Sickness. A Record of Four Years' War"", *Tropical Diseases Bulletin* (1916). On the replicability of the experience, see also Tilley, *Africa,* pp. 191–192.

6. Sleeping Sickness Control in Angola: A Fragmentary Response

Throughout the 1900s, sleeping sickness had continued to wreak havoc on the northern part of Angola, resulting in further alarming reports. According to Anibal Correia Mendes, who crossed the *concelhos* east of Luanda in August 1904, the situation had drastically worsened even since his visit as a member of the Bettencourt research mission three years before. “In that short period of time”, the director of the Bacteriological Laboratory noted, “the decrease that can be observed in the overall population of these *concelhos* is terrifying”. Moreover, many of the remaining workers in the area were infected, he claimed. Correia Mendes acknowledged that demographic data were too fragmentary to irrefutably prove the ongoing population decline, but he assured that his personal impression and the available demographic data both pointed in that direction. “If we do not quickly put in place prophylactic measures to bring under control the further and fatal spread of the disease”, he urged, “some of the most fertile regions of the colony will be completely depopulated within a few years.”[281]

His observations were confirmed by many others. Thus in 1905, a group of Portuguese citizens living in one of these *concelhos* urged the government in Luanda to undertake immediate action on account of the tremendous loss of human life in the region. The *concelho* of Zenza de Golungo had almost been entirely wiped out, they complained, as 15,000 people had died there over the last ten years, and other *concelhos* (Dondo, Massangano, Muxima, Calumbo, Golungo Alto e Icolo e Bengo) had lost about half of their population to the disease. Like a “formidable cataclysm”, sleeping sickness had depopulated and ruined previously flourishing centres of trade and agriculture.[282] And when army captain João Fernandes Barradas passed through the area between Dondo and Mussende just south of the Cuanza River on an official exploration mission, he described many deserted or ‘shrinking’ villages, concluding that “smallpox and above all the scourge of sleeping sickness [had] diminished, in an astonishing way, the population that was once so dense”.[283]

While most attention was directed toward the ravages caused in the hinterland of Luanda, where the Portuguese presence (state, merchants, doctors) was at its strongest, similar landscapes of empty villages and decimated populations were also noted around Novo

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[281] Mendes, *Glossinas de Angola,* p. 67 (here also quotes).
[282] Petition by the residents of Barra do Bengo to the Governor General of Angola, 03.03.1905, in: ANA, Cx. 3721. On their demands, see also section 3 in this chapter.
[283] Joao Fernandes Barradas, *Diário do chefe da missão*, p. 5 (see footnote 57). On depopulation among the Quissamas, see also Von Mattenklodt, "Die Kisama", *Koloniale Völkerkunde* 1 (1944), pp. 71–108.

Redondo (Sumbe) – a region halfway between Luanda and Benguela – in the hinterland of Benguela, and in the Portuguese Congo around São Salvador (M'Banza Congo).[284]

These dramatic accounts, however, did not trigger a coordinated response against the disease in Angola before the (mid-)1910s. In the final report on his government in Angola (1907-1909), Henrique de Paiva Couceiro admitted that, whereas Portuguese bacteriologists had made a visible contribution to international scientific research on the disease, sanitary and administrative prophylaxis in Angola "could have gone a bit further".[285] This was obviously a euphemism. Despite the international effervescence on the matter, the colony did not even have an official plan as to how to proceed by the end of his government. Paiva Couceiro partly blamed the young doctor Joaquim Ayres Lopes de Carvalho for this failure. In 1907, Lopes de Carvalho had been commissioned by the Marine and Overseas Ministry to set up a sleeping sickness study and treatment centre on the premises of the Companhia Agricola de Cazengo, an agricultural company that was situated at the heart of the territory struck by the sleeping sickness epidemics and headed by the powerful Banco Nacional Ultramarino (BNU), its major shareholder.[286] Information was indeed centralized in Cazengo for some time, but Lopes de Carvalho, who had actually written his medical dissertation on sleeping sickness, failed to produce a plan of action.[287]

In the long run, however, Angola's belated response to epidemic sleeping sickness can hardly be attributed to the inactivity of this young and inexperienced doctor. In the upper echelons of Angola's health services, there had already been ample knowledge as to how best to tackle the disease prior to Lopes de Carvalho's arrival. With regard to the *concelho* of

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[284] See Aguiar, José Maria d', "La maladie du sommeil et la tsé-tsé à Novo Redondo", in: Sociedade de Geografia de Lisboa (ed.), *XV Congrès International de Médecine. Lisbonne, 19-26 Avril 1906,* vol. 3 (Pathologie générale, bactériologie et anatomie pathologique), Lisboa: Adolpho de Mendonça, 1906, pp. 294–300; Bastos, Augusto, "Monographia de Catumbella", *Boletim da Sociedade de Geografia de Lisboa* 28 (1910), pp. 74-81; 105-109; 147-155; 180-185; 225-228; 251-255; 279-285; 329-332; 394-402 and 29 (1911), pp. 30-34; 54-60; 126-133; 173-178; 200-204 and 30 (1912), pp. 69-81, here 30 (1912), pp. 74 and 77. For São Salvador, see José Alves Martins, *Relatório do Superior da Circunscripção Missionária de S. Salvador do Congo, 1906-07*, January 1908, pp. 12-13, in: AHU, MU, DGU_DGC 864-866. For further reports on the situation in Luanda's hinterland, see, for instance, Pinheiro, Bordallo, "Revista sanitária das províncias ultramarinas referida ao anno de 1905", *Archivos de Hygiene e Pathologia Exoticas* 1,2 (1906), pp. 274–289, here pp. 276–280 and, for the Concelho do Alto Dande, see Secretário Geral do Governo to Repartição de Saúde, 6.6.1910, in: ANA, Cx. 109.

[285] Couceiro, Paiva, *Angola. Dois anos de governo. Junho de 1907-Julho de 1909. Historia e Comentarios, Com Prefácio de Norton de Matos,* Lisboa: Edições Gama, 1948 [1910], pp. 291-292, quote p. 291.

[286] On the involvement of the BNU, see Seleti, Yonah N., "The development of dependent capitalism in Portuguese Africa", in: Konczacki, Z. A.; Parpart, Jane L.; Shaw, Timothy M. (eds.), *The Front-Line States,* London: Frank Cass, 1990, pp. 30–74, here p. 44.

[287] Couceiro, *Angola [1948],* p. 292. See also, for his nomination, Direcção Geral do Ultramar to Governador Geral de Angola, 14.05.1907, in: ANA, Cx. 391 and Correia, *A doença do sono,* p. 172. For the centralization of information, see also Circular às administrações dos concelhos, 15.10.1907, in: ANA, Cx. 391. According to Damas Mora, Carvalho did not even write an official report on the disease, see Mora, *Luta contra a moléstia do sono,* pp. 3–4. For his dissertation, see Carvalho, *A doença do sono*.

Novo Redondo, José Maria d'Aguiar, who had been appointed in 1904 to continue the work of the Portuguese commissioners in Angola, had advised that the palm forests be thinned out and to replace brushwood with agricultural crops, as he had observed the correlation between the presence (or absence) of these types of vegetation and that of tsetse flies and sleeping sickness.[288] In early 1907, the Health Council *(Junta de Saúde)* proposed a broad range of general prophylactic measures and recommended that a study mission of several doctors map the incidence of vector and disease in order to obtain greater precision of information than that which had been collected thus far from local health delegates.[289] Furthermore, prior to travelling to Príncipe, Correia Mendes had published another, still more precise catalogue of measures, based on the newest international studies on the transmission, ecology and treatment of the disease.[290]

The available records do not give a satisfactory explanation as to why these proposals were not readily transformed into binding legal decrees. The expectations vis-à-vis the 'experimental' mission to Príncipe and the ongoing work by Lopes de Carvalho were certainly contributing factors, as was the absence of Anibal Correia Mendes in the colony until late 1909. It was, indeed, Correia Mendes who, after his return to Angola, pushed for action, presenting various elaborated projects to the Health Council and thus reassuming his position as prime local authority on sleeping sickness control until his death in 1919.[291] However, the fact that even then measures were slow to take form hints at the presence of other more structural obstacles.

On the one hand, the health services seem to have lacked the political leverage to pressure the governors and the administrative apparatus of the colony into action. Thus, even in 1910 and 1911, various proposals sent by the Health Council to the Governor General went unattended, to the great frustration of the former.[292] Even when anti-sleeping sickness measures were sanctioned in legally binding texts from 1912 onwards, the health services continually struggled for the means to implement them on the ground.[293] This also

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[288] Aguiar, *La maladie du sommeil*. On his nomination, see Direcção Geral do Ultramar, 5. Repartição, to Governor General, 21.7.1904, in: ANA, Cx. 1546. Apart from Aguiar's contribution to the Congress in Lisbon, I have not found any reference to further writings of his on sleeping sickness.
[289] Junta de Saúde, *Sessões extraordinárias*, 12.02.1907 and 05.03.1907, in: ANA, Cód. 1867, pp. 133v-135v and 136v-138r.
[290] Mendes, *Subsídio*.
[291] Junta de Saúde, *Acta da Sessão Extraordinária*, 30.05.1910 and *Acta da Sessão Ordinária*, 30.01.1911, both in: ANA, Cód. 1867, pp. 161v-166r and 189v-196r. For some of his activities and career moves, see *Processo Indiviudal de Anibal Celestino Correia Mendes* in: AHU, MU, DGAPC 3439. For his death in 1919, see Velho, Luís Baptista de Assunção, "A Tripanossomose humana em Angola (Relatórios etc.)", *Revista Médica de Angola* 2 (1921), pp. 7–196, here p. 49.
[292] Junta de Saúde, *Sessão Extraordinária, 09.08.1911*, ANA, Cód. 1867, pp. 220r-v.
[293] The bulk of that legislation is bundled in Alto Comissariado da República em Angola; Direcção dos Serviços de Saúde e Higiene (eds.), *Diploma Legislativo do Alto Comissariado n.° 463 de 9 de Dezembro de 1926 e*

demonstrates that the revolution in Portugal in October 1910, which surely increased political instability for some time, did not play a decisive role in the execution of sleeping sickness control measures in the colony. Across political regimes, the colonial administrations, in Lisbon and in Luanda, simply did not give the highest priority to the issue of sleeping sickness.

On the other hand, a protracted debate on which strategy to choose complicated the decision-making process, thus further delaying effective action. What started as a mere discussion of chronology became a principled issue, placing proponents of immediate and systematic action in opposition one with the other. In the project he presented to the Health Council in 1910, Correia Mendes not only urged Angola to follow the example of other colonial powers, notably Belgium, Great Britain and Germany, and to establish a special medical service to combat sleeping sickness, he also recommended a specific chronology of action. Before starting any health campaign, he wanted to gather more precise information on the distribution of both the disease and *glossina palpalis*. Acknowledging that the regular health delegates in the interior were neither numerous nor prepared enough for this task, he advocated the creation of a study mission of four doctors who would be commissioned to travel across the colony and gather this data. [294]

This was a reasonable demand for a variety of reasons. First, this was the procedure they had followed on Príncipe. In Angola, some preliminary studies on the subject had been conducted, notably by Correia Mendes himself, but the list of infected areas was incomplete, vague and, by 1910, certainly also outdated. Precise maps, however, were indispensable, as Correia Mendes emphasized in his project. Not only would they delimit the infested areas, thus indicating where where to tackle the disease first, they would also show which regions could still be protected against the invasion of the fly and/or the disease. Moreover, neighbouring colonies wished to know whether border areas were already infected, and if so, which. Furthermore, exact information would also be valuable for the cattle industry in Angola, whose exports were dwindling because of the disease. This information, in fact, would allow farmers to better prevent the infection of their animals, by raising them in certified glossina-free zones for instance.[295]

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diversos diplomas referentes á Doença do sono publicados desde 1911 a 1924, Loanda: Imprensa Nacional, 1927.

[294] Anibal Corrêa Mendes in Junta de Saúde, *Acta da Sessão Extraordinária*, 30.05.1910, in ANA, Cód. 1867, pp. 161v-166r.

[295] *Ibid.* For Correia Mendes preliminary studies, see Mendes, *Glossinas de Angola*; Mendes, *Subsídio*. See also Junta de Saúde, Sessão 05.03.1907, in: ANA, Cód. 1867, p. 137r.

In 1912, the Colonial Ministry eventually approved a two-year study mission along the lines of Correia Mendes' proposal.[296] When it was not immediately implemented, however, the idea of comprehensive reconnaissance came under the increasing pressure of those who urged immediate combat, arguing that too much time had been lost already. Especially senator António Bernardino Roque, who had been a government doctor in Angola for many years (1890-1903), tried to convince both the Senate and the Minister of Colonies that research commissions were useless if their sole task was to delimit the infested areas. Not only were the borders of these areas unstable, Portugal could not afford to lose another two years with studies and preparations, he claimed. The colony was rapidly losing its native workforce and therefore the doctors of the mission should proceed with simultaneous delimitation and 'sanitary occupation'.[297]

Bernardino Roque eventually won his battle in Parliament. The ensuing law of July 1913 established the creation of a medical mission composed of the Director of the Bacteriological Laboratory in Luanda and six more doctors, who would, in two teams *(brigadas)*, study and combat the disease contemporaneously. Yet, the law was only partially implemented. Due to a lack of volunteers (only two doctors applied), the chronic understaffing of the health services and funding problems, only one brigade was formed, consisting of three, and later two doctors.[298] From November 1914 to January 1915 and – after the interruption caused by the military campaigns in southern Angola, for which two of the doctors had been requisitioned – again from early 1916 to August 1918, João Gomes Salgado Júnior, Manoel do Nascimento de Almeida and Luís Baptista de Assunção Velho travelled across the central and southern districts of the colony gathering data.[299] The journey confirmed what many already doubted, or rather that most of these districts were not infected

[296] Ministério das Colónias, Decreto, 17.08.1912, reprinted in Alto Comissariado da República em Angola; Direcção dos Serviços de Saúde e Higiene, *Diplomas Doença do Sono,* pp. 45–50.
[297] For the law, see Ministério das Colónias, *Lei 84*, 25.07.1913, reprinted in Alto Comissariado da República em Angola; Direcção dos Serviços de Saúde e Higiene, *Diplomas Doença do Sono,* pp. 57–59. The debate can be found in Diário do Senado, Sessions 07.03.1913, pp. 2-13; 10.03.1913, pp. 2-5; 14.04.1913, pp. 4-6; 15.04.1913, pp. 4-15; 22.04.1913, pp. 5-7; 29.04.1913, pp. 7-11; 30.04.1913, pp. 5-10; 28.06.1913, pp. 29-32. On Bernardino Roque's career, see *Livro Mestre do Quadro de Saúde de Angola (1858-1913)*, pp. 44 and 55, in: AHU, SEMU, DGAPC 895.
[298] For the lack of volunteers, see Indice da correspondencia recebida 1913-1914, p. 164 (1914), in: AHU, MU, DGAPC 468. On the difficulties the mission had to face, see Velho, *A Tripanossomose humana,* pp. 49–52. For the composition of the brigade, and its later reduction to two members, see Governador Geral Norton de Matos, *Portaria 1.059*, 25.09.1914 and Secretário Geral Mario Teixeira Malheiros, Portaria 123, 16.06.1916, in: Alto Comissariado da República em Angola; Direcção dos Serviços de Saúde e Higiene, *Diplomas Doença do Sono,* pp. 67-72 and 73.
[299] Some of the reports for the period 1916-1918 are reprinted in Velho, *A Tripanossomose humana,* pp. 53–178. For the itinerary, see the map in *Ibid.,* p. 178.

and that the glossina palpalis did not live south of the 13th parallel.[300] Conversely, there was neither the personnel nor the money for a similar endeavour to be carried out in northern Angola, where the disease continued to affect many thousands of people and where knowledge on the distribution of vector and disease was still unordered and fragmentary, as reports in the 1920s would amply demonstrate and criticize.[301]

Although the lack of published and citeable geomedical maps contributed to the growing marginalization of Portugal and Angola in international sleeping sickness circles, the lack of a timely and comprehensive health campaign was surely of greater consequence for the affected populations in Angola. Before the end of the First World War, the only systematic attack on the disease took place in the central district of Benguela between 1914/5 and 1919. In 1914, the study mission confirmed suspicions that the disease, which had already raged in a few parts of this area in the early 1900s, was on the rise again and that tsetse flies abounded in forests and on river banks near the important European centres of Benguela, Lobito and Catumbela. The mission members hoped that quick and vigorous action would prevent the disease from invading these cities and the rest of the Benguela district. It was no coincidence that the leadership of this endeavour was entrusted to the experienced Bernardo Bruto da Costa, the doctor who had just directed the successful eradication campaign on Príncipe. As the presence of the tsetse fly in the Benguela district was limited to a few spots in forests and along rivers, and the infected territory was no greater than the surface area of Príncipe, Bruto da Costa believed that it would be feasible to eradicate vector and disease by repeating the combined approach used on Príncipe.[302]

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[300] See the preamble of DL 463, in Alto Comissariado da República em Angola (Vicente Ferreira), "Diploma Legislativo n. 463 (09.12.1926)", in: Alto Comissariado da República em Angola; Direcção dos Serviços de Saúde e Higiene (eds.), *Diplomas Doença do Sono,* pp. 5–21, here pp. 7; 9.

[301] For such reports, see Ornelas, Augusto, "Nós e a última conferência internacional da Doença do Sono", *Boletim da Agência Geral das Colónias* 8 (1926), pp. 86–101; Almeida, Carlos de, "Relatório do chefe da Missão do Congo Dr. Carlos de Almeida, referente ao triénio: 1923-1924; 1924-1925; 1925-1926", *Revista Médica de Angola* 5 (1927), pp. 22–79. Only in 1942 was the first complete map with the distribution of the glossina in Angola published. See Ribeiro, Lavrador, "Notas sobre aspectos nosográficos das endemias de Angola (II)", *Boletim Sanitário de Angola* 6 (1943), pp. 177–198, here p. 53 and also Albuquerque, Armando Cardoso de, "O Combate à doença do Sono em Angola. Métodos utilizados e resultados obtidos", *Boletim Sanitário de Angola* 11 (1953-1957 (printed 1959)), pp. 159–214, here pp. 167–168.

[302] For this and the following paragraph, see Costa, Bernardo Francisco Bruto da, *Vinte e três anos ao serviço do país no combate às doenças em África. Prefácio do Prof. Henrique de Vilhena,* Lisboa: Livraria Portugalia, 1939, pp. 132-156, with explicit links to his experiences on Príncipe, pp. 143; 148 and also Velho, *A Tripanossomose humana,* pp. 49-52; 184-187 and Alberto de Queiroz (Chefe dos Serviços Saúde Angola), *Serviço de Saúde de Angola. Os seus progressos nos ultimos 40 annos - o seu estado actual, e os melhoramentos e reformas de que precisa*, 28.05.1917, pp. 28–29, in: AHU, MU, DGAPC 3449. Jorge Varanda briefly mentions this transfer, but gets all the dates wrong, see Varanda, Jorge, "A asa protectora de outros. As relações transcoloniais do Serviço de Saúde da Diamang", in: Bastos, Cristiana; Barreto, Renilda (eds.), *A Circulação do Conhecimento. Medicina, Redes e Impérios,* Lisboa: Instituto de Ciências Sociais on-line, 2011, pp. 339–372, here p. 356. For earlier reports on sleeping sickness in this area, see Wellman, F. C., "Human Trypanosomiasis

Brush clearings had already been started under his predecessor in 1915, but it was mainly under Bruto da Costa's guidance between 1916 and 1918 that the bulk of the work was completed. Sanitary brigades cleared brushwood and cut trees on indicated spots, and a small group of workers trapped flies with the Maldonado method previously employed on Príncipe. Infected game as well as domestic animals were killed. In addition to this 'ecological' attack against the vector and its habitat, Bruto da Costa also sought to reduce man-fly contact. He ordered that people be removed from infected areas and that the diseased be isolated in a local concentration camp where they would be treated with atoxyl. These violent intrusions in the locals' lives met with considerable resistance, however. Many Africans opposed a drug treatment they did not believe in and fled from the concentration camp in which they had been forcibly incarcerated by local policemen *(cipaios)*. Others refused to leave their villages in the infected zones until they were destroyed by order of Bruto da Costa. Similarly to Príncipe, there was also resistance on the part of some Europeans. While these last mainly opposed the killing of livestock, some even launched a slander campaign and death threats against the doctors.[303] Nevertheless, the eradication campaign, which still continued on into 1919 even after Bruto da Costa's departure, proved largely successful. In the late 1920s, brush clearings would be extended to some further areas in the Benguela district.[304]

In the far more heavily infested Cuanza and Congo districts further north, by contrast, the fight against sleeping sickness was far less systematic and successful. Throughout the 1910s and early 1920s, only a few small areas in these districts would receive state personnel that was trained and exclusively destined to combat the disease.[305] Beyond these 'islands of intervention', hardly any sustained attack was being carried out against the disease. To be sure, all administrative authorities and health delegates in the victimized areas had been enjoined to combat sleeping sickness as well. Yet, ill-prepared and overburdened with other tasks, they were generally not up to the challenge. Although administrators were repeatedly instructed (from 1912 onwards) to carry out a series of prophylactic measures, ranging from the removal of native villages to glossina-free areas to the clearance of brushwood and the isolation of those who had contracted the disease, many did not execute them, as frequent

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and Spirochaetosis in Portuguese South-West Africa, with suggestions for Preventing their Spread in the Colony", *Journal of Hygiene* 6,3 (1906), pp. 237–245 and Bastos, *Monographia de Catumbella*.

[303] Costa, *Vinte e três anos,* pp. 136; 153-154. See also Associação Comercial de Benguela to Governor General, 20.9.1917, in: ANA, Cx. 391.

[304] Mora, *Luta contra a moléstia do sono,* pp. 67–70.

[305] For an overview, see Velho, *A Tripanossomose humana,* pp. 183–192 and Correia, *A doença do sono,* pp. 172–174.

reminders and threats of punishment from the Governor General so aptly reveal.[306] Some of these local administrators may have done so out of ill will, but the principal obstacle was most likely the lack of orientation and supervision by medical doctors, who were too few and too overburdened as well.[307] Moreover, relations between administrators and doctors were often strained. It was not uncommon for doctors to complain about the lack of support from administrators, when they needed for instance to recruit workers for sanitation measures.[308]

In addition, missionaries seem to have contributed little to the campaign against sleeping sickness in Angola, unlike for instance in the Belgian Congo, where the Colonial Ministry had obliged nearly two dozen Catholic and Protestant mission societies to participate in the state's efforts against the disease in 1910.[309] One of the main reasons was that, until after the Second World War, Catholic missions in Angola generally did not engage trained physicians.[310] Sleeping sickness was a complex disorder and diagnosis and treatment required advanced technical skills that missionaries, who had – in the best of cases – only received rudimentary training in nursing, were not able to provide.

Protestant mission societies in Angola, by contrast, began to professionalize their medical assistance much earlier by engaging so-called 'medical missionaries'. From the turn of the twentieth century onwards, specialized 'medical missionary societies' in Europe (mainly Great Britain) and North America began to recruit Protestant lay doctors for work, generally on a temporary contract basis, in missions of the same denomination in Africa and Asia. Unlike with the colonial state, there were no economic and political motivations to this development. Humanitarian considerations did play a role, but the strategic rationale that underpinned this movement was above all religious. By offering medical assistance and education to (diseased individuals of) 'backward' peoples, the movement aimed to facilitate their conversion and the spread of the gospel. The destruction of local 'pagan' healing 'traditions' was considered to be an important step in this process in that they were an

[306] Governador Geral interino Antonio Eduardo Romeiras de Macedo, *Portaria n. 627*, 14.05.1912, with the annexed *Regulamento da profilaxia da doença do sono em Angola*, 17.05.1912 (pp. 35-40); Governador Geral Norton de Matos, *Portaria n. 999*, 01.08.1912 (pp. 41-43); Governador Geral Norton de Matos, *Portaria 941*, 20.08.1913 (pp. 61-62); Governador Geral interino Jaime Alberto de Castro Morais, *Portaria 173*, 26.10.1917 (pp. 93-96), all in: Alto Comissariado da República em Angola; Direcção dos Serviços de Saúde e Higiene, *Diplomas Doença do Sono*.
[307] Governador Geral interino Jaime Alberto de Castro Morais, *Portaria 173*; Queiroz, *Serviço de Saúde de Angola,* pp. 27–28; Velho, *A Tripanossomose humana,* p. 183.
[308] See, for instance, doctor Augusto de Vasconcelos to Chefe do Serviço de Saúde, 20.03.1913, in: ANA, Cx. 109 and his criticism in the preamble of Alto Comissariado da República em Angola (Vicente Ferreira), *Diploma Legislativo 463,* p. 10.
[309] Lyons, *The colonial disease,* p. 129.
[310] For more details, see Chapter 3.

important part of belief systems.[311] In Angola, Protestant medical missionaries staffed dispensaries and hospitals of the British Baptist Missionary Society (BMS) and Christian Missions in Many Lands (CMML), the American Board of Commissioners for Foreign Missions (ABCFM) and the Board of Foreign Missions of the Methodist Episcopal Church (MEFB) from the United States as well as the United Church of Canada (UCC).[312] Most of these, however, were based in zones free of sleeping sickness in Central, Southern and Eastern Angola.[313]

The one exception was the Baptist Missionary Society.[314] In São Salvador, the ancient capital of the Kingdom of Kongo situated in north-western Angola, the BMS started the systematic treatment of sleeping sickness patients upon the arrival of its first 'medical missionary' in 1907.[315] Under Dr Mercier Gamble (1907-1914), a graduate from the University of Manchester and the London School of Tropical Medicine, the oldest Baptist mission station in the Congo Basin became the most important centre for medical treatment in a region where state health services were virtually inexistent prior to World War I.[316] Sleeping sickness was not the only disease treated here, but it did sit at the core of the station's medical work. Patients came "from the neighbourhood of San Salvador to three days' journey away"

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[311] An overview of the history of these medical missionaries is provided in Hardiman, David, "Introduction", in: Hardiman, David (ed.), *Healing Bodies, Saving Souls. Medical Missions in Asia and Africa,* Amsterdam: Rodopi, 2006, pp. 1–57.

[312] For early ABCFM medical missionaries in Angola, see Soremekun, Fola, *A History of the American Board Missions in Angola, 1880-1940* (Ph.D. Dissertation - Northwestern University), 1965, pp. 115–119. In 1927, seven Protestant head mission stations were manned by a medical missionary, see Streeter, A. J., *A Directory of Medical Missions. Head Stations and Foreign Staff,* London: World Dominion Press, [1927], p. 57. For an overview of their medical work, see Hollenbeck, H. S., ""He had compassion on them" (Medical Work)", in: Tucker, John T. (ed.), *Angola. The Land of the Blacksmith Prince,* London; New York; Toronto: World Dominion Press, 1933, pp. 97–102, here pp. 100–102. See also Minto, Una Jean, *Unto the hills. Looking up from the field of the West Central Africa Mission at the close of the year ending, May, 1924,* Dondi: Bela Vista, 1925, pp. 62–70.

[313] For a more substantiated account of Catholic and Protestant medical assistance structures, see Chapter 3.

[314] For the general history of the BMS Lower Congo Mission, which included northern Angola and parts of the Congo Free State, later to become the Belgian Congo, see Stanley, Brian, *The history of the Baptist Missionary Society, 1792-1992,* Edinburgh: T&T Clark, 1992, pp. 122-140; 336-364; 439-470, and, for the Angolan branch more specifically, see Grenfell, Frederick James, *The history of the Baptist church in Angola and its influence on the life and culture of the Kongo and Zombo people, 1879-1940* (MA Thesis - University of Leeds, Department of Theology and Religious Studies), 1995.

[315] The BMS had established its Medical Missionary Auxiliary (MMA) programme in 1901. On the M.M.A. programme, see Moorshead, Robert Fletcher, *The appeal of medical missions:* Revell, 1913; Moorshead, Fletcher, *The Way of the Doctor. A Study in Medical Missions,* London: Carey Press, 1926; Moorshead, Robert Fletcher, *Heal the sick. The story of the medical mission auxiliary of the Baptist Missionary Society,* London: Carey Press, 1929. For BMS medical work in the Lower Congo before 1907, see Browne, Stanley George, *B.M.S. Medical Work in Congo* (As the doctor sees it; 3), London: Baptist Missionary Society, [195-], pp. 5–7.

[316] For the lack of state health services, see *Relatorio da Residencia de São Salvador do Congo*, Novembro 1903, p. 3, in: ANA, Cx. 3374; Leal, José Heliodoro de Faria, "Memórias d'África", *Boletim da Sociedade de Geografia de Lisboa* 32 (1914), pp. 299-330; 343-362; 383-410 and 33 (1915), pp. 15-30; 64-79; 113-128; 162-173; 214-231; 357-380, here pp. 113–118. On the life of Gamble, see "Obituary Mercier Gamble, M.D.", *The British Medical Journal* (01.04.1939), p. 700.

and, by administering huge doses of atoxyl, Gamble achieved numerous 'apparent cures'.[317] While Gamble reported on his successes to the Journal of Tropical Medicine and further integrated himself into the networks in tropical medicine by sending collections of insects to the Imperial Bureau of Entomology in London, the Baptist missionaries capitalized on these successes to improve their relations with both the colonial state and the African population.[318]

Indeed, although the Portuguese colonial administration would time and again hamper Protestant mission work in its colonies during the late nineteenth and twentieth centuries, it was generally sympathetic towards the medical work carried out by the BMS.[319] It was with the financial support of the Portuguese government that, in the years leading up to the First World War, the BMS was able to establish a medical infrastructure in São Salvador that was exemplary for the times and the region. Initially, it comprised a dispensary for outpatients, a surgery and a pharmacy and, in 1913, a laboratory, a general hospital and, outside the city limits, a special hospital for the segregation of sleeping sickness patients were added. The Portuguese government contributed by allowing the prefabricated hospital to come to the colony free of charge and by granting a plot of land for the isolation hospital, privileges that were normally reserved for Portuguese mission societies only. At Dr Gamble's request, the Portuguese government even supplied atoxyl for free.[320] After Gamble had been withheld in Britain in 1914, his successors further extended the sleeping sickness treatments and other medical work in São Salvador.[321]

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[317] Gamble, Mercier, "An English translation of questions asked by General Faria Leal, administrator of San Salvador do Congo, of Dr. Gamble re sleeping sickness", *Journal of Tropical Medicine and Hygiene* 15 (1912), pp. 62–63 (quote); Gamble, Mercier, "Sleeping sickness in the Portuguese Congo. Apparent cures", *Journal of Tropical Medicine and Hygiene* 16 (1913), pp. 81–84. See also the appraisal for Gamble's work in Reverend J. Sidney Bowskill to British Consul Mackie in Luanda, 27.01.1910, in Baptist Missionary Society Archives, Oxford (hereafter BMSA), Box A 99.

[318] Between 1912 and 1914, Gamble regularly sent collections of insects, including glossina palpalis, to the Imperial Bureau of Entomology which had been established for Tropical Africa in 1910. See Bulletin of Entomological Research (Issued by the Imperial Bureau of Entomology), 3 (1912-1913), pp. 225, 340, 419; 4 (1913-1914), pp. 91, 353; 5 (1914-1915), pp. 91, 194. See also Gamble, Mercier, "A list of blood-sucking arthropods from the lower Congo, with a Vocabulary", *Journal of Tropical Medicine and Hygiene* 17 (1914), pp. 148–150. Gamble's standing in the British community of tropical medicine was reflected by the fact that he was one of 29 medical practitioners and entomologists interviewed by the Departmental Committee on Sleeping Sickness when he was on furlough in late 1913-early 1914, see Sleeping Sickness Committee, *Minutes of Evidence,* pp. 187–192.

[319] On Portuguese attitudes against Protestant missionary work, see Chapters 3 and 5.

[320] Reverend RHC Graham to Manuel Maria Coelho (Governor General of Angola), 05.10.1911, in: ANA, Cx. 3374; Reverend RHC Graham to British Consul in Luanda, 23.01.1912, in BMSA, A 124; Reverend Graham to Governor General of Angola, 01.08.1912 (with annexes), in: ANA, Cx. 2946; Consulta 19/1913 do Conselho Colonial, 14.02.1913, in: AHU, Conselho Colonial, Livro 1913, pp. 59-60; Ministério das Colónias, *Decreto 128, concedendo à Baptist Missionary Society o terreno necessário para a instalação em S. Salvador do Congo dum hospital para tratamento da doença do sono*, 10.09.1913, *Diário do Governo, Série I,* 10.09.1913, pp. 3445–3446; "Medical Work at San Salvador", *The Herald. The United Monthly Magazine of the Baptist Missionary Society, Zenana Mission and Medical Auxiliary* 28 (1914), pp. 125–126.

[321] For the names of the doctors and the dates in which they served, see e.g. Grenfell, *The history of the Baptist church,* pp. 24–25. For sleeping sickness work, see for instance, San Salvador Medical report for 1918 and Mapa

In comparison to the operations carried out in Benguela, there was also a marked difference with regard to approach. Most certainly, existing legislation promoted an integrated strategy here as well, which aimed at destroying the vector and its habitat, reducing human-fly contact and killing the trypanosomes in the human body. Yet, in practice, vector control played a less important role than in Benguela, or in Príncipe. This was not only due to the practical difficulties described above, but also to environmental differences. With regard to the Congo and Cuanza districts, no one believed that it would be possible to destroy the habitat of the tsetse flies completely. The luxurious tropical vegetation covering a vast area in these districts rendered impossible bush clearings beyond the restricted areas of plantations and villages. In 1907, Anibal Correia Mendes had already stated that "[i]t would be absurd to think about exterminating all the flies in the Cuanza valley, or in the forests around Cazengo and the swampy grounds of the Lucala and Luinho river banks. Whoever has visited the region understands immediately the foolishness of such an undertaking."[322] Over the years, he did not change his mind. "Obviously, it is not possible to use the plan of action that is being executed in Benguela for the Cuanza district", he wrote in 1917. "Nobody will seriously consider destroying the forests that cover the valleys of the Cuanza and Bengo and their numerous tributaries, just as it would be utopian to believe that one could exterminate all the animals living in that region."[323] Placing emphasis on the difference in scale between Príncipe and Angola, the director of the health services, Alberto de Queiroz, was equally adamant in dismissing the possibility of eradicating the tsetse flies in Angola.[324]

Moreover, studies on the bionomics (or ecology) of the tsetse fly, i.e. on the behaviour of the fly and its relationship to the environment, had generated scepticism towards both the possibility and desirability of vector control and "species sanitation" by the end of the 1910s. Not only had the glossina's behaviour proved too irregular for large-scale extermination campaigns, the species was also increasingly being conceptualized as a single element in a

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do movimento de doentes durante o ano 1925, both in: BMSA, A 124; Jones, Dr E. R., "The Fight with Sleeping Sickness. How a Native Teacher Played his Part", *The Missionary Herald of the Baptist Missionary Society* New Series, 7 (1919), pp. 20–21 and "Medical Work. Report of the Medical Mission Auxiliary, 1919-1920", *The Missionary Herald of the Baptist Missionary Society* New Series, 8 (1920), pp. 83–86, here p. 85. On other medical work in São Salvador, see also Chapter 3.

[322] Mendes, *Subsídio,* p. 397.

[323] Chefe da Missão de Estudo e Combate de Doença do sono (Correia Mendes) to Secretário Geral do Governo, 01.10.1917, in: ANA, Cx. 391.

[324] Queiroz, *Serviço de Saúde de Angola*, p. 26.

larger and complex ‘web of life’. The eradication of the tsetse fly would not only be a difficult endeavour, but it would also be one with uncertain consequences.[325]

Accordingly, the focus of the fight against sleeping sickness in northern Angola lay with preventing man-fly contact and treating the diseased. Brush clearing around villages and plantations as well as the relocation of villages, usually from tsetse fly infested river borders to higher uncontaminated grounds, were important and common measures to interrupt occurrences of common man-fly contact. Here, doctors depended heavily on the collaboration of administrative authorities, plantation owners and not the least local African populations, for whom resettlement, even over short distances, often meant abandoning ancestral grounds and the consequent risk of losing contact with their dead.[326] The most radical (and paradigmatic) measure was the establishment of so-called isolation, segregation or concentration camps. In the fight against sleeping sickness, all colonial powers in Africa made use of such camps, insofar as they were believed to fulfil two pressing needs: to break the man-fly infection cycle by separating the ill and infectious from the healthy and isolating the former in glossina-free places and, secondly, to heal the diseased with drug therapy. Most Africans, however, did not endorse this rationality. Wherever concentration camps were constructed, they met with massive resistance from the African population, which associated them with death and forced separation from their families. Many refused entry or, once forcibly ‘detained’, escaped.[327]

Correia Mendes was aware of the unpopularity of such camps in other colonies and when the first Angolan ones were established in Noqui (Congo district) and Camoma (Cuanza district) in 1912, he advised that they adopt a new camp concept that had recently been introduced – although still on a small scale, as Lyons has noted – in the Belgian Congo. This concept involved creating a more open village-like style. It was hoped that by allowing family

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[325] On the complexicity of the glossina’s behaviours, and the ensuing obstacles to eradication, see Schwetz, Jacques, *Recherches sur les glossines,* Bruxelles: Hayez, 1919 and Austen/Hegh, *Tsetse-flies*, esp. pp. 110-152. For the reception of these studies in Angola, see for instance Velho, *A Tripanossomose humana,* pp. 193–195. On the ‘ecological’ reframing of the tsetse problem by British scientists, see Tilley, Helen, "Ecologies of Complexity. Tropical Environments, African Trypanosomiasis, and the Science of Disease Control in British Colonial Africa, 1900-1940", *Osiris* 19 (2004), pp. 21–38, here pp. 29-30; 35-37. On the concept of “species sanitation”, see Packard, *Short History of Malaria,* p. 119 and Imam, Antonius Franciscus Irawan, *"Spezies-Assanierung". Die Entwicklung natürlicher Methoden der Malariabekämpfung in Niederländisch-Indien (1913-1938) und ihre mögliche Bedeutung für aktuelle Probleme der Malariabekämpfung* (Doktorarbeit - Heinrich-Heine-Universität Düsseldorf, Institut für Geschichte der Medizin), 2003.

[326] Borges, *Circunscrição de Cacongo - Relatório sobre assistência aos indígenas e profiláxia da varíola, paludismo e doença do sono*, 1913, in: ANA, Cx. 3374, pp. 24–26; Frazão, *Reabilitação*, pp. 132-133. More research is needed to understand to what extent these spatial measures were implemented in Angola.

[327] See, for Belgian Congo, Lyons, Maryinez, "From 'Death Camps' to Cordon Sanitaire. The Development of Sleeping Sickness Policy in the Uele District of the Belgian Congo, 1903-1914", *Journal of African History* 26,1 (1985), pp. 69–91; for Uganda Hoppe, *Lords of the Fly,* pp. 73–76 and for the German colonies Eckart, *Colony as Laboratory* and Isobe, *Medizin und Kolonialgesellschaft*, esp. pp. 71-91; 178-186; 238-264.

members to settle with their diseased relatives, African resistance to the camps would fade. Moreover, the camps were no longer to confine everyone with the disease, but only the more advanced cases. Patients in the first phase would be treated on an ambulatory basis, and would have to appear in the camp for periodical examinations and treatments only.[328] This latter modification not only responded to the desires of the African patients, it was also clearly meant to reduce the resistance of European employers, as many of them were extremely reluctant to send away their workers for long undefined periods of time.

With the exception of the short-lived camp in Camoma, which was closed in 1914 because it was not free of tsetse flies, concentration camps would only be used in the Congo district.[329] By the late 1910s, three such camps were functioning, all of which were situated near the border with the Belgian Congo: the 'Central Treatment Camp' in São Salvador, and the two auxiliary camps in Noqui and Maquela do Zombo.[330] Little is known about these camps, except that they were, like in other colonies, often severely understaffed and underfunded and did not enjoy much acceptance among the African population. Thus José da Silva Neves, the head of the Congo district's health services, reported in 1919 that "the native, who lacks any notion of the danger as well as the belief in the methods of scientific treatment, does not go looking for the doctor to be examined, since he knows very well that, in the case of being tested positive, he would be forced to go to the Central Treatment Camp in São Salvador, at a distance of five days, and that it would be impossible to return soon, if ever, to his family."[331] This quote implies that the concentration camps in Angola at the end of the 1910s were still very prison-like and that the reform Correia Mendes had advocated had not or had only insufficiently been implemented. It was only in the late 1920s that ambulatory treatment would be practiced on a large scale in Angola.[332]

Because of their unpopularity and dependency on the continuous zeal of local administrative and sanitary authorities, concentration camps were not particularly stable institutions. The concentration camps in the Congo district were abandoned in the early

[328] For the shift in the Belgian Congo, around 1910, see Lyons, *The colonial disease,* pp. 125–126; Neill, *Networks,* p. 130. For the adoption of this concept in Angola, see Junta de Saúde, *Sessão ordinária de 30.01.1911*, in: ANA, Cód. 1867, pp. 192r-v.; Governador Geral Norton de Matos, *Portaria 1.272*, 23.10.1912 and *Portaria 1.481*, 27.12.1912, reprinted in: Alto Comissariado da República em Angola; Direcção dos Serviços de Saúde e Higiene, *Diplomas Doença do Sono,* pp. 51–55.

[329] On the closure of the camp in Camoma, see the correspondence in Processo 2/1914 – Doença do somno e campo de segregação, in: ANA, Cx. 391 and Chefe do Serviço de Saúde to Chefe da Repartição de Gabinete, 15.08.1914, in: ANA, Cx. 404.

[330] *Portaria 173*, 26.10.1917, art. 3f and *Portaria 196*, 04.12.1917 in: Alto Comissariado da República em Angola; Direcção dos Serviços de Saúde e Higiene, *Diplomas Doença do Sono,* pp. 51-55; 93-97. See also Velho, *A Tripanossomose humana,* pp. 187–190.

[331] Neves, José da Silva, "Relatório sobre o serviço de saúde no distrito do Congo, durante o ano de 1919", *Revista Médica de Angola* 1 (1921), pp. 167–180, here pp. 167-169; 171-172 (quote p. 172).

[332] See Chapter 2.

1920s, but some of them would be revived and quite a few others established later on in the 1920s. Ostensibly, at least a portion of the doctors involved in anti-sleeping sickness campaigns continued to believe in the usefulness of such camps.[333] Simultaneously, leading doctors reaffirmed the ideal of open 'village-hospitals' or *sanzala-enfermarias*. To increase acceptance levels on the part of the locals, patients were to be allowed to bring family members. As these last could prepare food for their ill relatives, the problem of choosing appropriate diets would be resolved and the costs of hospitalization reduced.[334]

[333] For the attempts to (re)establish a small number of segregation camps from 1923 onwards, see Augusto Casimiro, *Relatório apresentado pelo ex-governador do distrito do Congo, Capitão Augusto Casimiro (1923-1926)*, 11.12.1928, pp. 29–36, in: AHU, MU, AGC 47A; Almeida, *Relatório do chefe,* pp. 36–37; Rebêlo, Frederico Leopoldino, "Relatório do Chefe da Missão do Zaire referentes ao periodo Agôsto de 1923 a Setembro de 1924", *Revista Médica de Angola* 5 (1927), pp. 80–91, here p. 84; "Assistência Médica aos Indígenas", *Boletim da Assistência Médica aos Indígenas e da Luta contra a Moléstia do Sono* 2,11 (1928), pp. 250–259, here pp. 250–251. For official recommendations in this sense, see, for instance, Governo Geral de Angola, *Portaria Provincial 20*, 12.02.1924 and Alto Comissariado da República, *Diploma 463*, 09.12.1926, art. 20, in: Alto Comissariado da República em Angola; Direcção dos Serviços de Saúde e Higiene, *Diplomas Doença do Sono,* pp. 115-118 and 5-21.

[334] See de Almeida, *Relatório do chefe,* pp. 36–37; Santos, *Assistência médica aos Indígenas,* pp. 65–69; Silva, Avelino Manuel da, *Serviço de Assistência aos Indígenas no distrito do Congo, 1930. Relatório elaborado pelo chefe da zona sanitária do Congo, Dr. Avelino Manuel da Silva* (Colecção de relatórios, estudos e documentos coloniais; 9), Lisboa: Agência Geral das Colónias, [193-], p. 19.

Conclusion: Reassessing Worboys: National Styles and the Response to Sleeping Sickness in Portuguese Africa

Nearly twenty years ago, Michael Worboys influentially argued that, at least until the First World War, the British, Germans and Belgians employed clearly distinct strategies to combat sleeping sickness in their East African colonies. While the British in Uganda adopted an ecological (or entomological) approach, aimed at eradicating the tsetse fly by destroying its habitat, officials in the Belgian Congo focused on reducing man-fly contact. Their spatial (or epidemiological) approach consisted mainly of establishing *cordons sanitaires* around infected areas and monitoring the movement of people between infected and non-infected areas. The Germans, then, showed a strong preference for the medical (or microbiological) approach, which sought to destroy the parasite – the trypanosome – in the human body through drug therapy.[335] Worboys ascribed these "different understandings and actions" to the interplay of different "form[s] and content[s] of expert advice" and "different colonial structures and policies of the respective imperial powers".[336]

Since then, several historians have critically engaged with Worboys' categorization and nuanced his concept of national approaches or styles. Two kinds of critique can be distinguished. On the one hand, many have questioned the geographical scale and chronological framework of his comparison. Indeed, knowing that sleeping sickness affected most of tropical Africa, it is arguably somewhat reductionist to derive 'national styles' from three colonies situated in a single region (East-Central Africa) only. One can suspect Worboys of having searched for 'ideal types' (Wehler) rather than for actual historical cases. To render the picture more complex, critics have inserted Worboys' cases into a larger framework by adding to the analysis other colonies in East-Central and even West-Africa – a region often neglected in Anglophone historiography on sleeping sickness – and by extending the comparison in time. In his study of German anti-sleeping sickness programmes, Isobe has thus highlighted the difference in approach *between* the different German colonies and even the hybridity of the German approach *within* East Africa.[337] Others have argued that, even in pre-war East-Central Africa, the differences in approach were never absolute and that they became increasingly blurred over time. According to Neill, for instance, fly-control measures might initially have been mainly a British practice, but, due to transnational collaborations between experts, they were eventually adopted by all colonies in East Africa.[338] With a very

[335] Worboys, *Comparative History*.
[336] *Ibid.*, quotes pp. 89 and 99.
[337] Isobe, *Medizin und Kolonialgesellschaft*.
[338] Neill, *Networks,* pp. 108; 134.

general statement, Hoppe has even concluded that "all colonial powers implemented a combination of targeting trypanosomes, tsetse, and people".[339] Although these arguments add nuance to Worboys' conclusions by reframing them within a larger picture, one must admit that they do not necessarily invalidate them.

This is different for the second kind of critique, which has targeted the way in which Worboys has explained the differences he noted as the result of 'national styles' of colonial rule and medical science rather than of epidemiological and material conditions. Heather Bell, for instance, has convincingly argued that the spatial approach that was dominant in the Anglo-Egyptian Sudan and that focused on migration control and the relocation of infected or endangered persons was above all the result of epidemiological specificities: the disease came from abroad and the major tsetse fly belts were located close to the international border.[340] Similarly, Isobe has demonstrated that policy differences between the three German colonies were necessarily due to varying local circumstances and disease patterns.[341] Epidemiological and environmental differences also underpinned Neill's idea that the biggest divide among the various responses was not between nations, but between regions, and specifically between East and Central-West Africa.[342]

The comparative analysis of Portuguese responses to sleeping sickness corroborates both sets of critiques. After having extensively analysed the campaigns in Angola and São Tomé and Príncipe in this chapter, a brief glance at the Portuguese dealings with the disease in Guiné and Mozambique will be enough to support my argument here.

In Guiné, sleeping sickness was virtually ignored until the mid-1920s. From the 1880s onwards, doctors had repeatedly made reports on people who showed the clinical symptoms of sleeping sickness, and in the early 1890s the director of the health services had even been convinced that the disease was far more common than usually assumed.[343] However, due to the small number of European doctors, the lack of microscopes in most districts and, overall, the little interest the government showed for the issue, it would not be until 1925 that the first clearly endogenous case of sleeping sickness was confirmed.[344] When the disease finally aroused the interest of the colonial administration in the 1930s, the head of the sleeping

[339] Hoppe, *Lords of the Fly,* p. 12.
[340] Bell, *Frontiers of Medicine,* pp. 127–128.
[341] Isobe, *Medizin und Kolonialgesellschaft*.
[342] See Neill, *Networks*, chapters 4 and 5, explicitly pp. 108 and 164.
[343] Barbosa, *Relatório,* pp. 134–135. For an analysis of early reports that mentioned cases of sleeping sickness, see Barreto, *Sobre a doença do sono (1928),* pp. 3–18.
[344] Barreto, Sant'Ana, "Doença do sono da Guiné Portuguesa", *Boletim Geral das Colónias* 2,11 (1926), pp. 60–65; Barreto, Sant'Ana, "La maladie du sommeil dans la Guinée Portuguaise", *Bulletin de la Société de Pathologie Exotique* 19 (1926), pp. 315–317.

sickness mission to Guiné (1932) even obliquely suggested that the European population had consciously tried to obscure the existence of the much-feared disease for economic reasons.[345]

In Mozambique, by contrast, the problem had been taken seriously even years before the first endogenous cases of sleeping sickness were detected in 1912.[346] Since the late 1900s, there had been a rising concern that the sleeping sickness epidemic, which was generally believed to move further eastwards, might also invade Mozambique, especially since doctors had identified several fly belts, regions infested with a great number of tsetse flies, near the borders with German East Africa, Northern Rhodesia and Nyasaland.[347] The glossinae in Mozambique were nearly all from the subspecies *morsitans* and not yet infected with trypanosomes that were pathogenic for humans, but it was feared that this would happen when they came in contact with infected Africans or wild animals as they entered the colony from the border regions. Alarmed by this possibility, the EMT commissioned the director of the bacteriological laboratory in Lourenço Marques in 1910 to investigate how sleeping sickness could be prevented from spreading to Mozambique. The measures José Firmino Sant'Anna proposed after his extensive journey through Zambezia, chiefly aimed at restricting, sometimes even prohibiting, cross-border movement of the African population and establishing medical inspection posts in endangered areas.[348] This spatial approach, in which like in the Anglo-Egyptian Sudan emphasis was placed on the need to protect territory rather than people, indeed became the primary business of the two sanitary brigades that were sent to Mozambique's north-western borders in 1912. Partly due to fact that the epidemic had not reached levels of great intensity in the neighbouring colonies, the brigades detected only one person suffering from sleeping sickness.[349] After the First World War, notably from the late

[345] Sequeira, Luís Artur Fontoura de, *Rapport de la mission médicale à la colonie de Guinée en 1932,* Lisboa: École de Médecine Tropicale, 1935, esp. pp. 5; 7-8; 10. For the increased interest that occurred from the 1930s onwards, see Ferreira, Fernando Simões da Cruz, *As tripanosomíases nos territórios africanos portugueses. Africa Ocidental (Angola e Guiné), África Oriental (Moçambique),* Lisboa: Sociedade Industrial de Tipografia, 1948, pp. 36–39 and also Havik, *Public Health*.

[346] Sant'Anna, José Firmino, "A Tripanosomíase humana da Rhodésia. Crónica e particularidades da epidemia, no que interesse ao território português da África Oriental", *Archivos de Hygiene e Pathologia Exoticas* 4 (1913), pp. 3–50, here pp. 48–49. In the four cases that had been previously detected in Mozambique, the endogenous character could not be proven, because the patients had also been to one of the neighbouring colonies, see *Ibid.,* pp. 43–48.

[347] Braga, A. Rodrigues, "L'Afrique orientale portugaise et la maladie du sommeil", *Archivos de Hygiene e Pathologia Exoticas* 2 (1909), pp. 192–194. A map of the tsetse fly infested regions can be found in Sant'Anna, *Tripanosomíase humana*, after p. 50.

[348] Sant'Anna, José Firmino, *Relatório de uma missão de estudo na Zambezia motivada pela doença do sono,* Lourenço Marques: Imprensa Nacional, 1911. For a French translation, see Sant'Anna, José Firmino, "Rapport d'une mission d'étude em Zambézie", *Archivos de Hygiene e Pathologia Exoticas* 3,2 (1911/1912), pp. 115–213. On the life and work of José Firmino Sant'Anna, see Cambournac, F. J. C., "Sobre o labor científico do Professor Firmino Sant'Anna", *Anais do Instituto de Medicina Tropical* 13,1-2 (1956), pp. 347–352 and Ribeiro, Aires Pinto, "O Prof. Firmino Sant'Anna", *Anais do Instituto de Medicina Tropical* 13,1-2 (1956), pp. 353–357.

[349] Lapa, J. Pereira; Sousa, Joaquim Morais de, *Serviço de defesa contra a doença do sono nos distritos de Tete e Quelimane no ano de 1913,* Lourenço Marques: Imprensa Nacional, 1915, esp. pp. 30 and 37.

1920s onwards, doctors would discover a larger number of individuals with the disease, but even then this still fairly limited number of cases would not give rise to anxieties of depopulation as it had in Angola and Príncipe.[350] In Mozambique, animal trypanosomiasis was generally considered the bigger problem for the social and economic life of both the Africans and Europeans living there.[351]

In conclusion, it is impossible to speak of a 'national' Portuguese style. Even though policies were to a considerable extent designed and supervised by the same experts, most notably Ayres Kopke, Anibal Correia Mendes, Bernardo Bruto da Costa and Firmino Sant'Ana, approaches in São Tomé and Príncipe, Angola, Mozambique and Portuguese Guinea substantially differed, even before 1914. They ranged from denial and inaction (Guinea) to eradication (Príncipe and Benguela), from border control (São Tomé and Mozambique) to complex integrated responses (Príncipe and Angola). These differences were the consequence of varying local circumstances such as epidemiological patterns, practical possibilities of control and economic and political considerations.

[350] António Rebêlo, for instance, found 80 individuals with the disease in the Tete district between 1932-1934, see Rebêlo, António, *A doença do sono no distrito do Tete,* Lourenço Marques: Imprensa Nacional de Moçambique, 1938, pp. 21–22. During and directly after the Second World War, numbers rose anywhere between two to three hundred yearly, see Ferreira, *Tripanosomiases,* pp. 39–40. For an overview of the Portuguese response in Mozambique until 1938, see Martins, António Rita, "A doença do sono. Oração de Sapiência", *Anuário da Escola Superior Colonial* 19/20 (1938-1939), pp. 33–63, here pp. 50–53.

[351] Ferreira, *Tripanosomiases,* pp. 39–41. See also Bárbara Direito, *"O terror dos homens e o flagelo dos animais." A doença do sono animal como problema em Moçambique. Paper presented at the International Conference "Saber Tropical em Moçambique: História, Memória e Ciência"*, Lisbon, 25 October 2012.

Chapter 2

Inter-Imperial Learning and the *Assistência Médica aos Indígenas* in the Interwar Period

Introduction

1. From Luanda to Freetown: António Damas Mora and Angola's Strategy of Inter-Imperial Learning
2. International Pressure and the Persistence of Sleeping Sickness
3. The Health Reforms of 1926-1928 and the Transition from Individual to Social Medicine
4. Demography and Depopulation
5. Inter-Imperial Cooperation and Regional Integration
6. Assembling a Medical Staff: Strategies of Recruitment and Hierarchies of Race
7. The "Portuguese Method" of Preventive Atoxylization and the Unstable Boundaries of Inter-Imperial Learning
8. *Estado Novo*, Colonial Order and the AMI crisis

Conclusion: Inter-Imperial Borrowing and Hierarchies of Prestige

Introduction

After a hesitant start prior to the First World War, all colonial powers in tropical Africa during the Interwar Period consistently worked to extend healthcare programmes to the African population at large. The resurgence of the civilizing mission, now labelled as *mise en valeur* (Sarraut), the persistence of depopulation discourses and international competition induced colonial states to envision, design and implement more comprehensive public health schemes that were also aimed at the rural populations. In many colonies, sleeping sickness continued to capture the attention of the colony's collective mind, and although programmes increasingly started to focus on other medical and demographic threats, the campaign against the 'colonial disease' (Lyons) lay at the heart of many of them.

Until very recently, however, historiography has largely overlooked the blatant parallels between these healthcare programmes. Using a conventional spatial grid – the colony or a group of colonies belonging to the same European power – as their analytical field, most studies have enclosed the development of these schemes within the confines of national narratives that do not or only minimally account for external influences. The role of international players such as the Health Organisation of the League of Nations (LNHO), of bi- and multilateral contacts and of processes of inter-imperial borrowing has thereby been systematically downplayed.[1] The epistemological neglect of these exchanges, connections and entanglements between colonial empires has consolidated the colony or the national empire as 'natural' and autarkic spaces of exchange.[2]

Methodological nationalism is probably still fuelled by a commonly held view on the Interwar Period whereby as international tensions mounted and collaboration in Europe

[1] For examples on British Africa, see Patterson, K. David, *Health in Colonial Ghana. Disease, medicine, and socio-economic change, 1900 - 1955,* Waltham, Mass.: Crossroads Press, 1981; Hoppe, Kirk Arden, *Lords of the Fly. Sleeping Sickness Control in British East Africa, 1900-1960,* Westport, Conn.: Praeger, 2003; Tilley, Helen, *Africa as a Living Laboratory. Empire, Development, and the Problem of Scientific Knowledge, 1870-1950,* Chicago: Chicago University Press, 2011, pp. 169–216; on French Africa Headrick, Rita, *Colonialism, Health and Illness in French Equatorial Africa, 1885-1935,* Atlanta: African Studies Association Press, 1994; Bado, Jean-Paul, *Médecine coloniale et grandes endémies en Afrique 1900 - 1960. Lèpre, trypanosomiase humaine et onchocercose,* Paris: Karthala, 1996; Tantchou, Josiane, *Épidémie et Politique en Afrique. Maladie du Sommeil et Tuberculose au Cameroun,* Paris: L'Harmattan, 2007; on German Africa Eckart, Wolfgang U., *Medizin und Kolonialimperialismus. Deutschland, 1884-1945,* Paderborn: Schöningh, 1997; Isobe, Hiroyuki, *Medizin und Kolonialgesellschaft. Die Bekämpfung der Schlafkrankheit in den deutschen "Schutzgebieten" vor dem Ersten Weltkrieg,* Münster: LIT, 2009; on the Belgian Congo Lyons, Maryinez, *The Colonial Disease. A Social History of Sleeping Sickness in Northern Zaire, 1900-1940,* Cambridge: Cambridge University Press, 1992.

[2] For this critique, see also, for instance, Anderson, Warwick, "Where is the Postcolonial History of Medicine?", *Bulletin of the History of Medicine* 72,3 (1998), pp. 522–530, here p. 528 and Digby, Anne; Ernst, Waltraud; Mukharji, Projit B., "Introduction. Crossing Historiographies, Connecting Histories and their Historians", in: Digby, Anne; Ernst, Waltraud; Muhkarji, Projit B. (eds.), *Crossing Colonial Historiographies. Histories of Colonial and Indigenous Medicines in Transnational Perspective,* Newcastle: Cambridge Scholars, 2010, pp. ix–xxii.

rapidly decreased, exchange and cooperation between colonial powers in Africa waned, not least in scientific and medical matters.[3] Such a view was already expressed in the immediate post-Second World War era. From the vantage point of the 1950s, the first Secretary-General of the CCTA (Commission for Technical Co-operation in Africa south of the Sahara), P. M. Henry, stated that in the period between the two wars "the administrations had the comfortable feeling of living in watertight compartments, that nothing for instance which happen [sic] in British Territories could ever be of the slightest interest to the neighbouring French territories, or Belgian, or Portuguese, except obviously questions involving frontier action."[4]

Yet, following calls from senior scholars of colonial medicine such as David Arnold and Warwick Anderson and responding, more generally, to the research programme outlined in a seminal essay by Stoler and Cooper, the research of a few historians has recently started to transcend the boundaries of national empires and to look at conduits of medical knowledge and practices that cut across colonial and imperial borders.[5] Deborah Neill, for instance, has shown how the respective health systems of French Equatorial Africa (AEF) and German Cameroon were shaped by their inter-colonial and inter-imperial contacts before the First World War.[6] She has also drawn attention to transnational connections in sleeping sickness drug therapy research in the period prior to 1914, an issue that has also been explored by Guillaume Lachenal with regard to the (late) Interwar and Second World War period.[7] Jorge Varanda has described how health practices of the major mining company Forminière in the Belgian Congo decisively influenced its Angolan counterpart Diamang in the Interwar

[3] On this, see, for instance, Mertens, Myriam; Lachenal, Guillaume, "The History of "Belgian" Tropical Medicine from a Cross-Border Perspective", *Belgisch Tijdschrift voor Filologie en Geschiedenis* 90,4 (2013), pp. 1249–1272, here p. 1262.

[4] Henry, P. M., "A Functional Approach to Regional Co-operation", *African Affairs* 52,209 (1953), pp. 308–316, here p. 310. A similar vision on collaboration in Interwar colonial Africa can be found in Vigier, Daniel, "La Commission de coopération technique en Afrique au Sud du Sahara", *Politique Etrangère* 19,3 (1954), pp. 335–349, here p. 335; Gruhn, Isebell V., "The Commission for Technical Co-Operation in Africa, 1950-65", *Journal of Modern African Studies* 9,3 (1971), pp. 459–469, here p. 459. On the CCTA, see below.

[5] Stoler, Ann Laura; Cooper, Frederick, "Between Metropole and Colony. Rethinking a Research Agenda", in: Cooper, Frederick; Stoler, Ann Laura (eds.), *Tensions of Empire. Colonial Cultures in a Bourgeois World,* Berkeley/Los Angeles: University of California Press, 1997, pp. 1–56, here pp. 13; 28-33; Arnold, David, "Introduction. Tropical Medicine Before Manson", in: Arnold, David (ed.), *Warm Climates and Western Medicine. The Emergence of Tropical Medicine, 1500 - 1900,* Amsterdam: Rodopi, 1996, pp. 1–19, here p. 11; Anderson, *Postcolonial History*.

[6] Neill, Deborah Joy, *Networks in Tropical Medicine. Internationalism, Colonialism, and the Rise of a Medical Specialty, 1890-1930,* Stanford: Stanford University Press, 2012.

[7] Neill, Deborah, "Paul Ehrlich's Colonial Connections. Scientific Networks and Sleeping Sickness Drug Therapy Research, 1900–1914", *Social History of Medicine* 22,1 (2009), pp. 61–77; Lachenal, Guillaume, *Biomédecine et Décolonisation au Cameroun, 1944 - 1994. Technologies, Figures et Institutions Médicales à l'Épreuve* (Thèse de Doctorat – Paris 7, École Doctorale Savoirs Techniques), 2006, pp. 123–135.

Period.[8] Also, Myriam Mertens and Guillaume Lachenal have very recently explored 'Belgian' tropical medicine from a cross-border perspective.[9]

The aim of this chapter is to contribute to this emerging field of research, which lies at the intersection between transnational studies and the history of medicine in colonial Africa. I will demonstrate that the planning and establishment of a comprehensive 'African healthcare' system (Port.: *Assistência Médica aos Indígenas* or AMI) in Angola between the two World Wars was, to a large extent, shaped by transnational influences. While the political will to invest in such a system relied upon internal and international constellations, the specific content of the system was mainly the result of a deliberate strategy of inter-imperial learning that had been pursued by the health services in Angola in the 1920s. This strategy went hand in hand with the desire to increase cooperation between the health services of tropical Africa. The trajectory of these ideas, however, was caught in the complex interplay between nationalism and internationalism. While competition between colonial empires essentially fostered the circulation of 'best practices', it often also constituted an important obstacle to the institutionalization of exchange and collaboration in colonial Africa. Moreover, international competition also induced colonial health services in Angola and elsewhere to claim the uniqueness and superiority of their methods and to characterize them as purely national, thereby hiding processes of inter-imperial borrowing. In addition, I also discuss how, in the mid-1920s, the first demographic surveys taken to measure the entire population only heightened anxieties about population decline and were used by doctors and others to legitimate healthcare programmes.

Two overarching historiographical challenges guide this chapter. In keeping with the empirical focus of the dissertation on Angola, the primary goal of this chapter is to (re)write the Interwar history of the colony's African healthcare programme from a transnational perspective.[10] This approach allows new light to be shed on several key aspects of these

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[8] Varanda, Jorge, "Um cavalo de Tróia na colónia? As missões de profilaxia contra a doença do sono da Companhia de Diamantes de Angola (Diamang)", in: Pereira, Luís Silva; Pussetti, Chiara (eds.), *Os saberes da cura. Antropologia da doença e práticas terapêuticas,* Lisboa: Instituto Superior de Psicologia Aplicada, 2009, pp. 79–110; Varanda, Jorge, "Crossing Colonies and Empires. The Health Services of the Diamond Company of Angola", in: Digby, Anne; Ernst, Waltraud; Muhkarji, Projit B. (eds.), *Crossing Colonial Historiographies. Histories of Colonial and Indigenous Medicines in Transnational Perspective,* Newcastle: Cambridge Scholars, 2010, pp. 165–184; Varanda, Jorge, "A asa protectora de outros. As relações transcoloniais do Serviço de Saúde da Diamang", in: Bastos, Cristiana; Barreto, Renilda (eds.), *A Circulação do Conhecimento. Medicina, Redes e Impérios,* Lisboa: Instituto de Ciências Sociais on-line, 2011, pp. 339–372.

[9] Mertens/Lachenal, *History*.

[10] The main reference is still Shapiro, Martin Frederick, *Medicine in the service of colonialism. Medical care in Portuguese Africa, 1885-1974* (Ph.D. Thesis - University of California), 1983, a very valuable study that suffers, however, from its extensive geographical and chronological scope, its lack of archival sources and, especially, its strong adherence to the 'medicine as tool of empire' debate of the 1980s. More recently, Jorge Varanda has

programmes and, simultaneously, to show how, why and to what extent the Angolan health services were connected to other health authorities in Africa and beyond. In this way, a gap is filled in the recent debate on transnational medicine in colonial Africa, in which Portuguese contributions or connections have tacitly been omitted.[11] The second objective of the chapter, by making a generalization based on the Angolan case, is to make the broader argument about inter-imperial exchange and collaboration between the health services in Africa, bringing into focus the strategies, structures, and also the multiple obstacles that were faced.

touched upon African healthcare in Angola in the twentieth century, but his studies are entirely focused on the health services of Diamang, an international diamond company in north-eastern Angola, see Varanda, Jorge, *"A Bem da Nação". Medical Science in a diamond company in Portuguese Angola* (Ph.D. Dissertation - University College London, Wellcome Trust Centre for the History of Medicine), 2006 and the studies cited in footnote 8.

[11] See, for instance, Lachenal, *Biomédecine*; Neill, *Networks*; Mertens/Lachenal, *History*.

1. From Luanda to Freetown: António Damas Mora and Angola's Strategy of Inter-Imperial Learning

When Norton de Matos returned to Angola in 1921, now vested with far-reaching competences in his role as High Commissioner, he made a second attempt to establish a comprehensive African healthcare system. He installed António Damas Mora (1879-1949) as new director of the Angolan Health Services, with the explicit assignment to organize the *assistência médica aos indígenas* (AMI).[12] It is unclear why Norton de Matos chose Damas Mora, but what is certain is that, by 1921, the latter was already a senior medical officer with extensive and long-standing experience as a colonial doctor, hygienist and public health administrator. After completing his medical studies in Lisbon, he had been placed on the island of Príncipe in 1902, where he had stayed until 1910 and where he had also taken part in the study mission on sleeping sickness dispatched by the School of Tropical Medicine (EMT) in 1907. Between 1914 and 1919, Damas Mora had directed the health services in Timor and in 1920-1921 had been Interim Director of the Health Department in the Colonial Ministry.[13] His activities in Timor, where he had reorganized the health services and established a rudimentary form of medical care for the population in the interior, may in particular have been what qualified him for the job.[14] Albeit with interruptions caused by political turmoil, Damas Mora remained in charge of the Angolan Health Services until 1934. He was then assigned to the same directorial position for Macau (1935-1936), before being appointed Director of the Institute of Tropical Medicine in Lisbon, a position he would hold until his retirement in 1939.

Upon his arrival in 1921, Damas Mora first proceeded to effectuate a general reform of the health services in Angola. Not long after he arrived, in fact, Damas Mora introduced his reform agenda to the medical staff, and most of these ideas were implemented as part of the

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[12] Mora, António Damas, "Os Serviços de Saúde em Angola e a obra de Assistência Médica aos Indígenas", *Boletim da Assistência Médica aos Indígenas e da Luta contra a Moléstia do Sono* 2,9 (1928), pp. 87–94, here p. 88.

[13] Biographical information gathered from AHU, *Processo Individual de António Damas Mora*; António Damas Mora, *A assistencia pública e a iniciativa particular*, in: Jornal do Comércio (Luanda), 30.04.1921, p. 1; Mora, António Damas, "Prefácio ao relatório do chefe da Missão do Congo Dr. Carlos de Almeida, referente ao triénio: 1923-1924; 1924-1925; 1925-1926", *Revista Médica de Angola* 5 (1927), pp. 11–21, here pp. 11–12; Abranches, Pedro, *O Instituto de Higiene e Medicina Tropical. Um século de história 1902-2002,* Lisboa: Instituto de Higiene e Medicina Tropical, 2004, p. 44; Amaral, Isabel, "The Emergence of Tropical Medicine in Portugal. The School of Tropical Medicine and the Colonial Hospital of Lisbon (1902-1935)", *Dynamis* 28 (2008), pp. 301–328, here p. 317; *Necrologia - Dr. António Damas Mora*, in: Diário das Notícias, 06.06.1949 and http://medicosportugueses.blogs.sapo.pt/1350.html (last accessed: 18.11.2013).

[14] See Mora, António Damas, *O Serviço de Saúde em Timor nos anos de 1914, 1915 e 1916. Relatório,* Dili: Imprensa Nacional de Timor, 1917.

official reorganization of the health services a few months later.[15] This far-reaching institutional reform was characterized by two salient features: the extension of healthcare provisions to both Europeans and Africans through the notable increase in the number of doctors and nurses brought to Angola; and the promotion of scientific research and debate in the colony. To achieve the latter – the former, i.e. increasing the numbers of medical staff in the colony, will be discussed at length later in this chapter – the reform decree stipulated a three-pronged approach: the establishment of a Technical Health Council *(Conselho Técnico de Saúde)*, comprised of all the doctors in the colony and tasked with discussing major scientific issues; of the *Revista Médica de Angola*, the colony's first medical journal; and, lastly, of the Institute for Scientific Research *(Instituto de Investigações Scientíficas)*.[16] These measures marked the beginning of a strategy to relocate biomedical research capacities from the metropole to the colony, a strategy that was common throughout tropical Africa in the 1920s.[17]

The implementation of this administrative reform, together with the struggle against recurrent epidemic outbreaks of bubonic plague, seem to have dominated Damas Mora's agenda during the following years.[18] His first term in Angola, under Norton de Matos (1921-1924), however, did not bring about a new healthcare system for the African population. The issue had not been shelved, however, and a crucial step towards future reforms was made with the organization of the First West African Conference on Tropical Medicine, which took place in Luanda from 16-23 July 1923.

Although the idea for the conference had been an Angolan initiative, it was organized in close collaboration with the directors of the health services of the Belgian Congo and French Equatorial Africa (AEF). Damas Mora and his counterparts in the Belgian Congo, Giovanni Trolli, and the AEF, Georges Boyé, had discussed and approved the idea of a conference in Luanda during their personal meetings of January 1922.[19] The project had quickly received the full support of the governments of all three colonies and their respective

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[15] António Damas Mora, *Circular aos médicos de Angola de 12 de Maio de 1921*, in: Jornal do Comércio (Luanda), 18.06.1921, p. 1; Alto Comissariado da República em Angola (Norton de Matos), *Decreto n. 74*, 17.11.1921, in: *Boletim Oficial da Província de Angola, Série I*, 26.11.1921, pp. 306–318.

[16] Alto Comissariado da República em Angola (Norton de Matos), *Decreto n. 74*, art. 28; 39-45.

[17] On this strategy, see Mora, António Damas, "La raison d'être des Congrès de Médecine dans l'Ouest Africain. Allucation prononcée à la séance solennelle du Premier Congrès de Médecine Tropicale de l'Afrique Occidentale", *Revista Médica de Angola* 4,1 (1923), pp. 47–59, here pp. 56–57.

[18] See, for instance, Mora, *Os Serviços de Saúde (1928),* pp. 90–91; Mora, António Damas, *A luta contra a moléstia do sono em Angola (1921-1934)* (Relatórios da Direcção dos Serviços de Saúde e Higiene de Angola; 2), Luanda, 1934, p. 24. For the bubonic plague, see below and Chapter 4.

[19] Damas Mora to Giovanni Trolli, 04.02.1922, with a provisory programme attached; Norton de Matos to Maurice Lippens (Governor General of Belgian Congo), 04.02.1922; Lippens to (Belgian) Minister of Colonies, 10.02.1922, in: Afrika-Archief/Archives Africaines, Brussels (hereafter, AA), GG 16792.

colonial ministries. Thus, High Commissioner Norton de Matos had enthusiastically embraced the idea "since it was legitimate to expect from it a serious improvement of the health systems in the colonies concerned, as well as the solution of problems they have in common, especially with respect to healthcare for indigenous peoples, a leading concern of the modern colonizing peoples", as his letter to the Governor-General of the Belgian Congo so clearly expressed.[20]

The conference, which was the first of its kind in sub-Saharan Africa, gathered more than 70 participants, among them the directors and/or senior members of the health services of the Belgian Congo, French West and Equatorial Africa, South Africa, Nigeria and Cameroon as well as high-ranking representatives from other Portuguese colonies and medical institutions in Europe.[21] Although historiography has hitherto paid little attention to this conference, it was a veritable milestone, not only for Angola, but also for the cooperation between medical services in West and Central Africa.[22]

The programme of the conference deliberately placed the *Assistência Médica aos Indígenas* (AMI) at the centre of the debate, to the detriment of more technical discussions of tropical diseases, thus offering an unprecedented stage for the exchange of ideas and first experiences in this relatively new field.[23] Indeed, the first two out of ten sessions were almost entirely devoted to presenting and comparing the various systems and problems of African healthcare in the represented colonies. In many other sessions – most of which were confined to specific diseases common to tropical Africa – the discussion of prevention and treatment possibilities left little room for technical debates. Moreover, exchange was not confined to the conference sessions: numerous leisure activities as well as boat trips before and after the conference offered ample opportunities for informal discussions.[24] The programmatic focus of the conference was not a coincidence, but an intentional and intrinsec feature present from the

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[20] Norton de Matos to Lippens, 05.05.1922, in: AA, GG 16792 (quote). For the Belgian support, see Décision du Ministre des Colonies, Bruxelles, 13.03.1922, in: AA, GG 16792; for the French, see Vassal, J., "Discours (du Directeur du Service de Santé de l'Afrique Equatoriale Française)", *Revista Médica de Angola* 4,1 (1923), pp. 129–132. On the preparation of the conference, see also Alto Comissariado da República em Angola (Norton de Matos), *Decreto 214*, 13.12.1922, *Revista Médica de Angola* 4,1 (1923), pp. 3–4 and further correspondece in AA, GG 16792.

[21] "Representações & Lista dos Congressistas", *Revista Médica de Angola* 4,1 (1923), pp. 9–19.

[22] The exception is Mertens/Lachenal, *History,* p. 1268, wherein the conference is briefly mentioned. Several short references to the conference (or some of its papers) can also be found in the standard publications on colonial medicine in the French and Belgian colonies, but frequent mis-dating reveals the little interest that was given to the conference. See Bado, *Médecine coloniale,* p. 306; Headrick, *Colonialism, Health and Illness,* p. 323.

[23] On the convenience of preferring this 'practical' issue, see Mora, *La raison d'être*, esp. pp. 50-51 and J. Rodhain, *Avis et considerations*, 11.03.1922, in: AA, GG 16792.

[24] On the importance of these informal exchanges, see Mertens/Lachenal, *History,* pp. 1268-1269.

outset of the planning process.[25] The discussion of this topic was considered to be beneficial for all participating colonies, but also markedly reflected the particular needs of Angola's health services. As Damas Mora emphasized in his opening speech, Angola was about to establish its own African healthcare scheme and was, for this purpose, eager to learn from the relevant experiences of the more advanced colonies.[26] In other words, the conference was part of an inter-imperial learning strategy that Damas Mora would pursue throughout his mandate and that would greatly influence the course of future healthcare reforms in Angola.

Due to changing internal political constellations, however, the conference did not trigger an immediate systematic overhaul of African healthcare in Angola. Two months after the conference had taken place, High Commissioner Norton de Matos returned to the metropole to face accusations of grave financial mismanagement. He eventually stepped down from his post at the beginning of 1924. Incidentally, the huge expenditures for the congress were one of the arguments used by Norton de Matos' opponents to exemplify his financial mismanagement.[27] Although the evidence is not conclusive, it seems that plans for a thorough healthcare reform had, in the wake of the conference, been elaborated. With Norton de Matos' premature departure, however, the project was left without political support. Damas Mora, who likewise returned to Lisbon in February 1924, later hinted at this.[28] Additional support for this assumption comes from a rather unlikely source. In his famous report, for which he had visited Angola in the summer of 1924, Edward Ross quoted a mission doctor stating that the Medical Department in Angola had "a very comprehensive plan for meeting the medical needs of the natives", but that it had "not been put into effect yet".[29] It was not until the appointment of the third High Commissioner, António Vicente Ferreira (1926-1928), and Damas Mora's return to Angola at the end of 1926, that such a project would finally be executed, as I will show later in this chapter. In the meantime, Damas Mora would receive further transnational inspiration from editing and publishing the more than 2,200 pages of

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[25] See , for instance, Provisory programme, attached to the letter from Damas Mora to Trolli, 04.02.1922, in: AA, GG 16792.

[26] Mora, *La raison d'être,* pp. 56–58.

[27] Leal, Francisco Cunha, *Calígula em Angola,* Lisboa, 1924, pp. 160–161. For the controversial debate on Norton de Matos's demission, see also Freudenthal, Aida, "Angola", in: Marques, A. H. de Oliveira (ed.), *O Império Africano, 1890 - 1930* (Nova História da Expansão Portuguesa; 11), Lisboa: Estampa, 2001, pp. 259–467, here pp. 288–290.

[28] Mora, António Damas, "L'Assistance Médicale Indigène", *Bruxelles-Médical. Revue hebdomadaire des sciences médicales et chirurgicales* 8,41 (1928), pp. 1328–1337, here p. 334. Damas Mora was released from service at his own request on 27 December of 1923, returning to the metropole in February 1924. See AHU, *Processo Individual de António Damas Mora*.

[29] Ross, Edward Alsworth, *Report on Employment of Native Labor in Portuguese Africa,* New York: The Abbot Press, 1925, p. 24.

conference proceedings in a special issue of the *Revista Médica de Angola* and from participating in an international study tour through West Africa.[30]

Obviously, the Luanda conference did not serve Angola's interests only. As it was the first inter-imperial medical conference to ever have been held on the continent, it was designed to herald a new era of exchange between the health services of the "vast intertropical zone of Africa", which was, according to Damas Mora, "one of the rare regions in the world where such an exchange of ideas had not yet taken place".[31] This rationale encountered broad support among participants and press commentators alike. Many, among them the eminent French parasitologist Emile Brumpt, defended the idea that more exchange and collaboration was needed, since, he argued, all colonies in the area were struggling with very similar problems. Brumpt also noted that the conference, highly acclaimed in both the Portuguese and the international press, had been very successful in this regard.[32] The Belgian Consul in Luanda, M. Moulin, agreed as well. The conference had been a "very bold, but really fortunate gesture", he concluded, "since it will establish contact between neighbouring colonies which, in the quest for solutions to identical problems, have perhaps not always, for lack of exchange of ideas, displayed the mutual understanding and collaboration that would have been useful."[33]

However, despite this seemingly unanimous support, multilateral collaboration and exchange between the health services in tropical Africa would prove more difficult than expected. The question of establishing follow-up conferences reveals that obstacles could be of a rather unexpected nature. In Luanda, it was agreed that the French would organize a second conference in Dakar in early 1927.[34] These plans, however, were first postponed and eventually aborted. The French did not want to host the event until the new buildings of the

[30] Damas Mora edited the proceedings, which were published in five volumes during his stay in Portugal in 1924, see Revista Médica de Angola 4 (1923), vol. 1 to 5 and Mora, António Damas, *Publicações Médicas e Legislação Sanitária* (Relatórios da Direcção dos Serviços de Saúde e Higiene de Angola; 4), Luanda, 1934, pp. 8–9.

[31] Mora, *La raison d'être,* pp. 56–58, quotes p. 56.

[32] See, for instance, the article by Brumpt and Joyeux in La Presse Médicale, 31.10.1923 and the article in La Nation Belge, 13.09.1923, in: "Anotações. O Congresso de Medicina Tropical julgado pela Imprensa portuguêsa e estrangeira", *Revista Médica de Angola* 4,1 (1923), pp. I–XXIII, here pp. IX-XV; XVI-XVII.

[33] Rapport du consul M. Moulin au Ministre des Affaires Etrangères Jaspar, Loanda, 05.08.1923, p. 27, in: AA, A 32 – Affaires Étrangères, Box 3209, Folder 1231.

[34] Primeiro Congresso de Medicina Tropical da África Ocidental, "Compte-Rendu de la Séance de Clôture", *Revista Médica de Angola* 4,5 (1923), pp. 331–345, here pp. 332; 335; Brumpt, Émile; Joyeux, Charles, *Un voyage médical dans l'Afrique du Sud. Extrait de La Presse Medicale, n. 87, 91, 94, 96 et 100, oct-dec 1923,* Paris: Libraires de l'Academie de Medecine, [1923], p. 16; Heckenroth, F.; Leger, Marcel; Nogue, "L'Afrique Occidentale Française au congrès de médecine tropicale de Saint-Paul de Loanda (Juillet 1923)", *Annales de Médecine et de Pharmacie Coloniales* 22 (1924), pp. 5–76, here p. 5.

Institute of Social Hygiene and the Medical School had been finished.[35] A few years later, the plan to organize the conference in Léopoldville in 1930 did not materialize for very similar reasons.[36] After hearing doctors, engineers and local governors, the General Government in the Belgian Congo reached the conclusion that the important medical infrastructure works in Léopoldville would not be finished by 1930. In the words of the Governor of the Congo-Kasai Province: "Certainly, the main issue is the congress itself, yet we should be able to show the accomplishments of the Belgian Congo in the field of hygiene to the other countries. In 1930, we will still be at work."[37] When faced with this reality, the Governor-General and the Minister of Colonies unanimously decided to reschedule the conference for 1933. Thus the conference would no longer coincide with the centenary of Belgium's independence, but with another symbolic date: the 25th anniversary of the annexation of Leopold's Congo by the Belgian state. By then, the colony would be able to show its accomplishments to the world.[38] In the end, the conference never took place.

In both instances, the lack of appropriate accommodation and the high costs of organization played a role, although only a minor one. The postponements are telling examples of the importance of representation in the colonial realm. The 1923 conference of Luanda remained unique not because of fundamental political or professional aversion toward such an event, but because of a mixture of vanity and anxiety driven by inter-colonial competition. The fear that the other colonial powers might see to what extent African healthcare, an increasingly important aspect of the civilizing mission, was still in its infancy eventually prevailed over medical exchange and mutual learning.

Meanwhile, the idea of stimulating closer collaboration and mutual learning between the colonial health services in Africa had been picked up by the Health Organization of the

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[35] Both Portuguese and Belgian sources point to the same set of reasons for the postponement, see Mimoso Moreira, *O problema da Assistência ao Indígena na África Ocidental. Entrevista com o Sr. Dr. Damas Mora*, in: O Comércio de Angola, 07.08.1926, pp. 1–2 and Governor General Tilkens to Minister of Colonies Jaspar, 25.08.1928, in: AA, A32 – Affaires Étrangères, Box 2932, Folder 512. The first official postponement of the conference in Dakar, communicated by the Governor General of AOF to the other colonies in April 1925, did not contain an explanation, see Governor General of AOF Carde to Governor General of AEF (copy), 29.04.1925 and Governor General of AOF Carde to Governor General of Belgian Congo, 29.04.1925, both in: AA, GG 16792.

[36] For the original project, see Governor General Tilkens to Minister of Colonies Jaspar, 25.08.1928, in: AA, A32 – Affaires Étrangères, Box 2932, Folder 512.

[37] Governor of the Congo-Kasai Province, Engels, to Governor General Tilkens, 20.12.1928, in: AA, A32 – Affaires Étrangères, Box 2932, Folder 512.

[38] Secretary-General of the Governor General to Minister of Colonies, 29.12.1928; Minister of Colonies Jaspar to Governor General Tilkens, 29.01.1929, both in: AA, A32 – Affaires Étrangères, Box 2932, Folder 512.

League of Nations (LNHO).[39] Certainly, the efforts of the LNHO and its charismatic medical director Ludwik Rajchman were mainly directed towards other continents, notably Europe and Asia and rather neglected the African continent, as two South African health officials noted in the mid-1930s.[40] Yet some of the initiatives that came out of Geneva did have a considerable impact with regard to Africa, most notably the work carried out by the expert committee on sleeping sickness in the 1920s and the study tour through French and British West Africa that the LNHO sponsored in 1926.

This study tour was the first colonial endeavour launched within the ambitious interchange programme for public health officials that the Health Organisation had created in 1922. Financial support for the scheme came from the International Health Division (IHD) of the Rockefeller Foundation (RF), a philanthropic organisation that was much involved in many of the LNHO's activities and constituted its main sponsor. The IHD shared Rajchman's vision that national health systems could and should be improved through the "international transfer of expertise", notably through the interchange of expert elites.[41] In the 1920s, these exchanges were the "dominant form of LHNO-organized transnational cooperation" and, for the League's Assembly, even "one of the most important schemes of the League of Nations at large".[42]

Interestingly, when the League's Health Committee decided to organize a study tour of medical officers to West Africa in April 1925, and also subsequently, when it tried to rally support from the national governments, the Committee emphasized that this undertaking conformed to the resolutions of the 1923 Congress of Tropical Medicine in Luanda.[43]

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[39] For the history of the LNHO, see Dubin, Martin David, "The League of Nations Health Organisation", in: Weindling, Paul (ed.), *International Health Organisations and Movements, 1918-1939,* Cambridge: Cambridge University Press, 1995, pp. 56–80 and the current work of Iris Borowy, most notably Borowy, Iris, *Coming to Terms with World Health. The League of Nations Health Organisation, 1921-1946,* Frankfurt am Main: Lang, 2009.

[40] Thornton, Edward N.; Orenstein, A. J., "Co-ordination of Health Work in Africa", *Quarterly Bulletin of the Health Organisation of the League of Nations* 5,1 (1936), pp. 208–209. For a biography of Rajchman, see Balinska, Marta Alexandra, *Une vie pour l'humanitaire. Ludwik Rajchman, 1881-1965,* Paris: Edition La Découverte, 1995.

[41] Weindling, Paul, "Philanthropy and World Health. The Rockefeller Foundation and the League of Nations Health Organisation", *Minerva. A Review of Science, Learning and Policy* 35,3 (1997), pp. 269–281, here pp. 274-275 and for contemporary critics of the interchange programme p. 279. On the rise and decline of the LNHO interchange programme, see Borowy, *Coming to Terms,* pp. 100-102; 191-205. On the "symbiotic relationship" between LNHO and Rockefeller Foundation, see Dubin, *League of Nations Health Organisation,* p. 72 (quote) and, especially, Weindling, *Philanthropy*. On the Rockefeller Foundation's global engagement with public health in the first half of the twentieth century, see also Farley, John, *To Cast Out Disease. A History of the International Health Division of the Rockefeller Foundation (1913 - 1951),* Oxford: Oxford University Press, 2004.

[42] Borowy, *Coming to Terms,* p. 191.

[43] LNHO, *Minutes of the Fourth Session of the Health Committee*, Geneva, 20-25th April 1925, C.224.M.80.1925.III, p. 23; LNHO, *Report to the Council on the work of the 4th session of the Health Committee*, C.248.1925.III (= C.H. 324), p. 1.

Although such a formal commitment had not been made in Luanda, it certainly conformed to its spirit. At the outset, the Health Committee had planned to execute two separate study tours, one through West Africa and the other through Equatorial Africa.[44] The objections of the French government against the latter, which at the practical level was considered to be even more complicated than the former, eventually resulted in the postponement and the subsequent cancellation of the tour through Equatorial Africa. Had the tour gone ahead as planned, it would have ended with another conference in Luanda.[45]

Even the remaining study tour to West Africa was probably still the most demanding tour of its time.[46] The interchange programme started in Dakar on 20 March 1926 and ended after a final two-day conference in Freetown (Sierra Leone) on 18 May 1926. First in separate subgroups, and later in one group, the participants visited six French and four British colonies in West Africa as well as the mandate of Togo. Initially, a visit of Portuguese Guinea had also been scheduled, but, due to miscommunication and transport issues, the authorities in that colony were unprepared and the visit had to be cancelled.[47] Among the twelve participating health administrators – which had been delegated by all of the colonial powers in the region as well as South Africa and Guatemala – figured two Portuguese doctors: António Damas Mora, at that moment still employed in Lisbon, and João Augusto Ornelas, a member of the medical staff in Angola. The names of both men, who would become close collaborators, were proposed by Ricardo Jorge, the Portuguese representative in the League's Health Committee.[48]

According to the final report of the coordinator, the French doctor Louis Destouches – who at the time worked for the Health Committee and who would soon after become one of the most influential and controversial French writers of the twentieth century under the pseudonym Louis Céline – the participants had focused on studying and comparing questions

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[44] See the correspondence between Rajchman and the French and Portuguese Ministries of Colonies in August-September 1925, in: League of Nations Archives, Geneva (hereafter, LONA), R. 955, 12B/45859/41908, West African Interchange – General arrangements.

[45] Rajchman to Van Campenhout, 11.09.1925, in: LONA, R. 955, 12B/47523/41908. See also French Ambassador to the League of Nations to the Secretary-General of the League of Nations, Eric Drummond, 12.09.1925, in: LONA, R. 955, 12B/45859/41908.

[46] Borowy, *Coming to Terms,* pp. 197–198.

[47] On this question, see Joaquim Morais de Sousa, *Informação do Chefe da Secção Técnica de Saude do Ministério das Colónias*, 16.07.1926, in: AHU, MU, DGAPC 3421.

[48] [Louis Destouches], *Rapport sur l'échange de personnel sanitaire en Afrique Occidentale – Confidentiel*, [July 1926], in: LONA, R. 955, 12B/52774/41908. Initial planning efforts had envisaged a larger group of 16 or 17 participants. On the nomination of Damas Mora and Ornelas, compare Norman White (Health Committee) to Ricardo Jorge, 30.11.1925 and 09.01.1926, in: LONA, R. 955, 12B/47523/41908, Jacket I and Ricardo Jorge to Colonial Ministry, 06.02.1926, in: AHU, MU, DGAPC 3421.

of African healthcare *('assistance médicale indigène')* and epidemiological control.[49] Given the need for rapid demographic growth, they had paid particular attention to maternities, infant healthcare and venereal diseases. He added that the interchange had already markedly fostered cooperation between, and mutual emulation of, colonial health services in West Africa, and also strengthened their relations with South Africa. Yet, partially because of recurrent transportation problems, it had also been a "very difficult experience", he stated, a "tour de force which it would perhaps be better not to repeat very soon". In the future, only shorter tours with fewer participants were to be considered.[50]

Practical problems were not the only reason, however, why there would be no further LNHO sponsored study tours in Africa. The West African Interchange had also revealed the existence of conflicting views on international cooperation. Although, like in Luanda, the participants agreed that all West African nations faced more or less the same problems, there was no unanimity about how, if at all, to fashion the collaboration between them.[51] At the final conference in Freetown, participants could not agree on the establishment of an epidemiological bureau in West Africa, which would have been patterned after the successful model in the Far East in Singapore. In accordance with a French proposal, the examination of the possibility of creating such a bureau had been one of the explicit assignments of the interchange.[52] While the French, Spanish, Portuguese and, somewhat hesitantly, also the Belgian delegates concurred with the idea, the British participants deemed it too premature. They argued that doctors in West Africa were still too few and their means too limited to be able to provide sufficiently comprehensive epidemiological information in a short period of time, and therefore, a Bureau would be of little advantage.[53] South Africa, for its part, preferred the creation of a pan-African Bureau, an idea the Belgian Colonial Ministry later endorsed.[54]

In this discussion, Damas Mora took a radical pro-cooperation stance by advocating a Bureau with much larger responsibilities. He deplored that colonial powers in West Africa

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[49] On Destouches' role, see Hewitt, Nicholas, *The Life of Céline. A Critical Biography,* Oxford: Blackwell, 1999, pp. 69–71.
[50] [Destouches], *Rapport*, p. 3-7, quotes p. 6.
[51] W.D. Inness, *Report of the visit of the League of Nations Study Tour to Sierra Leone*, 29.05.1926, p. 7, in: LONA, R. 955, 12B/5681/41908.
[52] On this assignment, see League of Nations, *Minutes of the Sixth Session of the Health Committee*, 26 April - 1st May 1926, C.252.M.96.1926.III (= Publications of the League of Nations, 1926.III.11), pp. 107-108.
[53] For the summarized opinion of each participant, see Inness, *Report*. For accounts that emphasized the divergence between the British and the rest (and thereby possibly misinterpreted the Belgian position), see Lasnet to Rajchman, 27.05.1926, in: LONA, R 955, 12B/50934/41908 as well as Damas Mora to Chefe da Secção Técnica de Saúde do Ministério das Colónias, 04.08.1926, in AHU, MU, DGAPC 3421.
[54] League of Nations, *Minutes of the Eighth Session of the Health Committee*, 13-19th October 1926, C.610.M.238.1926.III (= Publications of the League of Nations, 1926.III.28), pp. 72; 85-86.

continued to work in isolation from each other, each unwittingly repeating the same costly experiments that the others had already carried out or were actually conducting. In order to reduce the needless repetition of failures and to foster the emulation of successful policies, he pushed for "perpetual osmosis between all colonies of West Africa", through the creation of an 'International bureau for the sanitary defence of the native populations'. This Bureau, which he characterized as being "a draft form of the Health Committee of the League of Nations" in Africa, would collect all information on the health problems and healthcare methods used in West Africa and study and transmit all findings to the interested health services.[55]

Damas Mora's vision of such an enhanced West African Bureau drew from the same ideas that had led him to plan the Conference in Luanda in 1923, but it also denoted a radicalization in his stance. The postponement of the follow-up conference in Dakar had made Damas Mora fully aware of the precarious character of these conferences, and he was now seeking to build a stronger institutional foundation for cooperation.[56] Neither his nor the original French proposal was endorsed, however, when the Health Committee discussed the issue once again in Geneva in June and October 1926. The Portuguese government, on its part, consistently defended the establishment of a powerful epidemiological Bureau in Dakar, which was also backed by the favourable advice of its West African colonies.[57] Yet the Health Committee was not able to overcome the diverging national views that had become apparent in Freetown. It was divided over the utility, the location and the scope (West or Pan African) of the bureau. As a compromise, the half-hearted decision was made to collect epidemiological information in Algiers on an experimental basis. When this experiment failed to produce the expected results, it was shut down in 1928.[58]

Nevertheless, the study tour was to have a considerable impact on the health system in Angola. In a public lecture held at the Geographical Society in Lisbon in July 1926, Damas Mora reported on the innovative processes in African healthcare that he had observed in

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[55] Damas Mora, *Rapport au sujet des services sanitaires de Dakar*, 06.06.1926, pp. 21-28, in: LONA, R. 955, 12B/58594/41908.

[56] *Ibid.*, p. 24

[57] On Portugal's position, see F. Morais de Sousa, *Informação 894 and 967 do Chefe da Secção Técnica de Saúde do MC*, 09.08.1926 and 19.08.1926, both in: AHU, MU, DGAPC 3421, and the correspondence between the Portuguese Ministry of Foreign Affairs and the LNHO in AHD-MNE, 3. Piso, Armário 28, Maço 64, pasta 3 (Projecto de creação de um Bureau epidemiologico na Africa Ocidental 1926). See also Ricardo Jorge's interventions at the seventh and eighth sessions of the Health Committee, in: League of Nations, *Minutes of the Seventh Session of the Health Committee*, 19-20th June 1926, C.440.M.170.1926.III (= Publications of the League of Nations, 1926.III.17), p. 11 and *Minutes of the Eighth Session of the Health Committee*, 13-19th October 1926, C.610.M.238.1926.III (= Publications of the League of Nations, 1926.III.28).

[58] See League of Nations, *Minutes of the Seventh Session of the Health Committee*, pp. 10-13 and League of Nations, *Minutes of the Eighth Session of the Health Committee*, pp. 20-26; 72-89. See also Borowy, *Coming to Terms,* p. 198.

French and British West Africa and recommended that some of them be adopted in the Portuguese colonies, and more specifically in Angola.[59] Whether Vicente Ferreira was among the audience is unclear, but Damas Mora's international experience and reform plans convinced the new High Commissioner for Angola and, in August, he was reappointed as Director of the Angolan Health Services (ad interim).[60] After his arrival in Luanda, Damas Mora continued to emphasize the importance that his observations in West Africa had for the future of Angola, and he also published an article on this issue in Portugal's leading medical journal.[61]

In these public interventions and in the report he had presented to the Health Committee, Damas Mora made a distinction between two current models of providing healthcare in West Africa. The 'Latin school', under which he subsumed the French, Belgian and Portuguese health systems, was based on persuasion. By various means, 'Latin' health services tried to penetrate the lives of the African population and to impose their methods and belief systems upon them. The 'English school', by contrast, was far less coercive. It assumed that the natives would seek European healthcare of their own accord and focused on improving the overall economic and social conditions of the indigenous peoples. According to Damas Mora, the Latin model was "better adapted to the native psychology" and thus more efficient. Even the British had become increasingly aware of this, he claimed, and had begun to emulate the Latin model.[62]

Damas Mora was particularly impressed with the way the French colonies addressed the demographic question. For the French, he maintained, the native population did not constitute the principal, but the *only* wealth (*riquesa*) of their African colonies. Hence, the defence, reconstitution, and multiplication of the native population was the top priority of all

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[59] See António Damas Mora, *Missão Sanitária da S.D.N.*, in: O Século, 03.07.1926 and, a month later, an interview in the Angolan press: Mimoso Moreira, *O problema da Assistência ao Indígena na África Ocidental. Entrevista com o Sr. Dr. Damas Mora*, in: O Comércio de Angola, 07.08.1926, pp. 1–2.

[60] On Vicente Ferreira's motivations for this nomination, see Vicente Ferreira to Minister of Colonies, August 1926, in: Arquivo Nacional da Torre do Tombo (hereafter, ANTT), *Processo Individual de António Damas Mora* (Proc. 90760 Pt. 1, Cx. 5620).

[61] See, for example, the press coverage of a lecture given by Damas Mora at the Liceu Salvador Correia in Luanda, almost immediately upon his arrival in Angola *Modernos processos de colonizaçao em África. Uma conferência do sr. dr. Damas Mora*, in: A Província de Angola, 29.09.1926, p. 1. For the article in the medical press, see Mora, António Damas, "Assistência Médica ao Indígena em África", *A Medicina Contemporânea* 43 (1926), pp. 353-357; 393-396. I was unable to locate the probably still more substantial report António Damas Mora and Augusto Ornelas wrote about the Interchange for the Portuguese Ministry of Colonies. Reference to this report can be found in *Ibid.,* p. 396.

[62] See, for instance, Mimoso Moreira, *O problema da Assistência ao Indígena na África Ocidental. Entrevista com o Sr. Dr. Damas Mora*, in: O Comércio de Angola, 07.08.1926, pp. 1–2; Mora, *Assistência Médica ao Indígena em África (1926),* p. 354 (here quotes). See also Mora, *Rapport au sujet des services sanitaires de Dakar*, pp. 4-5 (see footnote 55).

departments.[63] It was imperative for Angola to emulate this policy, Damas Mora claimed. Like in French West Africa, "all services and not only the Health services should be geared towards this and prioritize this problem over all others."[64] As the potential examples for such interdepartmental collaboration, he mentioned botanical and dietary research to fight malnutrition and the establishment of hygienic (and eugenic) model villages with pre-selected healthy inhabitants, a project that would haunt Damas Mora for many years to come.[65]

He also praised the health services in AOF for having started to tackle the fundamental problems of maternal healthcare and infant mortality. In Dakar, the French had established specialized (anti-venereal, prenatal and gynaecological) services as well as training programmes for midwives and 'visiting nurses', he reported. Furthermore, throughout their colonies, the French were creating maternities for African women and, under the patronage of high-ranked European ladies, all sorts of protective institutions for infant children (crèches, gouttes de lait, oeuvres du berceau).[66] Some of these examples were already being imitated by the British, and Angola could no longer afford to lag behind or follow different procedures. "We need to confront and solve the sanitary problems of Angola along the same lines as the other colonizing nations", Damas Mora argued.[67]

Obviously, not all of these innovations, some of which were still in their embryonic stages in the French colonies themselves, would immediately be adopted and implemented in Angola. Yet, as I will show later, the reform decrees that finally initiated the creation of a comprehensive African healthcare system in Angola from November 1926 onwards contained a multitude of features that were also found in the neighbouring colonies and were informed by the same ideals of preventive social medicine. Without a doubt, Damas Mora had also come into contact with some of these ideas through other channels, but it seems safe to say that it was only through the prism of international exchange and inter-imperial learning of the mid-1920s that these ideas took on the shape of tangible reform projects. For many years, Damas Mora himself continued to refer to the conference in Luanda and the West African

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[63] Mimoso Moreira, *O problema da Assistência ao Indígena na África Ocidental. Entrevista com o Sr. Dr. Damas Mora*, in: O Comércio de Angola, 07.08.1926, pp. 1–2. Similarly António Damas Mora, *Missão Sanitária da S.D.N.*, in: O Século, 03.07.1926.

[64] António Damas Mora, *Missão Sanitária da S.D.N.*, in: O Século, 03.07.1926 (quote).

[65] On a French project on malnutrition in Togo, see Damas Mora, *Rapport au sujet des services sanitaires de Dakar*, p. 22 (see footnote 55). On the model village, see Chapter 4.

[66] Mora, *Assistência Médica ao Indígena em África (1926),* pp. 357; 393-394; 396 and especially Mora, *Rapport au sujet des services sanitaires de Dakar*, pp. 14 ; 34-37 (see footnote 55). João Augusto Ornelas also emphasized the importance of these initiatives in his speech at the final conference of the Study Tour in Freetown (18.05.1926), typescript also in LONA, R. 955, 12B/58594/41908. The problems of maternal healthcare and infant mortality are addressed in the next chapter.

[67] Mimoso Moreira, *O problema da Assistência ao Indígena na África Ocidental. Entrevista com o Sr. Dr. Damas Mora*, in: O Comércio de Angola, 07.08.1926, pp. 1–2.

interchange as milestones in his thinking as a hygienist and as seminal experiences for the conception of his AMI reforms.[68]

[68] See, for instance, Damas Mora, *Prefácio*, in: Mesquita, Bruno de, *Considerações sobre a profilaxia da doença do sono em Angola, com prefácio de A. Damas Mora* (Tese de Licenciatura - Universidade de Coimbra, Faculdade de Medicina), 1934, pp. 19–20.

2. International Pressure and the Persistence of Sleeping Sickness

The health reforms of the second half of the 1920s were, of course, not only determined by international exchanges and their influence on Damas Mora's stance on hygiene. While these exchanges informed the content and general orientation of the reforms to a significant degree, timing and financing mainly depended on other factors. Norton de Matos had left Angola in the throes of a deep financial crisis, and it was obvious that costly health reforms would depend on additional funding from a metropole that was reluctant to invest any more money in its nearly bankrupt colony.[69] Yet all the same this financial aid came in July 1926, when the newly designated High Commissioner for Angola, António Vicente Ferreira, obtained a loan of seven million escudos "for sanitation work and the struggle against sleeping sickness". This sum was part of a larger loan of 125 million escudos needed to fight the financial and economic crisis in Angola.[70]

Although there is no precise information regarding the motivations for the loan approval for seven million escudos, its timing as well as its explicit focus on sleeping sickness suggest that this sudden and massive investment in African healthcare was not merely an internal Portuguese affair. The decision to approve the loan must also be considered within the context of the growing international criticism directed at Portugal's colonization methods in 1925-1926 and, more importantly, the deepening anxieties in Portugal that such accusations could lead to the loss of some of the country's colonies. In June 1925, the Committee on African Welfare, a group of American philanthropists, had presented a report to the Temporary Slavery Commission of the League of Nations on labour conditions in Portuguese Africa, written on their behalf by the American professor in sociology Edward Ross. Although the 'Ross Report' was hardly if at all discussed on the diplomatic stage in Geneva, its harsh criticism of Portuguese colonialism had a huge impact on Portuguese public opinion at the time, also because it mirrored the incessant accusations of the colonial power's harsh labour policies on the part of the British Anti-Slavery and Aborigines Protection Society.[71]

[69] For an overview of the financial crisis in Angola in the 1920s, which was characterized by the colony's exorbitant public debts, and the controversy over Norton de Matos' responsibility, see Freudenthal, *Angola,* pp. 288–290.

[70] Ministério das Colónias, *Decreto 12.022*, 30.07.1926, in: *Diário do Governo, Série I*, 02.08.1926, pp. 922–924, quote from art. 4.

[71] On the Ross report and the Portuguese and international reaction to it, see Jerónimo, Miguel Bandeira, *Livros Brancos, Almas Negras. A 'missão civilizadora' do colonialismo português, c. 1870-1930,* Lisboa: Imprensa de Ciências Sociais, 2010, pp. 211–249. Jerónimo points out that historians have exaggerated the impact of the report on international discussions and have thereby reproduced the massive Portuguese response to the report in the 1920s, see *Ibid.,* pp. 219–220. On the Committee on African Welfare, which was funded by John D. Rockefeller in person, see Survey of Sources at the Rockefeller Archive Center for the Study of Twentieth-Century Africa, p. 9. In Geneva, the report was distributed to the members of the Temporary Slavery

Many newspaper articles expressed the fear that Germany, which was about to enter the League of Nations, might capitalize on the image of Portugal as a 'bad colonizer' and, with the support of other colonial powers, might try to win a mandate on a portion of the Portuguese colonies in an attempt to satisfy its colonial revisionism.[72]

Portugal was not the only colonial nation to fear the consequences of Germany's imminent entry into the League and the Permanent Mandates Commission of this last. Among the French and British, and doubtless also the Belgians and South Africans, it provoked grave concern over the stability of colonial rule in their mandated territories in Africa, i.e. the territories that had been former German colonies.[73] By analogy, the example of the French solution in its Cameroon and Togo mandates shows that investment in healthcare was a plausible and valid response to international criticism and the danger of a German take-over. In fact, in reaction to persistent German criticism of French health politics in Africa, the French Colonial Ministry spectacularly increased health expenditures in Cameroon and Togo in 1926 in an attempt to forestall Germany's use of the health argument against France on the international diplomatic stage in Geneva. Nowhere else in the French Empire did health budgets increase so much between 1925 and 1927. It was under these conditions that, for example, a well-funded permanent sleeping sickness mission was established in Cameroon. "The German threat", Lachenal has concluded, "has thus motivated health efforts unequalled anywhere else in the French Empire".[74]

Commission, but (apparently) not officially discussed before the commission was disbanded, see LONA, R. 66, 1/45003/23252. See also Miers, Suzanne, *Slavery in the Twentieth Century. The Evolution of a Global Problem,* Walnut Creek: Altamira Press, 2003, p. 106. On accusations against Portugal in the British press in 1925-1926, see, for example, the letters from Norton de Matos – then Portuguese Ambassador to London – to the Ministry of Foreign Affairs, 16.07.1925 and 29.07.1925, in AHD-MNE, 3. Piso, Armário 28, Mç 70 (Sociedade das Nações – Escravatura). On the British protest against labour policies in Portuguese Africa up to 1920, see Duffy, James, *A Question of Slavery. Labour Politics in Portuguese Africa and the British Protest, 1850-1920,* Oxford: Clarendon Press, 1967. For British support for Ross's analysis, see, for example, "Forced Labour in Portuguese Africa", *The Anti-Slavery Reporter and Aborigines' Friend* 15,3 (1925), pp. 103–107 and "Annual Report, 1926", *The Anti-Slavery Reporter and Aborigines' Friend* 17,1 (1927), pp. 38–41, here pp. 39–40.

[72] In January 1926, the Head of the Mandates Section of the League of Nations distributed to the commission members a dossier with articles from Portuguese newspapers that debated the possible alienation of the Portuguese colonies in 1925, in order to inform them of the existence of this debate. See Permanent Mandates Commission of the League of Nations, *The League of Nations, The Mandates System and the Portuguese Colonies*, 05.01.1926, C.P.M. doc. 352. On colonial revisionism in Germany in the 1920s, see Linne, Karsten, *Deutschland jenseits des Äquators? Die NS-Kolonialplanungen für Afrika,* Berlin: Links, 2008, pp. 21–25.

[73] On the French and British, see Callahan, Michael D., *Mandates and Empires. The League of Nations and Africa, 1914-1931,* Brighton: Sussex Academic Press, 2008 [1999], esp. pp. 122-156. On the Belgian case, see Vanthemsche, Guy, *La Belgique et le Congo. Empreintes d'une colonie, 1885-1980*, Bruxelles: Complexe, 2007, p. 123.

[74] See, for instance, Lachenal, Guillaume, *The campaigns against African trypanosomiasis. Classic lessons and untold stories*, WHO Global Health Histories – Seminar 31, 05.05.2009. Presentation and audiofile can be found at http://www.who.int/global_health_histories/seminars/2009/en/index.html (last accessed 28.11.2013). See also Lachenal, Guillaume, "Le médecin qui voulut être roi. Médecine coloniale et utopie au Cameroun", *Annales. Histoire, Sciences Sociales* 65,1 (2010), pp. 121–156, here p. 136 (quote). On the link between the mandate system, German criticism and the establishment of the permanent sleeping sickness mission in Cameroon, see

The explicit reference to sleeping sickness must also be considered within the context of this external pressure. Spurred on by international organisations such as the LNHO, the international debate on sleeping sickness in Africa had regained force by the mid-1920s.[75] In this evolving debate, however, Portugal was marginalized. In fact, the LNHO Expert Committee on sleeping sickness, which was established in 1922, did not have a Portuguese member, nor did the first provisional report of that committee contain relevant information on the Portuguese colonies, the moment Portugal had failed to provide any.[76] Only after the intervention of Ricardo Jorge, a recently appointed member to the Health Committee, was some summary information included in a second report.[77] Yet the ensuing International Conference on Sleeping Sickness, held in London in 1925 under the auspices of the League, re-iterated Portugal's marginalization with regard to this important question. According to the Expert Committee chairman Andrew Balfour, Portugal did not figure among the nations that took a great interest in sleeping sickness – which were, namely, the British, French and Belgians. Nor did Balfour mention any Portuguese research institution or propose a Portuguese member for the international research mission under discussion.[78]

It is telling that, their indignation notwithstanding, important Portuguese experts on sleeping sickness admitted that this situation was in large measure due to the administration's own shortcomings. In his report to the Minister of Colonies, Portugal's delegate to the London conference, Ayres Kopke, maintained that with regard to Angola the medical laboratory in Luanda had neither produced enough studies on tropical pathologies nor given enough publicity to its work to claim a role of importance in the international research field. Moreover, all study missions conceived by Norton de Matos had failed to materialize or had

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also Tantchou, *Épidémie et Politique,* pp. 73–78. For health budgets, see Headrick, *Colonialism, Health and Illness,* pp. 405–406.

[75] For a valuable overview of LNHO activities in this field until 1928, see Borowy, *Coming to Terms,* pp. 109-110; 255-261.

[76] Interim Report on Tuberculosis and Sleeping-Sickness in Equatorial Africa, by Balfour, Van Campenhout, Martin, Bagshawe, being the Expert Committee appointed by the Health Committee, League of Nations, in 1922, submitted to the Health Committee at its Sixth Session, May 26th, 1923 (= C.8.M.6.1924.III), esp. pp. 114-115, in: LONA, R. 854, 12B/24848/26254. The chairman of the Expert Committee, Andrew Balfour, was very concerned about this lack of response, as he considered the investigations of the Expert Committee to be incomplete without the information on the Portuguese colonies. Balfour believed that the absence of a Portuguese member in the League's Health Committee was the main reason for Portugal's lack of collaboration. With the appointment of Ricardo Jorge, who was formerly "jealous of OIHP", to the Health Committee, things changed and Ricardo Jorge finally submitted a brief (rather vague) report on (the fight against) sleeping sickness in the Portuguese colonies. See the correspondence between Andrew Balfour, Norman White and Ludwik Rajchman in February-April 1924, in LONA, R. 854, 12B/26381x/26254, Jacket 2 and between Balfour, Rajchman and Jorge (April-August 1924) in LONA, R. 854, 12B/35529/26254.

[77] Further report on Tuberculosis and Sleeping Sickness in Equatorial Africa, by Balfour, van Campenhout, Martin and Bagshawe, being the Expert Committee..., submitted to the Health Commitee at its fourth session, April 1925 (C.H. 281), pp. 60-63, in: LONA, R. 855, 12B/43613/26254.

[78] LNHO, Minutes of the International Conference on Sleeping-Sickness held in London at the Colonial Office from May 19th to 22nd, 1922 [= C.H. 334], p. 4, in: LONA, R. 855, 12B/44260/26254.

been quickly interrupted.[79] Although this last statement, which Kopke had also made at the conference, was not correct – and would provoke much animosity between Damas Mora, who felt betrayed and personally offended by Kopke's statement – his diagnosis was, in essence, correct.[80] It was consistent with the analysis of other doctors from the colonies, such as Augusto Ornelas, who attributed Portugal's marginalization to the fact that the medical services in the Portuguese colonies had failed to synthetize, publish and disseminate the vast amount of information on sleeping sickness gathered by the doctors on the ground.[81] According to Kopke, however, it was not only a matter of lack of publicity or the communication of information, but it was more about lack of action on the ground. He feared that, if Angola, Mozambique and Guinea did not immediately intensify their fight against sleeping sickness, notably in the border areas, neighbouring colonies would start to inquire into and interfere with Portugal's dealings in this matter, on the basis of the recommendations formulated at the London Conference. Hence, immediate action was, he claimed, not only a humanitarian and economic but also a political necessity.[82]

Given more or less its concurrence with the debate fuelled by the Ross report, the Portuguese government did not ignore this alarming message. In accordance with Ayres Kopke's report, the Colonial Ministry prompted the relevant colonies to establish and/or intensify their campaigns against the disease. The effects were immediate: in May of the same year, a study mission was organized in Guinea, where the director of the local medical laboratory, Sant'Ana Barreto, had claimed even in January 1926 that there were no confirmed endogenous cases of sleeping sickness.[83] And in 1927, a long-planned study mission finally departed for Mozambique, headed by Ayres Kopke and another professor of the Lisbon School of Tropical Medicine, José Anibal de Magalhães.[84]

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[79] Kopke, Ayres, "A Conferência Internacional sôbre a doença do sono, maio 1925. Relatório apresentado a Sua Ex.a o Ministro das Colónias pelo Delegado do Govêrno Português", *Archivos de Hygiene e Pathologia Exoticas* 7 (1925), pp. 501–566, here pp. 504-505; 512.

[80] On the study missions and Kopke's ignorance, see Mora, *Prefácio,* p. 21. On Damas Mora's enmity towards Ayres Kopke, see Damas Mora to Ricardo Jorge, Lisboa, 09.05.1928, p. 9 and Mora to Jorge, Loanda, 08.11.1928, both in: Private Letters belonging to Luiz Damas Mora (hereafter, Private Letters LDM). Prior to the Second International Conference on Sleeping Sickness in 1928, Damas Mora even communicated the discontent of the medical staff in Angola with the way Ayres Kopke had personally represented Angola to Ludwik Rajchman. See Damas Mora to Ludwik Rajchman, 03.08.1928, in: LONA, R. 5856, 8A/5994/1210.

[81] Ornelas, Augusto, "Nós e a última conferência internacional da Doença do Sono", *Boletim da Agência Geral das Colónias* 8 (1926), pp. 86–101.

[82] Kopke, *Conferência Internacional,* pp. 515–517.

[83] Director of the Health Services in Guinea to Chefe da Secção Técnica de Saúde do MC, 07.06.1926, and the attached report by Sant'Ana Barreto, 23.01.1926, in: AHU, MU, DGAPC 3433. See also Barreto, Sant'Ana, "Doença do sono da Guiné Portuguesa", *Boletim Geral das Colónias* 2,11 (1926), pp. 60–65 and Barreto, Sant'Ana, *Sobre a doença do sono na colónia da Guiné. Relatório apresentado em 1927 à Direcção dos Serviços de Saúde e Higiene,* Bolama: Imprensa Nacional da Guiné, 1928.

[84] See, for instance, Kopke, Ayres, "Estudos executados pela missão médica em Moçambique", *Jornal da Sociedade das Sciências Médicas de Lisboa* 92 (1928), pp. 233–273. A different version of this report was

Furthermore, the fact that the LNHO international research mission to Entebbe (Uganda) in 1926, which had been instituted at the London Conference, did not comprise a Portuguese member was now viewed by the Portuguese government as highly prejudicial to the country's prestige and vested interests in Africa. "Now that they unjustly accuse us of not fulfilling all of our duties as colonizers towards the native populations", the Minister of Foreign Affairs wrote to the Minister of Colonies, "it is not in any way suitable that we are not represented in this mission, in which there are delegates from all nations that have colonies in Central Africa and even from Germany which does not have any."[85] Upon Kopke's recommendation, the government decided to dispatch Máximo Prates, the director of the medical laboratory in Lourenço Marques, to the League's study mission in Entebbe.[86]

Two conclusions can be drawn from these findings. First, they clearly corroborate Martin Shapiro's argument that Portugal's fear of scientific and political marginalization, fuelled by the Ross report, constituted a strong motive for renewed efforts in sleeping sickness research and treatment programmes in its colonies after 1925.[87] Second, they demonstrate to what extent the loan of seven million escudos and the establishment in Angola in 1926 of a system of African healthcare, which almost entirely focused on combating sleeping sickness, must be seen against the backdrop of this international criticism.

This conclusion is corroborated by the fact that, in the 1920s, Damas Mora never claimed that, from a medical perspective, sleeping sickness deserved more attention than other epidemic and endemic diseases in Angola. Like Germano Correia, who presented an historical overview of sleeping sickness in Angola at the Luanda Conference in 1923, he firmly believed that, by the 1920s, the disease had lost its epidemic character, that the number of cases had accordingly declined, and that the Angolan case, generally speaking, fundamentally differed from the neighbouring Central African colonies. In Angola, he claimed, sleeping sickness occurred almost exclusively in the northern, thickly forested areas. The rest of Angola was a "country of savannah", neither forested nor humid enough to provide a propitious habitat for the tsetse fly.[88] "Having been misled by a false analogy with

published in English by the League of Nations, see Kopke, Ayres, *Investigations on human trypanosomiasis in Mozambique. Report submitted to the 2nd International Conference on Sleeping Sickness, Paris, 05.11.1928* (= 1930.III.12 = C.H. 890), Geneva, 1930.

[85] Vasco Borges (Minister of Foreign Affairs) to the Minister of Colonies, 30.01.1926, in: AHD-MNE, 3. Piso, Armário 28, Maço 65 (processo 12), pasta 2.

[86] Ayres Kopke to the Director of the School of Tropical Medicine in Lisbon, 21.12.1925 and Ayres Kopke to Augusto Vasconcellos, 12.01.1926, both in: AHD-MNE, 3. Piso, Armário 28, Maço 65 (processo 12), pasta 2. See also Augusto Vasconcellos to Secretary-General Drummond, 12.02.1926 and further correspondence in LONA, R. 856, 12B/45430/26254.

[87] Shapiro, *Medicine*, esp. pp. 232-239. Shapiro's thesis was not based on any archival evidence, however.

[88] For Germano Correia's and Damas Mora's opinion at the Conference in Luanda, see Primeiro Congresso de Medicina Tropical da África Ocidental, "Acta da 6a. Sessão (Doença do sono)", *Revista Médica de Angola* 4,4

the Belgian Congo, French Equatorial Africa and Uganda, we have magnified the problem, and after having exaggerated its dimensions, we have hesitated in face of the importance of the task to be done", he concluded.[89]

This opinion was based on impressions rather than on solid statistical material, however. Until the mid 1920s, statistics on sleeping sickness were more than fragmentary. Reported cases for 1919 and 1920, for instance, amounted to a mere 64 and 48, with 32 and 31 deaths respectively.[90] Yet, Damas Mora believed his opinion to have been confirmed by the study missions to the Congo and Zaire districts (1923-1926 and 1923-1924 respectively) and the preliminary results of the first comprehensive sleeping sickness surveys in northern Angola that were carried out in 1927.[91] The number of verified cases in 1927 amounted to only 3,805 and Damas Mora somewhat proudly announced, in the Portuguese and Belgian medical press as well as to Ricardo Jorge that, even though the counting continued, there would be at most 5,000 individuals that had contracted the disease in the colony, "a small percentage for a population of 3.6 Million inhabitants". According to Mora, it could no longer be doubted that "the problem of sleeping sickness in Angola" had lost "the acute dimensions it had possessed twenty years ago".[92] A few months later, however, it would be revealed that he was seriously mistaken, when the surveys of 1928 added another 18,966 (proven or strongly suspected) cases, thus bringing the total to 22,771.[93]

Yet, as he was organizing his reform in 1926, Damas Mora was not immune to the international pressure on Portugal in the matter and to the expectations that twenty-five years of alarm and anxiety caused by the sleeping sickness discourse had nourished. "The disease", he acknowledged, "still haunted almost everybody's mind".[94] Both public pressure and international obligations, he later explained, had demanded a concerted attack on sleeping

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(1923), pp. 7–46, here pp. 27 and 44; Correia, Alberto Carlos Germano da Silva, "A doença do sono em Angola", *Revista Médica de Angola* 4,4 (1923), pp. 157–176. After his return to Angola in 1926, Damas Mora would frequently repeat these claims, see, for instance, Mora, *Prefácio,* pp. 15–16 and Damas Mora to Ricardo Jorge, Lisboa, 09.05.1928, in: Private Letters LDM (here quote). From a retrospective perspective, see also Mora, *Luta contra a moléstia do sono,* p. 34.

[89] Mora, *Prefácio,* pp. 15–16.

[90] Correia, *A doença do sono,* p. 171.

[91] Almeida, Carlos de, "Relatório do chefe da Missão do Congo Dr. Carlos de Almeida, referente ao triénio: 1923-1924; 1924-1925; 1925-1926", *Revista Médica de Angola* 5 (1927), pp. 22–79, here pp. 33; 41; Mora, *Luta contra a moléstia do sono,* pp. 32–34.

[92] Mora, *Assistance Médicale Indigène (1928),* p. 1334. Similarly, Damas Mora to Jorge, Lisboa, 09.05.1928, in: Private Letters LDM and Mora, António Damas, "Les services de l'assistance médicale indigène en Angola, pendant 1927", *Revista Médica de Angola* 6 (1928), pp. 9–17, here p. 15.

[93] Mora, *Luta contra a moléstia do sono,* pp. 148; 231. See also Neves, José da Silva; Sousa, Jacinto de, "Assistência Médica aos Indígenas. Relatório apresentado a Sua Ex.a o Ministro das Colónias quando da sua visita a Angola", *Boletim da Assistência Médica aos Indígenas e da Luta contra a Moléstia do Sono* 3,4-6 (1929), pp. 433–442, here p. 438.

[94] Mora, *Assistance Médicale Indigène (1928),* p. 1334.

sickness, the “noisiest of all diseases north of the Cuanza River”.[95] For these reasons, and “because the public opinion did not yet understand the meaning of the term *Assistência Médica aos Indígenas*”, he initially presented his reform as a package of sleeping sickness-centred measures, literally adding *‘combate à molestia do sono’* (‘fight against sleeping sickness’) to the official name of the new services.[96]

These were not merely *a posteriori* rationalizations. Indeed, as I will show in greater detail in the following section, the legal texts governing the establishment of the reform in 1926 clearly demonstrate that these services, beyond the priority placed on sleeping sickness, were conceived to have a more comprehensive scope right from the outset.[97] Yet strategic and nationalist considerations underpinned the emphasis with which Damas Mora disclosed his own ‘manoeuvre’ in his publications from 1928 on. This disclosure served to strengthen the claim, incessantly brought up by Damas Mora and several of his colleagues, that Angola had been the first colony in Central Africa to implement an ‘integral’ approach to African healthcare on a large scale. They maintained that this ‘Portuguese method’, as they termed it, was superior to other methods and had been adopted only at a later stage by the health services in the Belgian Congo, AEF and Cameroon.[98] In other words, their attempt to claim the role of the pioneer was part of Portugal’s struggle to gain national and international prestige.

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[95] "Conferência sanitária luso-belga", *Boletim da Assistência Médica aos Indígenas e da Luta contra a Moléstia do Sono* 2,12 (1928), pp. 375–385, here pp. 379; 383 (here quote).

[96] António Damas Mora, *Assistência Médica aos Indígenas, em Angola*, in: A Província de Angola, 06.-08.08.1934. Similarly Mora, *Luta contra a moléstia do sono,* pp. 41–42.

[97] See Alto Comissariado da República em Angola, *Diploma Legislativo do Alto Comissariado n.° 452, criando um fundo especial, denominado "Fundo de Assistência aos Indígenas"*, 20.11.1926, in: *Boletim Oficial da Província de Angola, Série I*, 20.11.1926, pp. 604–607 and Alto Comissariado da República em Angola (Vicente Ferreira), "Diploma Legislativo n. 463 (09.12.1926)", in: Alto Comissariado da República em Angola; Direcção dos Serviços de Saúde e Higiene (eds.), *Diploma Legislativo do Alto Comissariado n.° 463 de 9 de Dezembro de 1926 e diversos diplomas referentes á Doença do sono publicados desde 1911 a 1924,* Loanda: Imprensa Nacional, 1927, pp. 5–21, especially preamble § 11 and art. 21.

[98] *Conferência sanitária luso-belga (1928),* p. 383; Camoesas, João, "Sobre a organização da Assistência Médica Indígena", *Boletim da Assistência Médica aos Indígenas e da Luta contra a Moléstia do Sono* 3,2 (1929), pp. 140–155, here p. 140; *Assistência Médica ao Indígena. Um Diploma*, in: A Província de Angola, 09.04.1929, p. 3; *A Luta contra a doença do sono nos sectores de profilaxia da Zona Sanitária do Cuanza*, in: A Província de Angola, 25.04.1929, p. 1; Mimoso Moreira, *Assistência Médica aos Indígenas. Entrevista com o sr. dr. Damas Mora, a propósito dum estudo de que o encarregou a Sociedade das Nações*, in: A Província de Angola, 10.01.1930, pp. 1–2; Mora, *Luta contra a moléstia do sono,* p. 157.

3. The Health Reforms of 1926-1928 and the Transition from Individual to Social Medicine

By 1926, Damas Mora had conceived of an ambitious plan to launch African healthcare in Angola, which he revealed in a set of articles over the next few years. In three distinct stages, Damas Mora intended to bring the entire African population under medical surveillance and to implement the transition from individual, therapeutic (or 'curative') treatment to a system of collective and preventive healthcare – of social hygiene.[99]

The first phase, codified in the groundbreaking 'Diploma Legislativo 463', aimed to execute the 'sanitary occupation' of those districts in which sleeping sickness was deemed endemic. The use of the term 'sanitary occupation' was not casual: indeed, the process emulated the hierarchical and territorialized logic that was characteristic of the 'administrative occupation' that had been carried out not many years before. DL 463 established four distinct zones (Congo-Zaire, Cuanza, Lunda and Benguela), which were subdivided into a total of twelve sectors.[100] Within each sector, a gradually expanding network of health centres *(postos sanitários)* and 'village-infirmaries' *(sanzalas-enfermarias)* was established. Each of the zones and sectors was to be directed by a doctor, while a European or native nurse was to be placed in charge of the health centres.[101] This medical personnel did not belong to the regular health services, but constituted a special branch. To reach the population, the medical staff were not supposed to wait for the sick to come to them, but were directed to actively seek patients out within the area they had been assigned.[102] The inhabitants of small groups of villages were told to gather at fixed points within walking distance once or twice a month. At these 'concentrations' *(concentrações)*, as they were called, the villagers underwent a medical examination by the staff in charge of the nearest medical post. Non-appearance was punished with forced labour. The local inhabitants that gathered were to receive basic treatments, such as smallpox vaccinations and injections with atoxyl against sleeping sickness. More

[99] While it is true that explicit and detailed references to the different stages of this programme only appear in published form in 1928, the long-term goal of collective and preventive hygiene already figured prominently in Damas Mora's texts in 1926. Compare Mora, *Assistência Médica ao Indígena em África (1926),* p. 355 with the more detailed descriptions of these three stages in Mora, António Damas, "A Assistência Médica aos Indígenas e a luta contra a propagação da moléstia do sono, em 1927. Relatório apresentado à Comissão de Assistência aos Indígenas, na sua sessão, extraordinária, de 21 do corrente mês", *Boletim Mensal da Luta contra a Propagaçõ da Moléstia do Sono e da Assistência Médica ao Indígena* 1 (1927), pp. 1–13, here p. 2 and especially Mora, *Os Serviços de Saúde (1928),* pp. 91–94.

[100] These sectors were Congo-Leste, Congo-Oeste, Zaire-Sul e Maiombe (zone Congo-Zaire); Encoje, Dembos-Golungo, Cazengo-Cambambe, Ambris-Dande and Sul do Cuanza (zone Cuanza); Lunda-Leste and Lunda-Norte (zone Lunda) and Benguela (zone Benguela). See Alto Comissariado da República em Angola (Vicente Ferreira), *Diploma Legislativo n. 463*, art. 1-2.

[101] Alto Comissariado da República em Angola (Vicente Ferreira), *Diploma Legislativo n. 463*, art. 3-4.

[102] Mora, *Os Serviços de Saúde (1928),* p. 87.

complicated cases were sent to the nearest health centre for treatment.[103] Central to this organization was the realization of the complete survey of the African population in the various sectors and zones. Therefore, the people who came to the concentrations not only received individual 'medical cards' *(fichas sanitarias)* with their medical history, but were also registered in lists, within which was included the total number of births and deaths. The census, as João Camoesas and many other doctors stated, was "the fundamental basis of all socio-medical action".[104]

By 1926, this (territorial) approach was already a common feature in sleeping sickness campaigns throughout colonial Africa – to a large extent, it emulated the system of 'prophylactic sectors' that had been introduced in French Equatorial Africa (AEF) in 1917 and that had subsequently been adopted in parts of French Cameroon and the Belgian Congo. Several communications on this matter had been presented at the International Conference in Luanda.[105] The Portuguese scheme in Angola, however, differed from its predecessors with regard to two important points. First, the establishment of permanent health centres within each sector ensured that the territorial presence of Portugal's healthcare system was far more concrete and firmly established than prevoiusly in the French and Belgian colonies. After visiting northern Angola in October 1928, Giovanni Trolli, the director of the health services in the Belgian Congo, characterized the Portuguese system as a combination of the Belgian mobile missions against sleeping sickness and the rural dispensaries that existed in Eastern Congo.[106] Second, the duties and responsibilities of the medical staff in the different zones were not confined to sleeping sickness, and therefore their activities fell in line with the integral approach to African healthcare posited in the Portuguese healthcare plan. These activities ranged from the treatment and prevention of venereal diseases to the study of local nutrition habits and the protection of young children. The goal was to examine the whole population and to produce nosological maps referencing the most common endemic and epidemic diseases.[107]

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[103] On the treatment of sleeping sickness, see below.

[104] Camoesas, *Organização AMI,* p. 143 (quote). For a more detailed analysis of these medical censuses, see Chapter 3.

[105] For the creation and slow expansion of this territorialized system in AEF, see Headrick, *Colonialism, Health and Illness*, esp. pp. 345-356. For Cameroon, see Letonturier, Charles; Tanon, Louis; Jamot, Eugène, "La maladie du sommeil au Cameroun et sa prophylaxie", *Revista Médica de Angola* 4,4 (1923), pp. 141–147, for Belgian Congo Schwetz, J., "Compte-rendu succint des travaux de la mission médicale du Kwango Kasai en 1920-1923", *Revista Médica de Angola* 4,4 (1923), pp. 149–155, here p. 152.

[106] Trolli, Giovanni, "Impression sur l'organisation du service médical de l'Angola", *Bruxelles-Médical. Revue hebdomadaire des sciences médicales et chirurgicales* 9,14 (03.02.1929) (1929), pp. 401–406, here p. 403. See also Ribeiro, Lavrador, *Un aspect de l'Assistance Médicale aux Indigènes. Suivi de Quelques notes sur la peste en Angola (Informations sommaires pour la Conférence Sanitaire de l'Afrique du Sud),* Luanda: Imprensa Nacional, 1935, p. 9.

[107] Alto Comissariado da República em Angola (Vicente Ferreira), *Diploma Legislativo n. 463*, especially art. 21.

The mobile missions *(missões volantes)*, which were created in addition to the territorial organization of the healthcare system into zones and sectors, epitomized this integral approach. The missions were dispatched into areas where sleeping sickness did not or only rarely occurred, and that were generally situated on the fringes of or adjacent to the already existing zones.[108] Throughout the course of several months, a small team of doctors and nurses inspected these remote areas, thereby vaccinating people against smallpox, treating them for all kinds of diseases and conducting anthropological and demographic studies. By early 1928, Damas Mora viewed these mobile services as the future of the *assistência médica aos indígenas* in rural and sparsely populated areas and, hence, as a key feature of the second stage of his project. The aim of the second phase of the scheme was to extend sanitary occupation to the entire colony, starting with the districts Moxico, Cuanza-Sul and Luanda.[109] In order to achieve this total coverage within the restrictions imposed by budget and manpower, regular district health services were assigned a larger role, and hence were to receive the means to autonomously organize mobile missions as well as large-scale preventive and prophylactic campaigns.[110]

In opposition to the opinion of the vast majority, as he himself emphasized, Damas Mora considered the first two stages of his project not as a goal in and of themselves, but as necessary preliminary steps in the paradigmatic shift towards social medicine. To perpetuate an "essentially sentimental" system of assistance as was conceived in the first two stages, he stated, would be a "tremendous economic error".[111] If one truly wished to tackle the demographic and sanitary issues of Angola at the roots, there was no other alternative than to realize the radical shift laid out in the third stage, the stage of collective and preventive hygiene, which several of the more advanced countries in Europe and America had already

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[108] At least four *missões volantes* were sent out in 1927-1928, to particular areas in Malange, Benguela, Lunda and to Dande. Only the latter concerned an area where sleeping sickness was endemic. See Silva, Francisco Venâncio da, "Relatório do Chefe da Missão Volante do Distrito de Malange referente aos meses de Setembro a Novembro de 1927", *Revista Médica de Angola* 6 (1928), pp. 219–243; Gama, Eduardo Armando Denís da, "Missão Volante de Assistência aos Indígenas do Planalto de Benguela. Relatório dos trabalhos efectuados pelo chefe da Missão Volante da asistência aos indígenas do planalto de Benguela, durante o trimestre Maio-Julho de 1928", *Boletim da Assistência Médica aos Indígenas e da Luta contra a Moléstia do Sono* 2,1-8 (1928), pp. 59–66; "Assistência Médica aos Indígenas", *Boletim da Assistência Médica aos Indígenas e da Luta contra a Moléstia do Sono* 3,3 (1929), pp. 294–319, here pp. 310–311 and Sousa, Jacinto de, *Relatório da missão médica volante de assistência aos indígenas do Dande, 1928* (Colecção de relatórios, estudos e documentos coloniais; 23), Lisboa: Agência Geral das Colónias, s.d.
[109] Alto Comissariado da República em Angola (Vicente Ferreira), *Diploma Legislativo n. 744*, 24.03.1928, in: *Boletim Oficial da Colónia de Angola, Série I*, 24.03.1928, pp. 112–115.
[110] On the second phase and the role of the mobile missions, see Mora, *Os Serviços de Saúde (1928),* pp. 92–93; Alto Comissariado da República em Angola (Vicente Ferreira), *Diploma Legislativo n. 744*, point 4 of the preamble and art. 6; Mora, *Assistência médica aos indígenas (1927),* p. 2.
[111] Quotes Mora, *Assistência médica aos indígenas (1927),* p. 2.

attained.[112] Here, expensive individual, curative medicine would cease to be a state matter and would instead become a private issue (i.e., a paid service) between doctor and patient. The state health services, on their part, would concentrate on their ultimate goal, which was not to cure the ill, a task reserved for private doctors, but to take care of the healthy.[113] To realize this Copernican turn, it would be necessary to actively enter into the lives of the natives and change, through the use of propaganda and education, their habits of hygiene, including practices connected with nutrition, housing and childbirth.

In expectation of resistance, not only from the targeted population, but from conservative colleagues and administrators as well, Damas Mora acknowledged that this transition would be a long and difficult process and might take between ten to twenty years to accomplish.[114] In the meanwhile, government doctors would have to continue to dispense individual curative medicine for humanitarian reasons, but also because to do so served prophylactic and even long-term strategic purposes. With respect to communicable diseases such as sleeping sickness, malaria or venereal diseases, for instance, curative treatment was also inherently prophylactic, as it interrupted the contamination chain. But, most importantly, individual assistance was considered instrumental in gaining the necessary support of the African population for European concepts of healing – it was "a valuable means for attracting the native population, and for a doctor the best possible way to gain the prestige that will allow him to impose, with moral authority, hygienic measures on the community."[115]

On a programmatic level, Damas Mora's vision of such a socio-hygienic transformation was not exceptional in the Africa of the 1920s. It was largely congruent with the ideas embraced by the medical services of other colonial nations in sub-Saharan Africa and must be situated within the context of the rise of social medicine in the first decades of the twentieth century.[116] Damas Mora's ideas on public health, which he would expound on in even greater detail and even more clarity following his transfer to Macau, were clearly informed by current theories of social medicine.[117]

It is nearly impossible to provide a consensual definition of what social medicine was (or is). As several authors have pointed out, social medicine is an "elusive" or "volatile" concept that has received partially overlapping, but also partly diverging, definitions by both its protagonists and historians. Moreover, other terms such as social hygiene, preventive

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[112] Mora, *Os Serviços de Saúde (1928),* p. 94.
[113] *Ibid.,* pp. 88; 93-94; Mora, *Assistência médica aos indígenas (1927),* pp. 2–3.
[114] Mora, *Os Serviços de Saúde (1928),* p. 94.
[115] Mora, *Assistência Médica ao Indígena em África (1926),* p. 355.
[116] For references to other health services, see *Ibid.,* p. 355.
[117] Mora, António Damas, "Preâmbulo aos relatórios do serviço de saúde e higiene de Macau referentes a 1934 e 1935 (Macau, 16 de Julho 1936)", *Boletim Sanitário de Macau* 18 (1934 [printed 1937]), pp. 37–64.

medicine, public hygiene and public health have often been used as synonyms, but also as concepts distinct from that of social medicine.[118] Although there was a broad continuum of meanings associated with the concept, including strands based on eugenic thinking, it is safe to say that at its core lay a new understanding of health that was not only critical of the predominant clinical approach to diseases but that also favoured a holistic approach to the human and social body. Under the influence of social science, social medicine emphasized the social causes of both disease and health and, therefore, advocated preventive measures to preserve the health of the individual and social body.[119]

The transition to social medicine did not develop everywhere at the same time, and in some parts of the world the transition was more pronounced than in others. Nor, and this must be stressed, has this transition ever reached completion. To a large extent, social medicine remained a utopian vision, a "dream, inaccessible and constantly reiterated, of European hygienists".[120] Yet the ideals of social medicine, which had emerged in the second half of the nineteenth century and had gained some acceptance in medical discourse in pre-First World War Europe[121], made a breakthrough in the Interwar Period. Individual states, but also international organisations such as the Rockefeller Foundation, the ILO and most notably the LNHO embraced some core issues of social medicine, such as nutrition, housing, rural hygiene and maternal and infant healthcare. The influence of the international epistemic community of public health experts associated with the LNHO was particularly instrumental in disseminating the ideas of social medicine.[122]

Certainly, international programmes of this nature focused mainly on Europe. In colonial Africa, far-reaching international programmes in these areas would only be

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[118] On the problem of a definition, see Borowy, Iris, "International Social Medicine between the Wars. Positioning a Volatile Concept", *Hygeia Internationalis* 6,2 (2007), pp. 13–35, here pp. 13-14, quotes p. 13 and Porter, Dorothy, "How Did Social Medicine Evolve, and Where Is It Heading", *PLoS Med* 3,10 (2006), pp. 1667–1672. online DOI: 10.1371/journal.pmed.0030399, here p. 1667. For an overview of some of the most influential conceptualizations of social medicine by people like George Rosen, Alfred Ryle, René Sand, Alfred Grotjahn and Rudolf Virchow, to name just a few, see Porter, Dorothy; Porter, Roy, "What was Social Medicine? An Historiographical Essay", *Journal of Historical Sociology* 1,1 (1988), pp. 90–160.

[119] See Porter/Porter, *What was Social Medicine?*; Borowy, *International Social Medicine*; Porter, Dorothy, "Introduction", in: Porter, Dorothy (ed.), *Social Medicine and Medical Sociology in the Twentieth Century,* Amsterdam: Rodopi, 1997, pp. 1–31; Weindling, Paul, "Social Medicine at the League of Nations Health Organisation and the International Labour Office Compared", in: Weindling, Paul (ed.), *International Health Organisations and Movements, 1918-1939,* Cambridge: Cambridge University Press, 1995, pp. 134–153.

[120] Lachenal, *Le médecin qui voulut être roi,* p. 123.

[121] For England and Germany, see Porter/Porter, *What was Social Medicine?*. For Portugal, see Garnel, Rita, "A consolidação do poder médico. A medicina social nas teses da escola médico-cirúrgica de Lisboa (1900-1910)", in: Pereira, Ana Leonor; Pita, João Rui (eds.), *Miguel Bombarda (1851 - 1910) e as singularidades de uma época,* Coimbra: Universidade de Coimbra, 2007, pp. 77–88.

[122] Weindling, *Social Medicine*; Borowy, *International Social Medicine*; Borowy, Iris, "Of Medicine and Men - Introduction", in: Borowy, Iris; Hardy, Anne (eds.), *Of Medicine and Men. Biographies and Ideas in European Social Medicine between the World Wars,* Frankfurt am Main: Lang, 2008, pp. 7–21, here p. 10.

conceived after the Second World War.[123] Yet, already between the two world wars, the fear of vanishing African populations and the depletion of labour reservoirs made the rapidly growing European medical corps increasingly receptive to the very same ideas.

[123] See below.

4. Demography and Depopulation

Indeed, calls for the reform and expansion of healthcare provisions not only resulted from international pressure, they were inextricably linked to persistent and even growing fears of population decline as well. Aside from the ravages of sleeping sickness in northern Angola, colonial officials identified a wide array of causes that were depopulating the whole colony, including other epidemic and endemic diseases, low fertility, high infant mortality and emigration movements. In the 1920s, depopulation became a pervasive idea.[124] It was openly acknowledged at the highest levels of government: Remarking upon his second term in Angola (1921-1924), former High Commissioner Norton de Matos expressed the firm belief that the native population in Angola was still decreasing in number due to unchecked diseases, poor hygiene and nefarious colonial policies. The increase of health provisions was one of the key measures with which he proposed to stem the tide.[125]

Portuguese fears of population decline were anything but exceptional. Immediately following the First World War, a large majority of colonial observers came to believe that the native populations in tropical Africa – and some other tropical regions such as Melanesia – were decreasing (or at best stagnating) for more or less the same reasons as those stated with regard to the population of Angola.[126] That the depopulation theory gained so much credit at the time was probably due as much to the outbreak or intensification of epidemic diseases

[124] See, for instance, Alberto de Queiroz (Chefe dos Serviços de Saúde de Angola), *Serviço de Saude de Angola. Os seus progressos nos ultimos 40 annos - o seu estado actual, e os melhoramentos e reformas de que precisa*, 28.05.1917, pp. 19-20, in: AHU, MU, DGAPC 3449; Athayde, Luiz de Mello e, "O perigo do despovoamento de Angola", *Boletim da Sociedade de Geografia de Lisboa* 36 (1918), pp. 227–243; Correia, Alberto Carlos Germano da Silva, "Os processos práticos de hospitalização dos indígenas e a sua assistência médica em Angola", *Revista Médica de Angola* 4,2 (1923), pp. 179–200, here p. 180 and António Leite de Magalhães, *A situtaçao de Angola – O Século entrevista o Sr. Major Leite de Magalhaes apoz a sua chegada a Lisboa*, in: O Comércio de Angola, 17.03.1927, pp. 1–2.

[125] Matos, José Mendes Ribeiro Norton de, *A Província de Angola,* Porto: Edição de Maranus, 1926, pp. 227–277.

[126] For tropical Africa, see for instance, Headrick, *Colonialism, Health and Illness,* pp. 104–105; Cinnamon, John M., "Counting and Recounting. Dislocation, Colonial Demography, and Historical Memory in Northern Gabon", in: Ittmann, Karl; Cordell, Dennis D.; Maddox, Gregory H. (eds.), *The Demographics of Empire. The Colonial Order and the Creation of Knowledge,* Ohio: Ohio University Press, 2010, pp. 130–156, here pp. 142–143; Summers, Carol, "Intimate Colonialism. The Imperial Production of Reproduction in Uganda, 1907-1925", *Signs* 16,4 (1991), pp. 787–807, here p. 795 and the discussions at the International Colonial Institute: Gohr, M., "Des remèdes à apporter à la dépopulation des indigènes, dans les colonies équatoriales de l'Afrique", in: Institut Colonial International (ed.), *Compte Rendu de la Session tenue à Paris les 17, 18 e 19 mai 1921,* Bruxelles: Institut colonial international, 1921, pp. 507–535; "Discussion - Des remèdes à apporter à la dépopulation des indigènes dans les colonies équatoriales de l'Afrique", in: *Compte Rendu de la Session tenue à Paris les 17, 18 e 19 mai 1921,* Bruxelles: Institut colonial international, 1921, pp. 184–212. A more critical account can be found in Meyer; Gerhard, "Entvölkerung in unseren Kolonien", in: Schnee, Heinrich (ed.), *Deutsches Kolonial-Lexikon,* vol. 1, Leipzig: Quelle & Meyer, 1920, p. 565. For Melanesia, see especially Rivers, W. H. R. (ed.), *Essays on the Depopulation of Melanesia,* Cambridge: Cambridge University Press, 1922; Roberts, Stephen H., *Population Problems of the Pacific,* London: Routledge, 1927 and the analysis in Widmer, Alexandra, "Of Field Encounters and Metropolitan Debates. Research and the Making and Meaning of the Melanesian 'Race' during Demographic Decline", *Paideuma* 58 (2012), pp. 69–93.

during and after the war – among which influenza, smallpox and plague – as to the greater awareness of disease incidence and fertility patterns.[127] What was also largely new was that claims of population decline were no longer solely based on general observations of people dying, deserted areas and very partial and inaccurate mortality statistics. In order to bolster their claims, discussants gradually began to use demographic data that were now being produced on a larger scale, in part as a result of the use of new techniques that, although they were still much contested, were without a doubt far more accurate than before.[128] An illuminating example of both the use and contested nature of demographic data is the discussion between the Governor of Katanga and future Governor-General Martin Rutten and the Jesuit missionary procurator Legrand on depopulation in the Belgian Congo that was published in the semi-official journal *Congo* in 1920-1921. While Rutten dismissed the idea that the population surveys of 1916 and 1917 supported the depopulation theory, arguing that the data were too unreliable and *a priori* incapable of indicating any evolution of the population, Legrand countered that, though imperfect, the data revealed a low percentage of

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[127] There is a vast body of scholarship on the destruction wrought by the 1918-19 influenza epidemic in Africa and colonial reactions to it, see, for instance, Patterson, K. David, "The diffusion of influenza in sub-Saharan Africa during the 1918-1919 pandemic", *Social Science and Medicine* 17 (1983), pp. 1299–1307; Patterson, K. David, "The Influenza Epidemic of 1918-19 in the Gold Coast", *Journal of African History* 24,4 (1983), pp. 485–502; Philipps, Howard, "South Africa's Worst Demographic Disaster. The Spanish Influenza Epidemic of 1918", *South African Historical Journal* 20,1 (1988), pp. 57–73; Echenberg, Myron, "L'histoire et l'oubli collectif. L'épidémie de grippe de 1918 au Sénégal", in: Cordell, Dennis D.; Gauvreau, Danielle; Gervais, Raymond R.; Le Bourdais, Céline (eds.), *Population, Reproduction, Sociétés. Perspectives et Enjeux de la Démographie Sociale, Mélanges en l'honneur de Joel W. Gregory,* Montréal: Les Presses de l'Université de Montréal, 1993, pp. 283–295; Tomkins, Sandra M., "Colonial Administration in British Africa during the Influenza Epidemic of 1918-19", *Canadian Journal of African Studies* 28,1 (1994), pp. 60–83. See also Gewald, Jan-Bart, "Spanish Influenza in Africa. Some Comments Regarding Source Material and Future Research", *African Studies Centre - Leiden, Working Paper* 77 (2007), http://www.ascleiden.nl/Pdf/workingpaper77.pdf (last accessed 18.12.2013), where further literature is cited and an analysis of the spread of influenza in Sierra Leone, Gambia and Nigeria is conducted. Scholarly work has focused on the British colonies. Although influenza hit Angola as well, there is no study available. For references to the Angolan case, see Correia, Alberto Carlos Germano da Silva, "O clima, a nosografia e o saneamento de Loanda", *Revista Médica de Angola* 4,2 (1923), pp. 377–482, here p. 406; Mora, António Damas, "A mortalidade infantil de brancos e indígenas nas Colónias de Angola e Moçambique, suas causas principais e remédios possíveis. Métodos para a organização de estatística da mortalidade infantil", in: Comissão Executiva dos Centenários (ed.), *Memórias e comunicações apresentada ao Congresso Colonial (IX Congresso)* (Publicações do Congresso do Mundo Português; 14-16), vol. 14, Lisboa, 1940, pp. 557–625, here pp. 581–582. For plague and other diseases in this period, see also Echenberg, Myron J., *Black death, white medicine. Bubonic plague and the politics of public health in colonial Senegal, 1914-1945,* Portsmouth, NH: Heinemann, 2002; Summers, *Intimate colonialism,* p. 795. Plague also hit Angola in the early 1920s, see Mora, António Damas, "A pandemia de peste durante o ano de 1921. A peste em Angola (1921-1922)", *Revista Médica de Angola* 3 (1922), pp. 7–21; Mora, António Damas, "A segunda epidemia de peste em Loanda. Setembro, Outubro e Novembro de 1922", *Revista Médica de Angola* 3 (1922), pp. 102–117.

[128] For the German colonies, for instance, see the studies by Carl Ittameier and H. Feldmann printed in *Wissenschaftliche Beiträge zur Frage der Erhaltung und Vermehrung der Eingeborenen-Bevölkerung. Ergebnisse der Eduard Woermann-Preisaufgabe,* Hamburg: Friederichsen, 1923. For further examples, see Chapter 3.

children in the colony and thus corroborated the widespread impression of low fertility and population decline.[129]

Assumptions about low fertility and high infant mortality played an important role in the Interwar debate on Africa's population problems. Early demographic studies often focused on these interconnected issues and, more often than not, they fuelled depopulation anxieties by presenting pessimistic results based on (small) population samples. Yet, alongside this type of demographic reasoning, which I will examine in detail in the next chapter, there were also persistent assumptions about demographic decline based on the alleged evolution of the *whole* population. The construction and use of this different kind of demographic evidence will be the focus of this section. I will argue that, with regard to Angola, fears of depopulation acquired a new dimension in the second half of the 1920s, as they were now supported by demographic surveys, which, for the first time, covered the entire colony. Moreover, these fears also neatly tied in with debates on optimum density and labour scarcity. To understand why these surveys, the results of which were never wholly accepted, heightened anxieties and why they were carried out in the first place, it is necessary also to discuss earlier forms of demographic intelligence.

Census taking has had a long tradition in colonial Angola. The first demographic survey of the population in Portuguese-ruled Angola was ordered in the 1770s by Marquês de Pombal, Portugal's powerful and 'enlightened' Prime Minister, and from the late eighteenth to the first half of the nineteenth century, censuses were carried out almost yearly.[130] The

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[129] Rutten, A., "Notes de Démographie Congolaise", *Congo. Revue générale de la colonie belge* 1,2 (1920), pp. 260–275; Legrand, E., "La dépopulation du Congo belge et les recensements de 1917", *Congo. Revue générale de la colonie belge* 2,1 (1921), pp. 201–210; Rutten, A., "Démographie congolaise", *Congo. Revue générale de la colonie belge* 2,2 (1921), pp. 1–13.

[130] See Curto, José C., "Sources for the pre-1900 Population History of Sub-Saharan Africa. The Case of Angola, 1773-1845", *Annales de Démographie Historique* (1994), pp. 319–338. For the broader intellectual and administrative context of bureaucratic rationalization in the second half of the eighteenth century that underpinned these censuses, see Santos, Catarina Madeira, "Administrative Knowledge in a Colonial Context. Angola in the Eighteenth Century", *The British Journal for the History of Science* 43,4 (2010), pp. 539–556. These colonial censuses did not precede census taking in the metropolis: in the wake of the devastating 'Lisbon earthquake' of 1755, José Sebastião de Carvalho e Melo, as the later Marquês de Pombal was still referred to at the time, commissioned a demographic survey (as part of a broader investigation) in all of the parishes of Portugal. See Barata, Maria do Rosário Themudo, "The Lisbon Earthquake of November 1st, 1755. An Historical Overview of its Approach", in: Mendes-Víctor, Luiz A.; Oliveira, Carlos Sousa; Azevedo, João; Ribeiro, António (eds.), *The 1755 Lisbon Earthquake. Revisited,* s.l.: Springer Netherlands, 2009, pp. 26–41; Maxwell, Kenneth, *Lisbon 1755. The First 'Modern' Disaster (but if modern, how it is so?)*, online http://www.mod-langs.ox.ac.uk/files/windsor/5_maxwell.pdf, last accessed 18.12.2013. I would like to thank Ida Pugliese for drawing my attention to this survey. Curto has analysed the censuses on Luanda, see Curto, José C., "The Anatomy of a Demographic Explosion: Luanda, 1844-1850", *The International Journal of African Historical Studies* 32,2/3 (1999), pp. 381–405 and Curto, José C.; Gervais, Raymond R., "The Population History of Luanda during the Late Atlantic Slave Trade, 1781-1844", *African Economic History* 29 (2001), pp. 1–59. For the second half of the nineteenth century, Curto lists only a few censuses. It is unclear whether there was an interruption in the production of census maps, or whether this is merely an archival issue. At least in the 1860s, some census maps were published in the Boletim Oficial de Angola, see, for instance, *Mappa estatistico*

censuses were most likely classified as *arcana imperii*, and it was not until 1846 that the first demographic data on Angola were effectively published in Lopes de Lima's statistical survey of Portugal's overseas possessions.[131] While the frequency of census taking seems to have subsided in the second half of the nineteenth century, the scramble for Africa and the gradually emerging international imperative of scientific colonialism generated new interest in collecting and publishing data on the (native) populations.[132] The census was now clearly defined as an "instrument of knowledge" capable of guiding and facilitating colonial rule.[133] When the Overseas Minister proposed a census law for the Portuguese colonies in 1899, he declared: "In the overseas possessions, agricultural, industrial and commercial work depends directly on the indigenous population and the population that has emigrated from the metropolitan states. It is, therefore, of greatest benefit, even of indispensable necessity, to know these populations in their qualities, number and origin, something only periodically conducted censuses will allow."[134]

Although the law, which was approved a few months later, established that a general census of the population in the Portuguese overseas territories ought to be taken every ten years, starting in 1900, demographic knowledge remained highly precarious and incomplete.[135] There was an obvious reason for this state of affairs: most of the territory

da população da Provincia d'Angola referido ao dia 31 de Dezembro de 1861, 03.09.1862, in: Boletim Official de Angola, 14.02.1863, between pages 56-57 and the census map for 1866 reprinted in Lemos, Alberto, "Introdução ao primeiro censo geral da população de Angola", in: Colónia de Angola - Direcção dos Serviços de Economia - Repartição de Estatística Geral (ed.), *Censo Geral da População, 1940,* vol. 1, Luanda: Imprensa Nacional, 1941-1947, pp. 1–76, here pp. 10–13.

[131] *Mapa da População de Angola [1845]*, in: Lima, José Joaquim Lopes de, *De Angola e Benguella e suas dependencias* (Ensaios sobre a statistica das possessões portuguezas na Africa occidental e oriental, na Asia occidental, na China, e na Oceania; 3), Lisboa: Imprensa Nacional, 1846, part 1, p. 4A. On the secrecy of demographic knowledge and the shift toward the publication of government statistics in the 1820s, see Hacking, Ian, *The Taming of Chance,* Cambridge: Cambridge University Press, 1990, pp. 16–34. On the relevance of the concept of *arcana imperii* for the non-publication of scientific knowledge on the Iberian empires in Early Modern Times, see Bleichmar, Daniela; De Vos, Paula; Huffine, Kristin, et al. (eds.), *Science in the Spanish and Portuguese Empires, 1500-1800,* Stanford: Stanford University Press, 2009 and Portuondo, María M., *Secret Science. Spanish Cosmography and the New World,* Chicago: University of Chicago Press, 2009.

[132] For a general discussion of the relationship between knowledge, science and colonial rule in other colonies, see, for instance, Conrad, Sebastian, "Wissen als Ressource des Regierens in den deutschen und japanischen Kolonien des 19. Jahrhunderts", in: Risse, Thomas; Lehmkuhl, Ursula (eds.), *Regieren ohne Staat? Governance in Räumen begrenzter Staatlichkeit*, Baden-Baden: Nomos Verlagsgesellschaft, 2007, pp. 134–153 and Lagae, Johan, "'Het echte belang van de kolonisatie valt samen met dat van de wetenschap'. Over kennisproductie en de rol van wetenschap in de Belgische koloniale context", *Het geheugen van Congo. De koloniale tijd,* Tervuren: Koninklijk Museum voor Midden-Afrika, 2005, pp. 131–138. For the role of censuses, see the Introduction.

[133] Peabody, Norbert, "Cents, Sense, Census. Human Inventories in Late Precolonial and Early Colonial India", *Society for Comparative Study of Society and History* 43 (2001), pp. 819–850, here pp. 821 (quote).

[134] Diario da Camara dos Senhores Deputados, *Sessão n. 31 de 20 de Março de 1899*, p. 74.

[135] Ministério da Marinha e Ultramar, "Lei auctorisando o governo a proceder de dez em dez anos ao recenseamento geral da população nas populações ultramarinas portuguezas", in: *Collecção Official da Legislação Portuguesa anno de 1899,* Lisboa: Imprensa Nacional, 1900, p. 343. This periodicity followed the recommendations of the International Institute of Statistics and was already implemented in Portugal, like in most European countries. See Sousa, Fernando Alberto Pereira de, *A História da Estatística em Portugal,* Lisboa: INE, 1995, pp. 164–171. In Portugal, the first 'modern' census occurred in 1864. For a critical analysis,

within Angola's internationally recognised borders of the late 1880s and 1890s was not yet under effective Portuguese control, and even in those parts that were, local census commissions met with great difficulties, including the resistance of many Africans who did not want to be counted.[136] With a total population of 789,936, the 1900 census diverged considerably from the numbers that were subsequently published in the colony's statistical yearbooks for 1897 (433,397), 1898 (1,083,360) and 1899 (946,301), which were based on administrative counts and estimates (See Table 2.1 at the end of this section).[137] Although there would be various attempts in this direction during the following decades, the first 'scientific' census would only be conducted in 1940, seven years after a new, centralized statistical service had been created in the colony.[138]

This does not mean that, in the meantime, the colonial administration governed in complete demographic ignorance. As in other (African) colonies, this option was considered neither viable nor legitimate.[139] Hence, before 1940, different colonial departments produced

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see Branco, Rui Miguel C., "Contar (com) as Pessoas. O Recenseamento Geral da População de 1864", *Revista de História das Ideias* 26 (2006), pp. 385–438.

[136] On the planning and implementation of the 1900 census, see also Diniz, José de Oliveira Ferreira, "Contribuïção para o Estudo da Demografia Indígena de Angola", *Boletim da Agência Geral das Colónias* 6,58 (1930), pp. 32–53, here pp. 36–38 and Lemos, *Introdução ao primeiro censo,* pp. 20–27. There would still be some changes to Angola's borders with Namibia and the Belgian Congo in the 1920s, but these were rather limited. For an overview, see Oliveira, Joaquim Dias Marques de, *Os caminhos históricos das fronteiras de Angola,* Luanda: Cefolex, 2010. For an analysis of the negotiations regarding the Congo-Angola border, see Vellut, Jean-Luc, "Angola-Congo. L'invention de la frontière du Lunda (1889-1893)", *Africana Studia* 9 (2006), pp. 159–183 and Santos, Maria Emília Madeira, "A cartografia dos poderes. Da matriz africana à organização colonial do espaço", *Africana Studia* 9 (2006), pp. 129–143. For the negotiations on the border with Namibia, see also Chapter 5.

[137] All population figures mentioned in this section are summarized in Table 2.1 at the end of this section. For the figures from 1897 to 1900, compare the 1900 census data published in: Ministério dos Negócios da Marinha e Ultramar, *Annuario estatistico dos dominios ultramarinos portugueses, 1899 e 1900,* Lisboa: Imprensa Nacional, 1905, pp. 62-63, with Governo Geral da Província de Angola, *Annuario Estatístico da Província de Angola, 1897,* Loanda: Imprensa Nacional, 1899, pp. X-XI and 15-44; Governo Geral da Província de Angola, *Annuario Estatístico da Província de Angola, 1898,* Loanda: Imprensa Nacional, 1900, pp. IX-X and 1-66; Governo Geral da Província de Angola, *Annuario Estatístico da Província de Angola, 1899*, 2 vols, Loanda: Imprensa Nacional, 1901, vol. II, pp. 3-76.

[138] The decision to take a census in Angola and all other Portuguese colonies was made by the Council of Ministers, presided by António de Oliveira Salazar. In the year of the two big commemorations ('800 years of independence' and '300 years of restauration'), Salazar wanted "to present another testimony of Portugal's expansion in the world". See Presidência do Conselho, *Decreto-lei n.° 29:750*, 14.07.1939, in: Diário do Governo, 14.07.1939, pp. 719-720. The results of the Angolan census were published in Colónia de Angola - Direcção dos Serviços de Economia - Repartição de Estatística Geral (ed.), *Censo Geral da População, 1940*, 12 vols, Luanda: Imprensa Nacional, 1941-1947. On the history of the Statistical Services in Angola and their reform in 1932-1933, see Lemos, Alberto de, "Contribuïção para o Estudo da Organização dos Serviços Estatísticos das Colónias e suas relações com o Instituto Nacional de Estatística", in: Primeira Conferência Económica do Império Colonial Português (ed.), *1.a Comissão - Politica Comercial. Trabalhos apresentados,* Lisboa: Ministério das Colónias, 1937, pp. 111–137, esp. pp. 125-133.

[139] See, for instance, Gervais, Raymond R.; Mandé, Issiaka, "Comment compter les sujets de l'empire? Les étapes d'une démographie impériale en AOF avant 1946", *Vingtième Siècle. Revue d'Histoire* 95 (2007), pp. 63–74; Gervais, Raymond R.; Mandé, Issiaka, "How to Count the Subjects of Empire? Steps toward an Imperial Demography in French West Africa before 1946", in: Ittmann, Karl; Cordell, Dennis D.; Maddox, Gregory H. (eds.), *The Demographics of Empire. The Colonial Order and the Creation of Knowledge,* Ohio: Ohio University Press, 2010, pp. 89–112.

demographic data. Leaving aside the medical services, the involvement of which in the collection of demographic data will be discussed in the next chapter, this task fell first and foremost to the Native Affairs Department *(Secretaria dos Negócios Indígenas)*. The creation of this department in 1913 – upon the initiative of Governor-General Norton de Matos – adhered to the logic underlying scientific colonialism. The "greatest wealth" of the colony was the millions of natives, Norton de Matos explained. The study of the economic, political and social life of the *indígenas* of Angola, therefore, was "indispensable to properly guide the measures needed to improve and properly use such important population masses".[140] Along with the collection and analysis of ethnographic data, the codification of native customs, and the regulation of native labour, the yearly survey of the population was one of the key assignments of the Native Affairs Department.[141] From 1913 onwards, it compiled, published and analysed these demographic surveys in its annual reports.[142] These demographic surveys were based on the numbers counted by local administrators during tax collection and revealed a population that oscillated somewhere between 1.98 (1913), 2.12 (1914) and 1.67 million (1916) (See Table 2.1). Although these were the best data available, it was clear to all observers, including the Secretary of Native Affairs, José de Oliveira Ferreira Diniz (1913-1918 and 1921-1922), that these numbers were still "far from the truth", since various (unruly) parts of the territory had not yet been included in the count; some administrators still resorted to estimates instead of specific head counts; and, overall, many natives tried to evade taxation and enumeration.[143]

When, after an almost ten-year gap, the Native Affairs Department resumed the publication of administrative population figures in the mid-1920s, many shortcomings of

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[140] *Projecto de Decreto*, in: Acta da Sessão do Conselho do Governo [de Angola], 09.07.1912, in: AHU, MU, DGU 807A. Norton de Matos' project was approved by the Government Council in Luanda that same day and the Department began to function in early 1913, even if it was only confirmed by the Colonial Ministry at the end of 1913. See Offício do Governador Geral Norton de Matos ao Ministro das Colonias, 30.03.1913, in: AHU, MU, DGU 807A; Governador Geral de Angola, *Portaria Provincial n. 372 criando os Serviços dos Negócios Indígenas*, 17.04.1913 and Ministro das Colónias, *Decreto n. 175 criando a Secretaria dos Negócios Indígenas*, 21.10.1913, both reprinted in: Diniz, José de Oliveira Ferreira, *Negócios indígenas. Relatório do ano 1913,* Luanda: Imprensa Nacional de Angola, 1914, pp. 107–110. On this process, see also *Ibid.,* pp. 3–6.

[141] Governador Geral de Angola, *Portaria Provincial n. 372 criando os Serviços dos Negócios Indígenas*, 17.04.1913, art. 2 and Ministro das Colónias, *Decreto n. 175 criando a Secretaria dos Negócios Indígenas*, 21.10.1913, art. 1, both reprinted in: Diniz, *Negócios indígenas 1913,* pp. 107–110.

[142] See Diniz, *Negócios indígenas 1913,* pp. 11-16; Diniz, José de Oliveira Ferreira, *Negócios Indígenas. Relatório do ano 1914,* Luanda: Imprensa Nacional de Angola, 1915, pp. 7-25; Diniz, José de Oliveira Ferreira, *Negocios Indígenas. Relatório do ano 1916,* Lisboa: Tipografia do Anuário Comercial, 1917, pp. 4-6; Diniz, José de Oliveira Ferreira, *Negócios Indígenas. Relatório do ano 1915,* Lisboa: Tipografia Universal, 1918, pp. 3-5.

[143] Diniz, *Negócios indígenas do ano 1914,* p. 8 (quote). Diniz more or less made the same complaints in each annual report. See also Diniz, *Contribuição para o estudo,* pp. 40–46.

administrative enumerations still subsisted.[144] One fundamental aspect had changed, however: now that the pacification wars had ended, a whole series of rebellions been suppressed, and administrative authority had been established throughout (almost) the entire colony, these figures theoretically included (almost) the entire population. Despite the shortcomings of this method, officials like Ferreira Diniz believed that these figures were now close to representing demographic 'realities'.[145] Arguably, these new figures fuelled the debate on population decline. The surveys themselves certainly did not directly suggest that the population in Angola was still subject to population decline. The numbers, in fact, systematically ranged between 2.3 and 2.7 million throughout the second half of the 1920s and the 1930s, and they were thus considerably higher than those Ferreira Diniz had compiled in the 1910s (See Table 2.1).[146] If the surveys nevertheless contributed to strengthen a sense of a decline in the indigenous population, as I argue they did, that was because the numbers contained therein stood in stark contrast with common – much higher – expectations.[147]

Indeed, in the late nineteenth and early twentieth century, geographers, doctors, missionaries and explorers had estimated the total population of Angola to be significantly higher, wherein the estimates reported varied greatly, between 4 and 12 million.[148] The budget

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[144] From 1926 onwards, population maps were published, starting in the year 1925, in the Boletim Oficial de Angola. For a collection of these maps, see, for instance, AHU, MU 975 and the summaries in Lemos, *Introdução ao primeiro censo,* p. 30. See also the interview with Ferreira Diniz in Mimoso Moreira, *Trabalhadores de Angola para S. Tomé e os interesses desta Provincia*, in: O Comércio de Angola, 24.08.1926, p. 1. Diniz' claim that, between 1916 and 1925, annual surveys had continued to be compiled (but just not published) is supported by the multitude of completed local surveys I have encountered in the Arquivo Nacional de Angola (ANA) for these years. See, for instance, the detailed maps for the *circunscrições* of the Zaire and Congo Districts in 1922 and 1923, in: ANA, Cx. 3625 and 4995. For his claim, see Diniz, *Contribuição para o estudo,* p. 45. Nevertheless, the Native Affairs Department had been repeatedly reformed, in 1917 and 1921, and lost some of its influence, see Diniz, José de Oliveira Ferreira, *A missão civilisadora do estado em Angola,* Lisboa: Centro Tipograpfico Colonial, 1926, pp. 112–113 and Secretaria de Colonização e Negócios Indígenas (Província de Angola), *Legislação Provincial,* Loanda: Imprensa Nacional de Angola, 1921, pp. 3–15. For later complaints about this lack of influence, see José Ribeiro da Cruz, *Relatório do Chefe dos Serviços, interino, da Repartição Central dos Negócios Indígenas, ano de 1941*, [1942], in: AHU, MU, ISAU 1725, pp. 2-3.

[145] See Diniz, *Contribuição para o estudo,* p. 53. Virtually the whole territory had definitively been occupied by the late 1910s, see Pélissier, René, *História das campanhas de Angola. Resistência e Revoltas (1845-1941)*, 2 vols, Lisboa: Editorial Estampa, 1986 [1977], esp. the overview in vol. 1, pp. 205-240.

[146] See footnote 144.

[147] For a similar argument concerning French Equatorial Africa, see Headrick, *Colonialism, Health and Illness,* p. 105.

[148] For the figure of four million, see Vasconcelos, Ernesto Júlio de Carvalho, *As colonias portuguezas. Geographia physica, politica e economica,* Lisboa: Typographia da Companhia Nacional Editora, 1896, p. 162; Trancoso, Francisco, *Angola. Memória,* Lisboa: Oficinas da Secção de Publicidade do Museu Comercial, 1920, p. 162. For the seven million estimate, see Nascimento, José Pereira do; Mattos, A. Alexandre de, *A colonização de Angola,* Lisboa: Mendonça, 1912, p. 52, for the nine million estimate, see Sasportes, Simão, *A colonização branca e o aumento da população indígena em Angola e Moçambique. Tese apresentada ao primeiro Congresso da Colonização,* Lisboa, 1934, p. 10. Between 1917 and 1922, Magalhães had calculated the total population at about 10 Million, see António Miranda Magalhães, *O desenvolvimento e fixação da população indígena e as missões* [1934], p. 2, in: AHU, MU, AGC 950. According to Athayde, old sources had estimated the population between ten and twelve million, see Athayde, *O perigo do despovoamento,* p. 229.

in 1897 had even mentioned a population of 19,400,000.[149] In the early 1920s, most observers, including High Commissioner Norton de Matos, had still estimated the population to lie somewhere around 5 million.[150] Regardless of appearances, these were not just random number games. Norton de Matos' estimate of 5 million was an educated guess, based on the multiplication of the number of enrolled male taxpayers by three to five, depending on the level of administrative occupation in each region, and by adding a number of women based on the presumed average sex ratio of 100 men to 127 women.[151] Most of the older figures, on the other hand, were calculated on the basis of another estimate: that of population density. Often, as was the case with geographers such as Josef Chavanne and Ernesto Vasconcellos, density estimates stemmed from the observation of a specific part of the colony and were then extrapolated in a more or less logical manner for the entire territory.[152]

Arguably, the shock caused by the Interwar population surveys was due as much to the absolute population figures of roughly 2.5 million as to the corresponding population density of just below 2 people per square kilometre. In Norton de Matos' words: "From 1912 to 1923, we were all convinced that the density of the population was more than four inhabitants per square kilometre; today everybody believes that this density does not reach two inhabitants."[153] The importance with which population densities were being attributed in the colonial sphere may be understood when taking into consideration the fact that, in 1921, Ferreira Diniz and Norton de Matos had elaborated new regulations for the administrative population surveys *(recenseamentos)* instructing local administrators to calculate population densities as well.[154] Moreover, during the Interwar Years, colonial officials began to compare the population density in Angola with those in other parts of the world and most notably with

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[149] Governo Geral da Província de Angola, *Annuario Estatístico para 1897,* p. X.

[150] Matos, *A província de Angola,* p. 227. In the same book, Norton de Matos also advanced the number of six million, see *Ibid.,* pp. 7–8.

[151] Such an estimate, dated 30 September 1922, is reprinted and briefly discussed in Muralha, Pedro, *Terras de África. S. Tomé e Angola. Com introdução de Freire d'Andrade,* Lisboa: Publicitas, 1925, pp. 118; 446-448.

[152] For explicit examples, see, for instance, Chavanne, Josef, *Reisen und Forschungen im alten und neuen Kongostaate,* Jena: Hermann Costenoble, 1887, pp. 380; 501-508 (for the Congo Region); Vasconcelos, *Colonias portuguezas,* p. 162 and António Miranda Magalhães, *O desenvolvimento e fixação da população indígena e as missões* [1934], pp. 1-2, in: AHU, MU, AGC 950.

[153] Matos, José Mendes Ribeiro Norton de, "Síntese das medidas aconselháveis para impulsionar o povoamento indígena de Angola", in: Comissão Executiva dos Centenários (ed.), *Memórias e comunicações apresentada ao Congresso Colonial (IX Congresso)* (Publicações do Congresso do Mundo Português; 14-16), vol. 15, Lisboa, 1940, pp. 479–525, here p. 489.

[154] Govêrno Geral de Angola, *Portaria Provincial n° 112*, 16.11.1921, in: *Boletim Oficial do Governo Geral da Provincia de Angola, Série I*, 26.11.1921, p. 320. On this, see also Diniz, *Contribuição para o estudo,* p. 46. Population densities indeed began to appear in administrative population surveys immediately afterwards, see, for instance, Magalhães, António Leite de, *Relatório do Governador do Distrito do Cuanza-Sul. Geografia histórica, física, política e económica do distrito, (referido a 30 de Junho de 1922),* Lisboa: Centro Tipografico Colonial, 1924, p. 42 and the maps for the Zaire and Congo Districts in 1922 and 1923, in: ANA, Cx. 3625 and 4995.

other African colonies, for which data were being published as well.[155] These comparisons revealed that Angola was by far the least densely populated Portuguese colony and also figured among the least densely populated in Central and Southern Africa. Many Portuguese observers noted that population density in Angola was still higher than in French Equatorial Africa, Namibia or Northern Rhodesia and that the African continent was generally sparsely populated. Nevertheless low density continued to be perceived as a problem. Why?

To begin, leading Portuguese colonialists equated low population density with underpopulation, a term that relates density to the natural resources of a given space. They believed that Angola, like Mozambique, could sustain a much greater population.[156] Obviously influenced by Interwar debates on optimum population density, Damas Mora took this a step further. During his journey in West Africa in 1926, he concluded that a close link existed between density and prosperity: prosperity reigned where density was greater than ten inhabitants per square kilometre (i.e., mainly in the British colonies), whereas the situation was "deficient" in those regions that were characterized by a density inferior to five inhabitants per square kilometre. Angola clearly fell into the latter category.[157] The underlying reasoning was that low density hindered colonial development. "The agricultural-industrial valorization of many African regions", Germano Correia wrote in 1923, "is intimately linked to the density of their populations".[158] Increasing population density was, in other words, an economic imperative closely linked to the labour question.

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[155] Repartição Central de Estatística Geral de Angola, *Anuário Estatístico de Angola. Ano de 1933,* Luanda: Imprensa Nacional, 1935, pp. 5-6 (and subsequent yearbooks); Mora, António Damas, "O estado actual da Assistência Médica aos Indígenas na colónia de Angola e outras colónias estrangeiras do grupo da Africa inter-tropical", *III Congresso Colonial Nacional de 8 a 15 de Maio de 1930. Actas das Sessões e Teses,* Lisboa: Tip. e Pap. Carmona, 1934, p. 17; Silva, Francisco Venâncio, *Colónia de Angola - Serviço permanente de Prevenção e Combate à Peste Bubónica no Sul de Angola. Relatorio 1933* (Colecção de relatórios, estudos e documentos coloniais; 37), Lisboa: Agência Geral das Colónias, 1936, pp. 101–103; Cruz, José Ribeiro da, *Geografia de Angola,* Lisboa, 1940, pp. 103–106; Mora, *A mortalidade infantil,* pp. 577–579; Matos, *Síntese,* p. 489.

[156] Cruz, Domingos da, *A Crise de Angola,* Lisboa: Imprensa Lucas & C.a, 1928, p. 121; Mora, *A mortalidade infantil,* p. 625; Francisco dos Santos Serra Frazão, *Relatorio da Curadoria Geral dos Indigenas, referente aos anos de 1939 e 1940, apresentado pelo chefe do expediente da repartiçao central, no impedimento do respectivo Chefe e Curador Geral*, 25.06.1941, p. 3, in: AHU, MU, ISAU 1725. In 1923, the head of the colonial medical services in Mozambique had declared that Mozambique could support a population five times as large as the one indicated by demographic statistics, see Santos, Francisco Ferreira dos, "Assistência médica aos Indígenas e processos práticos da sua hospitalisação", *Revista Médica de Angola* 4,2 (1923), pp. 51–71, here p. 59.

[157] See, retrospectively, Mora, *A mortalidade infantil,* p. 563 (here also quote). See also Mora, *Estado actual,* p. 17. Bashford has incisively argued that, in the Interwar Period, debates on world population growth or decline were closely linked with geopolitical and economic debates regarding (ideal) population density, see Bashford, Alison, "Population, Geopolitics, and International Organizations in the Mid Twentieth Century", *Journal of World History* 19,3 (2008), pp. 327–348 and Bashford, Alison, *Global Population. History, Geopolitics, and Life on Earth,* New York: Columbia University Press, 2014 (forthcoming). The question of ideal population density was extensively debated during the First World Population Conference in Geneva in 1927, see Sanger, Margaret (ed.), *Proceedings of the World Population Conference. Held at the Salle Centrale, Geneva, August 29th to September 3rd, 1927,* London: Edward Arnold, 1927, esp. pp. 72-111 and 118-122.

[158] Correia, *Processos práticos,* p. 180.

Indeed, in the 1920s, the impression that the population was already reduced and possibly still in decline was reinforced by heated debates about the 'labour problem' *(problema da mão d'obra)* veritably filling the pages of local newspapers. European entrepreneurs, often backed by journalists and colonial officials, feared that the African labour pool was or in the near future would not be big enough to supply their demands. Anxieties over labour scarcity were not new and, as in the first decade of the twentieth century, the complaints of entrepreneurs were linked to a public campaign to stop the export of Angolan contract labourers to São Tomé and Príncipe, for which Angola did not have, in their opinion, sufficient demographic resources as it was.[159] At the same time, the aim of the complaints was to put pressure on the government to take a more active part in the recruitment process and, if necessary, to force Africans into labour contracts. This was exactly what Norton de Matos had forbidden upon his return to Angola as High Commissioner in 1921.[160]

The interesting point here is that Norton de Matos, who *a priori* did not believe in the veracity of labour scarcity claims, chose to refute them by commissioning a labour survey which, though apparently proving he was right, ultimately contributed to further reinforcing the belief that labour scarcity and underpopulation were plaguing the colony. How did that happen? In 1923, Norton de Matos ordered that, for each administrative *circunscrição*, the number of (available) male African labourers was to be established and compared with the total labour demands of the colonial state, private enterprises (in agriculture, industry and trade), and native agriculture. When the results were finally published in January 1925, long after Norton de Matos' resignation, they demonstrated that there were far more male labourers

[159] For the first decade of the twentieth century, a brief analysis of the protests of planters, journalists and colonial officials in Angola against this labour trade can be found in Duffy, *A question of slavery,* pp. 177–179. A more substantial study that also includes the period between the 1910s and 1940s has still to be carried out, however. On this caveat, see also Nascimento, Augusto, "Relações entre Angola e S. Tomé e Príncipe na época contemporânea. Esboço de problematização em torno da transferência de mão-de-obra e das relações políticas", *Construindo o passado Angolano. As fontes e a sua interpretação, Actas do II seminário internacional sobre a história de Angola; Luanda, 4 a 9 de agosto de 1997,* Lisboa, 2000, pp. 679–694, here pp. 684–685. In the 1920s, newspapers like the Jornal de Angola, O Comércio de Angola and A Província de Angola published a multitude of articles on this issue. By way of example, see *Mão d'Obra*, in: O Comércio de Angola, 25.03.1926, p. 1; *Ás armas por Angola*, in: O Comércio de Angola, 15.04.1926, p. 1.

[160] Alto Comissariado da República em Angola (Norton de Matos), *Decreto n.° 40 revogando disposições sobre o regime de angariamento de trabalhadores indigenas*, 03.08.1921, in: *Boletim Oficial da Província de Angola, Série I*, 04.08.1921, pp. 205–206; Alto Comissariado da República em Angola (Norton de Matos), *Circular aos Srs. Governadores dos Distritos, ao Secretário de Colonização e Negócios Indígenas, aos Srs. Administradores das Circunscrições Civis e Capitães-mores*, 02.10.1921, in: *Boletim Oficial da Província de Angola, Série I*, 08.10.1921, pp. 259–261. However, it seems that this non-interference was not really implemented – and for the colony's largest company, Diamang, Norton de Matos had made an exception anyway, see Ball, Jeremy, *"The colossal lie". The Sociedade Agricola do Cassequel and Portuguese Colonial Labor Policy in Angola, 1899-1977* (Ph.D. Dissertation - University of California), 2003, pp. 120-121; 148-149 and Cleveland, Todd, *Rock Solid. African Laborers on the Diamond Mines of the Companhia de Diamantes de Angola (Diamang), 1917-1975* (Ph.D. Dissertation - University of Minnesota, Faculty of Graduate School), 2008, pp. 28–29. For protests against Decree 40, see also *O problema da mão de obra em Angola. A iniciativa do general sr. Norton de Matos, apreciada por um colonial sabedor*, in: Jornal do Comércio (Luanda), 21.01.1922, p. 1.

available than needed: 559,192 vs. 186,811.[161] However, this number was far below the estimated 2.1 million Norton de Matos believed there were in 1921.[162] Published a year before the first administrative survey of the total population, the labour survey caused a stir. To be sure, some, like the journalist Domingos da Cruz, continued to believe that the real number of fit adult males had to be much higher, as many thousands had most likely evaded their taxes and hence had not been counted. In his opinion, the recruiting difficulties employers encountered were not due to objective scarcity, but were to be attributed to poor labour conditions and the unwillingness of many Africans to take on contracts.[163] Others, however, were more than happy to take the numbers at face value. One newspaper article stated that labour contracts with European firms were only allowed for six months and therefore the demand should be considered to be almost twice as high. “So where is”, the author concluded “that surplus of labourers that only Mr Domingos da Cruz saw and nobody else can find?”[164]

The stance Domingos da Cruz took was further backed by a new inquiry that had been ordered in October 1926 by High Commissioner António Vicente Ferreira. Again, the supply of 588,300 fit men aged 18 to 45 (or 744,400 between 18 and 60 years) still far exceeded the demand for 378,800. Moreover, the total number of men was estimated at more than 1.6 million. According to Vicente Ferreira, the ‘labour problem’ was not one of absolute scarcity, but one of “distribution and rational use”.[165] However, this study did not much assuage fears of labour scarcity. The results of the study were backed by some but contested by others, who believed that far more adult men were needed in African agriculture and that, based on these demographic figures, it would be difficult to simultaneously increment European and African economic activities in Angola.[166] More studies would follow and, during the next decades, the demographic question would remain closely linked with the ‘labour problem’.[167]

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[161] Alto Comissário da República José Norton de Matos, *Portaria Provincial n.° 148*, 06.08.1923, in: *Boletim Oficial da Província de Angola, Série I,* 11.08.1923, pp. 314–316; Governador Interino Antero Tavares de Carvalho, *Despacho*, 16.01.1925, in: *Boletim Oficial da Colónia de Angola, Série I,* 17.01.1925, p. 46.

[162] Alto Comissariado da República em Angola (Norton de Matos), *Circular aos Srs. Governadores dos Distritos, ao Secretário de Colonização e Negócios Indígenas, aos Srs. Administradores das Circunscrições Civis e Capitães-mores*, 02.10.1921, in: *Boletim Oficial da Província de Angola, Série I,* 08.10.1921, pp. 259–261, here p. 260.

[163] Domingos da Cruz, *A proposito do recenseamento indigena. Algumas considerações sobre a população valida, os transportes, a agricultura, o crédito e a maquinaria agraria*, in: A Província de Angola, 12.07.1925, p. 1; Domingos da Cruz, *A Mão de Obra para S. Tomé*, in: A Província de Angola, 24.04.1926, p. 1; Domingos da Cruz, *Ainda a mão d'obra*, in: A Província de Angola, 01.05.1926, p. 1.

[164] *Mão de Obra. Neste momento Angola não pode fornecer braços para S. Tomé*, in: O Comércio de Angola, 19.04.1926, p. 1.

[165] See the circular letter from 8 October 1926 reprinted in *O problema da mão d'obra*, in: A Província de Angola, 10.11.1926, p. 1 and the results in Ferreira, António Vicente, *A situação de Angola. Circular-consulta enviada ás associações comerciais, industriais e agrícolas da Província de Angola,* Luanda: Imprensa Nacional, 1927, pp. 49-53 (quote p. 53).

[166] For a critical opinion, see, for instance, Santos, Oliveira, "O problema demográfico e a questão da mão de obra em Angola", *Boletim da Sociedade de Geografia de Lisboa* 47 (1929), pp. 209–212. Damas Mora, in

In the late 1920s and 1930s, prominent colonialists interpreted the current situation of underpopulation as the result of a process of population decline. But while they agreed that the population in Angola had diminished, their opinions were less unanimous with regard to how and when exactly the decrease had occurred and whether the process was still on-going.

In 1926, and more elaborately in 1940, Norton de Matos ascribed the dearth of people in Angola to recent epidemics, but also to a long and twisted history of colonial violence and exploitation. Between the Portuguese 'discovery' of Angola in the 1480s and the abolition of the slave trade in 1836, he stated, the "dense and exuberant" population – "a real human anthill" – had been greatly diminished by the constant wars and the transatlantic slave trade. After a period of recovery in the mid-nineteenth century, the wars of occupation, the revolts and their repression around the period of the First World War, epidemic disease and, most importantly, a misguided native policy characterized by high taxes and institutionalized forced labour had again curtailed the native population, all the while destroying their social and family life.[168] Moreover, in 1940, Norton de Matos was not yet convinced that the recent colonial efforts had been enough to halt and reverse the process of population decline.

His chronology, outlook and critical assessment of the 'merits' of colonial rule departed considerably from the historical outline given a few years earlier by Alberto de Lemos, the director of Angola's newly established statistical services. In the second volume of the new series of Statistical Yearbooks *(Annuário Estatístico de Angola)* published in 1936, Lemos presented estimates of the colony's population ('white', 'mixed' and 'black') for a few selected years between 1846 and 1934 (See Table 2.1).[169] Although these estimates – which he would later say he had found "in the most diverse publications", but which rather seem to have been his own retrospective recalculations and, for 1933 and 1934, the results of new surveys – were considerably higher than the numbers in the administrative surveys, they still corroborated the depopulation theory.[170] His interpretation of these figures, however, is quite uncritical of colonial rule and, at some points, even bewildering.[171] He argued that the decline of the total population from 5.38 to 4.27 million between 1846 and 1920 was mainly a

contrast, agreed with Vicente Ferreira's interpretation; see, in retrospect, Mora, *A mortalidade infantil,* pp. 561–562.

[167] This connection is further explored with regard to the 1930s and 1940s in Chapter 4.

[168] Matos, *A Província de Angola,* pp. 227–228; Matos, *Síntese,* pp. 482-483; 487-489; 523 (quotes p. 482).

[169] Repartição Central de Estatística Geral de Angola, *Anuário estatístico de Angola, Ano de 1934,* Luanda: Imprensa Nacional, 1936, pp. 21–23. Lemos had already presented the same figures up to and including 1933 in Repartição Central de Estatística Geral de Angola, *Anuário Estatístico 1933*, p. 17.

[170] Lemos, *Introdução ao primeiro censo,* p. 32 (quote). The detailed results of the 1933 survey can be found in "Demografia", *Boletim Trimestral da Repartição dos Serviços de Estatística* 1,4 (1933), pp. 242–305, here pp. 242–265.

[171] Repartição Central de Estatística Geral de Angola, *Anuário estatístico 1934*, pp. 2-3 (Nota Introdutória).

statistical correction, since there had been no sound basis for the 1846 estimate. Here, Lemos 'forgot' that, in 1846, Lopes de Lima had put forth the number of 386,463 and therefore he himself must have invented the number of 5.38 million for 1846.[172] The decrease in the population from 4.27 to 2.88 million between 1920 and 1927, by contrast, reflected a real decline, he argued, and was caused by epidemics of pneumonia, smallpox, the plague and the continuing ravages of sleeping sickness. And if, between 1927 and 1934, the population had begun to grow again, this growth could be attributed to the positive effects of the AMI programme.

With regard to this last point, Damas Mora readily agreed with Alberto de Lemos. In a long article on Angolan and Mozambican demography that was presented at the Colonial Congress in Lisbon in 1940, Damas Mora gave an account of the chronology and the causes that was very similar to that of Norton de Matos, but he adhered to Lemos' view of recent population growth. In 1940, and even a decade earlier, Damas Mora was eager to take rather shaky demographic estimates as proof of the positive impact of the AMI programme.[173] In Angola as in many other African colonies, healthcare programmes had been and were still believed to be the key to redress the decline in the African population.[174] Alberto de Lemos' data seemed to confirm that healthcare investments had, indeed, lived up to their promise.

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[172] On this point, see also the estrangement expressed by Matos, *Síntese,* pp. 484–485.
[173] Mora, *A mortalidade infantil,* pp. 579–583. On Damas Mora's use of demographic statistics in the late 1920s, see Chapter 3.
[174] Compare, for instance, with Bruel, Georges, "La population du Cameroun et de l'Afrique Equatoriale Française", *L'Afrique Française* 37 (1927), pp. 340–346, here p. 343.

Table 2.1 – Native Population Numbers (1846-1940)

Year	'Native' Population (administrative surveys)[175]	'Black' Population (Lemos)[176]
1846	386,463*	5,378,923
1897	433,397*	
1898	1,083,360*	
1899	946,301*	
1900	789,936*	4,777,636
1913	1,984,824	4,500,000
1914	2,124,316	
1915	1,839,077	
1916	1,677,705	
1920		4,250,000
1922		3,424,000
1924		3,400,000
1925	2,438,411	
1926	2,481,955	
1927	2,395,636	2,833,411
1928	2,438,671	
1929	2,533,229	
1930	2,503,794	
1931	2,534,075	2,937,665
1932	2,574,204	
1933	2,974,937	3,020,626
1934	2,477,829	3,147,045
1935	2,689,443	
1936	2,664,562	
1937	2,629,562	
1938	2,622,808	
1939	2,615,400	
1940	3,665,829 (census)	

The figures with asterisk (*) are *total* population figures.

[175] Lima, *Angola e Benguella*, part 1, p. 4A; Governo Geral da Província de Angola, *Annuario Estatístico para 1897*, pp. X-XI and 15-44; Governo Geral da Província de Angola, *Annuario Estatístico para 1898*, pp. IX-X and 1-66; Governo Geral da Província de Angola, *Annuario Estatístico para 1899*, vol. II, pp. 3-76; Ministério dos Negócios da Marinha e Ultramar, *Annuario Estatístico para 1899/1900*, pp. 62-63; Diniz, *Negócios indígenas do ano 1916,* p. 5; Colónia de Angola - Direcção dos Serviços de Economia - Repartição de Estatística Geral (ed.), *Censo geral*, vol. I, p. 30; 78-79.

[176] Repartição Central de Estatística Geral de Angola, *Anuário estatístico 1934,* pp. 21–23.

5. Inter-Imperial Cooperation and Regional Integration

All the while that he was developing his reform plans for Angola during the late 1920s, Damas Mora continued to be very interested in inter-imperial learning and international collaboration. His vision of a multilateral West African Health Bureau had not materialized, but his desire for stronger bilateral connections, which was also laid down in the recommendations *(voeux)* of the Luanda conference, would meet with greater success.[177]

In July 1927, Angola and the Belgian Congo concluded four conventions, one of which was dedicated to sanitary measures, in order to foster economic and technical collaboration.[178] Overall, these conventions reflected the rapprochement between the two colonies that had grown throughout the 1920s, which had been fuelled by their financial and economic entanglements but also by their reciprocal need for strategic collaboration against the perceived threat of foreign – mainly British, South-African and German – expansionism.[179] In the second half of the 1920s, the question of collaboration between the two minor colonial powers in Africa was widely and, in general affirmatively, discussed in both countries by publicists like Paulo Osório, Louis Habran and Pierre Daye.[180]

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[177] 1er Voeux: Accords sanitaires intercoloniaux sur la côte Ouest-Africaine, in: "Voeux du Congrès, approuvés dans la séance de clôture", *Revista Médica de Angola* 4,5 (1923), pp. 349–355, here pp. 349–350. On this, see also Rodhain to Halewijck (Directeur Général au Ministère des Colonies), 15.11.1926, in: AA, A 32 – Affaires Étrangères, Box 2954, Folder 776.

[178] These conventions had been prepared during an initial meeting in Lisbon in December 1926 and further elaborated in Luanda on 16-22 July 1927. For the Lisbon declaration, see Ministério dos Négocios Estrangeiros, *Acordo relativo ao estudo de problemas de ordem económica e humanitária que interessam aos Governos Português e Belga nas suas colónias vizinhas de Angola e do Congo*, 10.12.1926, in: *Diário do Governo, Série I,* 24.12.1926, pp. 2339–2340; for the final texts of the conventions, which were ratified on 2 March 1928, see AHU, MU, GM 196 and Ministério dos Négocios Estrangeiros, *Carta de Confirmação e Ratificação de quatro Convenções assinadas em Loanda, entre Portugal e Bélgica, regulando assuntos que interessam às colónias de Angola e do Congo Belga*, 02.03.1928, in: *Diário do Governo, Série I,* 05.03.1928, pp. 409–419.

[179] Vanthemsche, *La Belgique et le Congo,* pp. 121–122. For the Portuguese rationale favourable to this increased collaboration, see the documents relating to a meeting between the Ministers of Colonies and Foreign Affairs, other high-ranking officials of both ministries, and the designated High Commissioner for Angola, Vicente Ferreira on 19 July 1926: 'Minutes of the Conference of 19 July 1926' and 'Justificação de Parecer emitido sobre o Memorial do Governo Belga', in: AHD-MNE, 3. Piso, Armário 28, Maço 71 (Sociedade das Nações – Escravatura). On the economic penetration of Portugal and its colonies by Belgian capital, see Clarence-Smith, William Gervase, "Les investissements belges en Angola, 1912-1961", *Laboratoire Connaissance du Tiers-Monde. Actes du colloque entreprises et entrepreneurs en Afrique, XIXe et XXe siècles,* vol. 1, Paris: L'Harmattan, 1983, pp. 423–441.

[180] See, for instance, the articles written by Paulo Osório in the Portuguese journal *Diário de Notícias*, 12 January; 27 Febr; 2,3,4 and 17 March 1926, collected and read with great attention within the Belgian Foreign and Colonial Ministries (AA, A 32 – Affaires Étrangères, Box 2954, Folder 775); Habran, Louis, "Pour l'unité européenne en Afrique", *Portugal em Angola* 6 (1927), pp. 240–242; Habran, Louis, *La politique extérieure du Congo Belge,* Bruxelles/Paris: Librairie Coloniale/Éditions de la Revue des Indépendants, 1928, esp. pp. 43-48; Daye, Pierre, *Congo et Angola,* Bruxelles: Renaissance du Livre, 1929, esp. pp. 125-149 and, later, also Teixeira, Alberto de Almeida, *Angola intangivel (notas e comentários),* Porto: Oficinas Gráf. da Sociedade de Papeleria, 1934, pp. 185–196.

In the eyes of the Portuguese government, Angola had much to gain from medical cooperation with the Belgian Congo. An internal opinion paper, drafted after a meeting held in Lisbon in July 1926 between the Ministers of Colonies and Foreign Affairs, other senior officials of both ministries and the designated High Commissioner for Angola, Vicente Ferreira, clearly stated:

> "The action of the governments with regard to native policy has not kept pace, except in laws and decrees, with the advances made by Belgium and England. The treatment of sleeping sickness has been almost completely disregarded, though thousands of natives perish every year. Vaccination against smallpox is not carried out as regularly and constantly as had been hoped. The treatment of syphilis among the natives has not yet begun. Childcare *(puericultura)* does not exist. Without these four fundamental points of native policy it is difficult to adopt a policy of isolation or exclusivism. The present international moment is one of cooperation and mutual support."[181]

It was within this context and also under the impulse of Damas Mora that the conventions included a particularly broad-reaching sanitary convention, as laid out in the draft written by this last.[182] The convention went far beyond the usual measures of 'sanitary defence' against the spread of epidemics in border regions, as recommended by the International Sanitary Conventions of 1912 and 1926.[183] Not only did it stipulate the exchange of epidemiological data for a much larger group of diseases, it also called for the creation of joint medical missions, the coordinated study of plans to combat venereal diseases and the organization of regular conferences between hygienists from both colonies.[184] Some

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[181] 'Justificação de Parecer emitido sobre o Memorial do Governo Belga' (no author, s.d.), in: AHD-MNE, 3. Piso, Armário 28, Maço 71 (Sociedade das Nações – Escravatura).

[182] For the final text of the sanitary convention, signed in Luanda on 19th July 1927, see Ministério dos Négocios Estrangeiros, *Carta de Confirmação e Ratificação de quatro Convenções assinadas em Loanda, entre Portugal e Bélgica, regulando assuntos que interessam às colónias de Angola e do Congo Belga*, 02.03.1928, in: *Diário do Governo, Série I,* 05.03.1928, pp. 409–419. This final draft was largely based upon a proposal written by Damas Mora. The Belgian delegation in Luanda had not even brought a health official with them. See Vicente Ferreira and Ernesto Júlio de Carvalho e Vasconcelos, *Relatorio apresentado ao Governo da Republica Portuguesa pelos seus delegados plenipotenciários*, pp. 13-14; *Questões de Higiene – Proposta portuguêsa apresentada pelo Dr. Damas Mora*, both in: AHU, MU, GM 196.

[183] The International Sanitary Convention of 1926 in Paris determined what would be the protective measures against yellow fever, cholera, plague, and to a lesser extent, smallpox and typhus. It was held within the organizational framework of the Office International de l'Hygiène Publique (OIHP) in Paris replacing the previous conventions of 1903 and 1912. For the international context of the 1926 convention, see Sealey, Anne, "Globalizing the 1926 International Sanitary Convention", *Journal of Global History* 6 (2011), pp. 431–455. The text can be found in *Conférence Sanitaire Internationale de Paris, 10 mai - 21 juin 1926. Procès Verbaux,* Paris: Imprimerie Nationale, 1927, pp. 151–210. For an overview of all international sanitary conferences between 1851 and 1938, see Howard-Jones, Norman, *The Scientific Background of the International Sanitary Conferences, 1851-1938,* Geneva: World Health Organization, 1975. The Portuguese delegate at the 1926 Conference, Ricardo Jorge, was very critical of the "excess of sanitary obligations" and the "reactionary tendency" that characterized the new convention. He objected that the measures would hamper maritime commerce and were neither supported by recent experiences nor epidemiological knowledge. For a brief overview of his criticism of the conference, see *Conférence Sanitaire Internationale de Paris (1926)*, pp. 133-134; 394-396, quotes pp. 133 and 395. N.B. Portugal did not ratify the 1926 convention.

[184] By mutual agreement between the administrations of both colonies, several diseases were added in 1929 to the long list, notably dengue fever, yaws and venereal diseases. See Alto Comissariado da República em Angola

Portuguese observers, however, objected to such an extensive agenda, stating that the sanitary convention went too far. The most vociferous opponent of the conventions in general, Francisco de Aragão e Melo, claimed that the convention infringed on Portuguese sovereignty and that it would provide the Belgians with information that could be used to attack Portugal in the League of Nations. Melo feared the comparison between the powerful health machinery deployed by the Belgian Congo against sleeping sickness and the Angolan health services, which had only just begun to tackle the disease.[185] As former governor of the district of Zaire, Melo was properly qualified to assess Angola's comparative weakness in this matter. Indeed, on the other side of the border, confidence reigned supreme. In his advice on the utility of a bilateral sanitary convention, Jerôme Rodhain, former director of the Congo health services (1920-1925) and by then professor at the School of Tropical Medicine in Brussels, wrote: "Our medical organisation is indisputably stronger than the one that exists in Angola, which has become weaker still since the departure of Mr Norton de Matos. We need not fear any comparison."[186]

Joint medical missions or study groups seem not to have materialized, but the rest of the convention did not simply remain on paper. The health services of both colonies started to exchange reports and several bilateral conferences indeed took place, in Luanda (November 1928) and Léopoldville (January and September 1930).[187] Although these conferences seem

(Filomeno da Câmara Melo Cabral), *Portaria 547,* in: *Boletim Oficial da Colónia de Angola, Série I,* 01.02.1930, p. 111 and the discussion in AHD-MNE, Piso 2, Armário 49, Maço 6 (Processo 34/1 – Convenções sanitárias Angola-Congo Belga).

[185] Melo, Francisco de Aragão e, *As quatro convençoes luso-belgas. O acordo de Loanda,* Lisboa: Tip. da Empresa do Anuario Comercial, 1927, pp. 20–24. Such fears were dismissed by others, like Alberto Almeida de Teixeira, former governor of the Lunda district. See Teixeira, *Angola intangivel,* p. 192. For Melo's general opposition to the conventions, see Melo, *As quatro convenções*; Melo, Francisco de Aragão e, *A Conferência Luso-Belga. O acordo de Loanda e a questão do M'Poso,* Lisboa, 1927 and the polemic between Melo and Admiral Gago Coutinho in Diário de Lisboa, 16, 22 and 23 Sept. 1927. For the opposition to the conventions in Portugal, see also the reports from the Belgian Ambassador in Lisbon to the Belgian Minister of Colonies: Lichtervelde to Vandervelde, 02.09.1927, 09.09.1927 and 24.09.1927, in: AA, A 32 – Affaires Étrangères, Box 2956, Folder 778.

[186] Rodhain to Halewijck (Directeur Général au Ministère des Colonies), 15.11.1926, in: AA, A 32 – Affaires Étrangères, Box 2954, Folder 776.

[187] See, for the first conference, *Conferência sanitária luso-belga (1928)*; "Première Conférence Médicale Luso-Belge (Article 7 de la Covention luso-belge de juillet 1927). Procès-verbal de la séance du 22 octobre de 1928", *Bruxelles-Médical. Revue hebdomadaire des sciences médicales et chirurgicales* 9,42 (18.08.1929) (1929), pp. 1177–1184. For the second conference, see *Relações luso-belgas*, in: Portugal. Orgão do Nacionalismo Português em Angola, 18.01.1930, p. 1, which contains an overview of the discussed topics, and a long interview with the Portuguese delegate in *Combate à Doença do Sono. Uma entrevista com o Sr. Dr. Eurico d'Almeida*, in: Portugal. Orgão do Nacionalismo Português em Angola, 15.02.1930, pp. 1 and 5 and 17.02.1930, p. 2. For the third conference, in September 1930, see the summary by Trolli in the letter from Governor General Tilkens to the Colonial Ministry in Brussels, 23.10.1930, in: AA, A11 – Hygiène, Box 4465, Folder 929.

to have been discontinued after 1930, they did have an important impact on sleeping sickness policy in Angola, as I will demonstrate below.[188]

The legacy of the sanitary convention went beyond the confines of its own agenda. While Angola did not conclude any bilateral agreements with its other neighbours, the Belgians used the text of the Luso-Belgian convention as the basis upon which to stipulate further – albeit eventually less comprehensive – bilateral conventions with French Equatorial Africa (1931), the Anglo-Egyptian Sudan (1931) and Uganda (1939).[189] According to the Belgians, this bilateral strategy resulted in part from the failure to create multilateral collaboration between the various health services in Africa. At the Second International Conference on Sleeping Sickness in November 1928 in Paris, the Belgian Delegation had presented a draft for an international agreement that would regulate and coordinate the efforts against the disease, notably in the border regions. While the text was obviously based on the Portuguese-Belgian sanitary convention of 1927 –pared down to exclusively address sleeping sickness – the idea to organize such an international convention also followed the recommendations of the international research commission to Entebbe.[190] The Portuguese rallied to the Belgian proposal, but the British and French voiced their strong opposition. They argued that, if necessary, bilateral agreements would also do the job and even allow authorities to be more attentive to the diversity of local conditions. Consequently, the project for the international convention was abandoned.[191] In hindsight, the failure to establish a West African Epidemiological Bureau in 1926-1927 was clearly not an *accident de parcours*.

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[188] On the failure to convene a conference in 1931 "for plenty of reasons", see Gouverneur Général [du Congo Belge] Tilkens au Ministre des Colonies, 18.01.1932, in: AA, A11 – Hygiène, Box 4465, Folder 929. It is unclear whether further conferences took place and how regular the exchange of reports was. The exchange of reports seems to have continued at some level until the late 1930s, see AA, A11 – Hygiène, Box 4465, Folder 929.

[189] On the intention to do so, see Trolli, Giovanni, *Colonie du Congo Belge - Rapport sur l'Hygiène Publique pendant l'année 1929,* Bruxelles, 1931, pp. 5–6. For the conventions, see AA, A11 – Hygiène, Box 4465, Folder 926. For the text of these conventions, see, for instance, "Convention pour l'application de certaines mesures sanitaires au Congo Belge et à l'Afrique équatoriale française (signée le 29 juillet 1931, ratifiée le 23 décembre 1931)", *Bulletin Officiel du Congo Belge* 25,1 (1932), pp. 157–163.

[190] League of Nations - Health Organisation (ed.), *Report of the Second International Conference on Sleeping-Sickness, held in Paris, November 5th to 7th, 1928 (= C.H. 743)* (Publications of the League of Nations; 1928.III.18), Geneva, 1928, pp. 8; 10-13; Kleine, F. K.; van Hoof, L.; Duke, H. Lyndhurst, "General Recommendations for the control of sleeping-sickness in African dependencies", in: League of Nations - Health Organization (ed.), *Final Report of the League of Nations International Commission on Human Trypanosomiasis (= C.H. 629)* (Publications of the League of Nations; 1927.III.13), Geneva, 1928, pp. 391–392.

[191] Société des Nations, Seconde Conférence Internationale sur la Maladie du Sommeil, Sous-Commission d'Administration, 2ième séance = C.H./Mal.som./2e Conf/S.Com.Admin./P.V. 2, p. 9-13, in: LONA, R. 5855, 8A/1216/716. Portugal did not have a delegate in this subcommission, but Ayres Kopke claimed that he would have given his support to the the convention for Portugal, see Ayres Kopke ao Ministro das Colónias, *Relatório do Chefe da missão à 2a Conferência Internacional sobre a Doença do Sono*, 27.11.1928, in AHU, MU, DGAPC 406. At a preparatory meeting in Paris, the participants had still signalled support for such a convention. Here, explicit references to the Portuguese-Belgian convention had also been made. See LNHO, Arrangements

Although the conference delegates approved other instruments of multilateral collaboration, notably individual interchanges between sleeping sickness specialists and a new expert Advisory Committee on the disease, and although these decisions were later confirmed by the League's Health Committee, their effects would prove to be relatively limited and insignificant. The Expert Committee was supposed to receive reports from health services and laboratories in Africa and, partly based on their content, it was expected to assess and divulge the progress made by the respective participant health services in the field.[192] However, the committee – to which Damas Mora was added in September 1929 as the first Portuguese member on account of his "very particular competence" and the "very wide experience acquired by the medical administration of the Portuguese colonies in the struggle against sleeping sickness" – failed to produce any tangible results. The interchange programme also does not appear to have materialized.[193]

In conclusion, the absence of internationally coordinated sleeping sickness research and campaigns in the 1930s was not indicative only of the decreasing interest the LNHO attached to the subject, as Borowy has argued.[194] It also, and possibly even primarily, reflected the minimal interest various metropolitan governments took in international discussions and collaboration.

At roughly the same time (1929-1930), another LNHO project for more exchange and collaboration between the African health services failed to emerge. Upon his nomination to the expert committee on sleeping sickness, Ludwik Rajchman had invited Damas Mora to Geneva and commissioned him to write a report about the causes of high mortality rates in Africa and the problem of African healthcare (AMI).[195] During the next six months (Sept

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for the Second International Conference on Sleeping Sickness (Autumn 1928), 11.06.1928 (= C.H. 727), pp. 4-5; 10, in: LONA, R. 5856, 8A/5836/1210.

[192] League of Nations, *Report Second Conference on Sleeping Sickness (1928)*, p. 10. See also Note by the Medical Director, 01.04.1929, for the 14th session of the Health Committee, 2n of May 1929, C.H. 778, in: LONA, R. 5857, 8A/11235/1210. For the approval by the Health Committee, see League of Nations - Health Organisation, *Annual report of the Health Organization for 1929 (= 1930.III.6),* Geneva, 1930, pp. 46–47 .

[193] On Damas Mora's nomination and appointment, see Madsen (President of the Health Committee) to Drummond (Secretary-General of the League), 31.08.1929 (quotes) and Extrait du procès-verbal de la 3e séance de la 56ième session du conseil, 06.09.1929, both in: LONA, R. 5905, 8A/14243/10525. Six members had previously been appointed at the 14th session of the Health Committee (Bagshawe, Van Campenhout, Castellani, Mesnil, Pittaluga, Strong), and an eighth member, the German doctor Max Taute, was added during the Council in March 1930. Although some scattered letters and reports were sent to the committee in Geneva, there is no evidence that the committee ever met or discussed sleeping sickness work as was intended, compare the correspondence in LONA, R. 5905, 8A/various/10525 and R. 6089, 8A/3979 and 12821/3979. On the individual interchanges, see the correspondence in LONA, R. 5880, 8A/various/3603.

[194] Borowy, *Coming to Terms,* p. 261.

[195] For Damas Mora's nomination and a first outline of the report, see Rajchman to Damas Mora, 25.09.1929 and Mora to Rajchman, 18.09.1929, both in: LONA, R. 5855, 8A/15008/687. The Portuguese colonial ministry

1929-March 1930), Damas Mora conducted research at the LNHO headquarters in Geneva and in the colonial ministries in London, Brussels, Paris and Lisbon. He wrote a lengthy report on the state of the art of these questions in the 'intertropical' colonies in West and Central Africa, for which he had previously elaborated studies on eight of these colonies.[196] The report addressed a wide range of issues, from the underlying demographic and economic rationale of African healthcare, to the issues connected to the budget and personnel, and to the outline of a system of public hygiene suited to tropical Africa. Damas Mora summarized his ideas in 27 concise conclusions, or rather recommendations. In doing so, his study clearly went beyond a simply descriptive analysis. His recommendations were based on a broad comparative approach and were strongly imbued with the idea of inter-imperial learning, which was evident in his frequent calls for the common adoption of health schemes that had already proved successful in another colony.[197]

The comprehensiveness, the comparative scope and the policy-oriented character of Damas Mora's study ensured that the document without a doubt was one of a kind. For unknown reasons, however, Rajchman classified the report as confidential and it remained unpublished, in spite of Portuguese insistence.[198] Damas Mora presented a synthesis of his report at the Third Colonial Congress in Lisbon in 1930, but this did little to increase the circulation of his analysis outside the Portuguese empire.[199] Therefore, it was with bitterness that, two years later, Damas Mora commented upon Orenstein's much acclaimed report on rural hygiene in Africa at the Cape Conference in 1932. In a letter to Ricardo Jorge, he commented that it was nothing more than "a pile of truisms, of age-old principles and banalities repeated more than twenty times since the Congress of Luanda". If Rajchman had published his report, as he should have, Damas Mora continued, "Mr Orenstein would no

granted Damas Mora's request to accept the commission three days later, see the correspondence in AHD-MNE, 3. Piso, Armário 28, Maço 65 (processo 12).

[196] His research involved French West and Equatorial Africa, British West Africa, the Portuguese colonies of Angola and São Tomé, the Belgian Congo and the mandated territories of Togo, Ruanda-Urundi and Cameroon. I was unable to retrieve the original full report at the LONA in Geneva. A memo in LONA, R. 5855, 8A/15008/687 states that the report was received in Geneva and transferred to the 'Bulky documents and enclosures' section on 14 March 1930, but the report is missing there. Parts of it as well as correspondence between Damas Mora and the Health Committee can be found in the folder mentioned above. A Portuguese journalist saw (and read parts of) the report "of more than 400 typed pages" before Damas Mora left Lisbon for Geneva to submit it there, see *O Sr. Dr. Damas Mora diz ao 'Século' que se faz como assistência aos indígenas de Africa*, in: O Século, 15.03.1930. For two different summaries of the report, see António Damas Mora, *L'état actuel de l'assistance médicale indigène dans certaines colonies et pays sous mandat de l'Afrique équatoriale*, 28.02.1930, in: AHD-MNE, 3. piso, armário 28, maço 65 and Mora, *Estado actual*.

[197] See for this the overview by Mora, *L'état actuel*, which reportedly contained parts of all chapters as well as the full conclusions.

[198] The Portuguese Ministry of Foreign Affairs pressured Ricardo Jorge to use his influence in Geneva to get the report published, but in vain, see Augusto de Vasconcelos to Ricardo Jorge, 28.02.1931, in: AHD-MNE, 3. Piso, Armário 28, Maço 65 (processo 12). See also Damas Mora's complaint in Damas Mora to Jorge, Luanda, 08.12.1932, in: Private Letters LDM.

[199] The contributions were only published in 1934 and in Portuguese. See Mora, *Estado actual*.

longer have the right to ignore what is happening outside the English colonies".[200] Damas Mora went on to add in Angola's daily press that the "English-speaking nations" had only now begun to learn the basics of rural African healthcare, principles that had already been applied for many years in the French, Belgian and Portuguese colonies.[201]

The Cape Conference was one of two 'pan-African' conferences that took place under the patronage of the Health Organization of the League of Nations (LNHO) in South Africa during the 1930s. These conferences did not meet with great and lasting success, however. The preparation of the first conference in Cape Town in 1932 was overshadowed by a conflict between France and Belgium on the one side and South Africa on the other over the matter of the conference agenda.[202] South African health authorities were concerned that yellow fever – and to a lesser extent also smallpox – might spread from other African regions to South Africa and even India by way of air traffic. They wanted to use the conference to discuss the issue outside the OIHP, which was just about to finalize a new International Sanitary Convention on Air Traffic. Both the French and the Belgians feared, however, that such a parallel discussion would weaken the authority of the OIHP and, therefore, eventually withdrew from the conference.

Their withdrawal was also the consequence of their disillusionment and annoyance regarding the way the original conference programme had been altered by the South Africans. Originally, in October 1930, Rajchman had proposed that the conference be organized in Geneva and he thought to invite the medical directors of the colonial ministries of those countries with possessions in Africa along with the representatives of the other African countries. This proposal explicitly aimed to ensure the further collaboration between African health services in their struggle against sleeping sickness and other diseases as well as to foster the well-being of the Africans. Virtually all the colonial governments concerned had reacted positively to the proposal, and some even with overt enthusiasm.[203] Hence, it is

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[200] Damas Mora to Jorge, Luanda, 08.12.1932, in: Private Letters LDM. For the discussion on the topic at the Conference, see "Report of the International Conference of Representatives of the Health Services of Certain African Territories and British India, held at Cape Town, Nov. 15th to 25th, 1932", *Quarterly Bulletin of the Health Organisation of the League of Nations* 2,1 (1933), pp. 3–115, here pp. 101–107.

[201] *A actuação do delegado de Angola na Conferência Médica do Cabo*, in: A Província de Angola, 02.01.1933, pp. 1–2.

[202] On the conference preparations in general, see Borowy, *Coming to Terms,* pp. 226–228.

[203] For an overview of the reactions, see LNHO, Session du Bureau du Comité d'Hygiène – Conférence des Directeurs de Santé des pays d'Afrique, 23.04.1932, in: LONA, R. 5920, 8A/23475/23393. For Portugal, see Rajchman to Vasconcellos, 13.10.1930; A. Ferraz d'Andrade (Chef de Chancellerie Portugaise auprès de la Société des Nations) to Rajchman, 07.01.1931, both in: LONA, R. 5920, 8A/23397/23393. See also Francisco de Calheiros (Ministério dos Negócios Estrangeiros) to Ferraz d'Andrade, 02.01.1931, in: AHD-MNE, 3. Piso, Armário 28, Maço 65 (Sociedade das Nações – Higiene).

unclear why Rajchman and the Health Committee did not pursue the issue further. The South African offer, in February 1932, to organize the conference together with the LNHO, was well received by the latter regardless of the fact that it included a profound change in the agenda. As the medical director in the Belgian colonial ministry aptly remarked, "the aim was no longer to discuss African healthcare *(AMI)*, but to protect British India against the introduction of yellow fever."[204]

In consequence to the withdrawals, the conference became an exclusively British and Portuguese endeavour with limited international impact.[205] Angola, which unlike Mozambique had not been on the original list of participants, was eventually invited too and was to be represented by Damas Mora.[206] As planned, the discussions focused on epidemiological control, and the broader public health issues played only a minor role. Within this context, these last were given the label "rural hygiene" reflecting changes to terminology brought about by the influential LNHO conference held in Europe in 1931.[207] According to Damas Mora, the conference had bolstered his personal network, but had been "completely useless from a practical point of view, since it had neither come up with new insights nor made any useful suggestions".[208]

Indeed, the most interesting consequence of the conference for Angola was that, following an informal conversation between Damas Mora and Wilbur Sawyer of the Rockefeller Foundation (RF), the latter included Angola in its West African research programme on yellow fever. Accompanied by Damas Mora, the RF doctor Alexandre Burke travelled through Angola between mid-September and early November 1933, taking blood samples from nearly 1,000 natives in 19 different locations in order to determine whether yellow fever was really extinct or whether incidences of it had still occurred after the end of the nineteenth century, when the last cases had been reported. Having found almost no positive blood samples, the Rockefeller Foundation concluded that Angola had indeed been free from yellow fever during the present generation's lifespan.[209] While the result in itself

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[204] Directeur Général de la DG d'Hygiène du Ministère des Colonies to Administrateur Général, Bruxelles, 30.07.1932 (here quote). See also Administrateur Général to Gouerneur Général du Congo Belge, Bruxelles, 09.08.1932, both in: AA, A11 – Hygiène, Box 2932, Folder 513.

[205] On the conference, see Borowy, *Coming to Terms,* pp. 227–230 and *Report of the International Conference in Cape Town (1932).*

[206] Avenol to Portuguese Ministry of Foreign Affairs, 26.08.1932, in: LONA, R. 5920, 8A/23397/23393.

[207] On this conference, see Borowy, *Coming to Terms,* pp. 325–343.

[208] Damas Mora to Jorge, Luanda, 08.12.1932, in: Private Letters LDM.

[209] On this conversation, see Damas Mora to Jorge, Luanda, 08.12.1932, in: Private Letters LDM; Interim Governor Ernesto Gonçalves Amaro to Minister of Colonies, Luanda, 13.09.1933, in: AHU, MU, DGAPC 410. For the study on yellow fever which the Rockefeller Foundation conducted in Angola (as well as in some other colonies), see Beeuwkes, Henry; Mahaffy, A. F.; Burke, A. W.; Paul, J. H., "Yellow fever protection test surveys in the French Cameroons, French equatorial Africa, the Belgian Congo, and Angola", *Transactions of the Royal Society of Tropical Medicine and Hygiene* 28,3 (1934), pp. 233–258, here pp. 233; 253-257 and the press

was unspectacular, this study seems to have been the only occasion in which an international health organization worked in Angola in the Interwar Period.

The second pan-African health conference, held in Johannesburg in 1935, was more successful. Not only were representatives from all major colonial powers in Africa (except Italy) present, the participants even adopted resolutions to enhance cooperation between the respective health services, in response to a South African proposal. These resolutions stipulated the establishment of a special sub-committee on African health at the LNHO in Geneva, the exchange of health officers and the organization of regional as well as pan-African conferences at regular intervals.[210] After the conference, however, the growing reluctance of national governments to engage in this direction, combined with the decline of the LNHO and the outbreak of the Second World War prevented these measures from materializing. A conference scheduled to take place in Nairobi in 1940 in fact was cancelled.[211] In 1938, Portugal still declared its official support for the recommendations produced by the Johannesburg conference, arguing that regular conferences and the exchange of medical personnel would contribute to improving and unifying methods to combat the "various pandemics that rage across tropical regions" and of the more general question of *assistência médica aos indigenas*.[212]

Although these efforts did not bear fruit during the Interwar Period, they paved the way for closer collaboration in the 1940s and 1950s. It was indeed in very similar ways that the idea of collaboration between the African health services was taken up again towards the end of the Second World War, first in a meeting of the French, British and Belgian health services in Lagos in July 1943 and then at the famous conference in Brazzaville in February

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coverage in A.J., *O valor altruista e humanitario da vinda à Colónia da Missão da Fundação Rockefeller*, in: Mossamedes. Semanário defensor dos interesses do distrito, 04.11.1933, p. 3; *Sobre a Missão Rockefeller que visitou terras de Angola*, in: A Província de Angola, 09.11.1933, p. 2. Damas Mora had presented a short historical overview of the occurrence of the disease in Angola at the conference in Cape Town, see Mora, António Damas, "Yellow Fever in Angola", *Quarterly Bulletin of the Health Organisation of the League of Nations* 2,1 (1933), pp. 50–53.

[210] Thornton/Orenstein, *Co-ordination*; Resolutions in "Report of the Pan-African Health Conference held at Johannesburg, November 20th to 30th, 1935", *Quarterly Bulletin of the Health Organisation of the League of Nations* 5,1 (1936), pp. 1–210, here p. 207. On the conference, see also Borowy, *Coming to Terms,* pp. 230–234.

[211] Borowy, *Coming to Terms,* pp. 234–235.

[212] This favourable opinion was expressed by the Head of the Health Department in the Colonial Ministry, and subsequently endorsed by the Minister of Colonies and the Ministry of Foreign Affairs. See Manuel Gomes de Araújo Alvares (Chefe da Repartição dos Serviços de Saúde e Higiene), Informação n. 9, 28.03.1938 and Raúl Antero Correia (Director geral, interino, da DGAPC do Ministério das Colónias) to Director Geral do Ministério dos Negócios Estrangeiros- Secretaria Portuguesa da SdN, 06.05.1938, both in: AHU, MU, DGAPC 7, Processo 35/1; L. Esteves Fernandes (Portuguese delegate at the League of Nations) to Secretary-General Avenol, 08.06.1938, in: LONA, R. 6114, 8A/24780/12886.

1944.[213] In September 1944, the French and Belgian legations in Lisbon tried to rally Portugal to join their project of creating, with the so-called African Bureau of Hygiene and Prophylaxis, a permanent structure for African healthcare in Léopoldville. The proposed work of this Bureau, which had been designed to include all intertropical colonies and countries (i.e. excluding northern and southern Africa), was strikingly similar to that which Damas Mora had proposed in Freetown in 1926: it included the centralization of epidemiological information, the general exchange of knowledge aimed at improving and unifying prophylactic and curative methods, common training courses and study tours.[214] Like its precursor, this project never came to fruition. In the second half of the 1940s, however, bilateral conversations and multilateral conferences on medical and, more broadly, technical cooperation in general would multiply and eventually lead to the creation of two inter-related intergovernmental organizations, the Scientific Council for Africa south of the Sahara (CSA) and the Commission for Technical Co-operation in Africa south of the Sahara (CCTA), both founded in 1950.[215] Certainly, the member states (France, the United Kingdom, Portugal, Belgium, South Africa and Rhodesia) did not work together only to pursue the official aim to raise the living standard of Africans; rather, the creation of the CSA/CCTA also responded to the fear that international organizations with strong non-colonial participation and potential anti-colonial bias, notably UN special agencies, would start working on the very same technical issues and hence interfere with colonial rule.[216] Yet, from the outset, medicine was one of the favourite fields of this new scheme, wherein a series of conferences were held, for instance, on medical co-operation and education, trypanosomiasis, nutrition and malaria.[217]

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[213] On the Brazzaville conference, see Cooper, Frederick, *Decolonization and African society. The labor question in French and British Africa,* Cambridge: Cambridge University Press, 1996, pp. 177–195.

[214] Memorandum, enclosed in: French Legation in Portugal to Luiz Teixeira de Sampayo (Secretary-General of the Ministry of Foreign Affairs), 27.09.1944 and Director Geral do Ministério dos Negócios Estrangeiros to Chefe de Gabinete do Ministério das Colónias, 19.01.1945, both in: AHD-MNE, 2. Piso, Armário 49, Maço 3.

[215] Both acronyms refer to the official names in French. Until now, the historiography on the CSA/CCTA has strongly focused on diplomatic issues as well as their internal organization, thereby neglecting the impact of the dozens of conferences on the participants and their respective colonial administrations. See Kent, John, *The Internationalization of Colonialism. Britain, France, and Black Africa, 1939-1956,* Oxford: Clarendon Press, 1992, pp. 263–285; Gruhn, *Commission* and Teng-Zeng, Frank, "Science, Technology and Institutional Co-Operation in Africa. From Pre-Colonial to Colonial Science", *Eastern Africa Social Science Research Review* 22,1 (2006), pp. 1–37, here pp. 18–31. For contemporary views, see also Henry, *Functional Approach* and Vigier, *Commission*. From 1957 onwards, new independent African countries started joining the CCTA/CSA. The process of Africanization was completed with the expulsion of the Portuguese in 1962. On this process, see especially Gruhn, *Commission*. On the bilateral conversations and first conferences in the second half of the 1940s, see, from an anglo-french perspective, Kent, *Internationalization,* pp. 200–213.

[216] Kent, *Internationalization*, pp. 263–267; Gruhn, *Commission,* pp. 459–460.

[217] For a list of CSA/CCTA conferences until 1954, see "A Note on Various Inter-African Meetings", *African Affairs* 53,211 (1954), pp. 113–118, here p. 115 and also Vigier, *Commission,* pp. 343–344.

Furthermore, in 1950, a permanent Tsetse Fly and Trypanosomiasis Permanent Inter-African Bureau (BPITT) was created in Léopoldville.[218]

Four conclusions may be drawn with regard to the inter-imperial learning in this period.

First, the impact of the LNHO's involvement in African health issues should neither be downplayed nor exaggerated. The study tour in West Africa, the activities of the sleeping sickness commission and the pan-African conferences brought medical officers from different colonizing nations into closer contact with each other and fostered processes of exchange and emulation. Moreover, the idea of multilateral cooperation in health matters was actively entrenched and pursued, thus paving the way for more intense and institutionalized forms of health cooperation in Africa after the Second World War. Official forms of exchange and collaboration, however, were often hampered by political agendas – especially the British did not often see the use of it, while the South Africans, with their ambition for regional dominance, tried to control the content and the scope of the discussions. Hence, there was still a low level of regional integration during the Interwar Period. Thornton and Orenstein, two leading South-African health officers, were not entirely wrong when, at the Pan-African Health Conference in Johannesburg, they deplored the lack of "inter-state coordination of health work in Africa whatsoever other than what has been established by international conventions"; that the interest of the League of Nations in the health problems of Africa was negligible; and also the fact that "few health administrators in Africa, if any, have a working knowledge of what their neighbours have done or are doing towards the solution of their problems."[219]

Second, given this background, the eagerness for inter-imperial learning and more collaboration displayed by Damas Mora seems to have been a rather exceptional trait among health administrators in colonial Africa. Overall, it is striking that, throughout the Interwar Period, both the Angolan health services and the Colonial Ministry in Lisbon, seemingly unaffected by regime changes, consistently supported Portuguese participation in international conferences, interchanges and conventions on public health in Africa. As I have shown throughout this chapter, the idea that inter-imperial learning would help to improve local healthcare processes constituted a core motive for this support, especially in the 1920s.

[218] Kent, *Internationalization,* p. 268.
[219] Thornton, Edward N.; Orenstein, A. J., "Co-ordination of Health Work in Africa", in: *Report of the Pan-African Health Conference (1935),* pp. 208–209.

However, and this perhaps was to a larger degree a metropolitan perspective, participation was also governed by the fear of being marginalized as well as (increasingly) by nationalist ideas of representation. Conferences were stages on which the Portuguese delegates were expected to demonstrate to the other colonial nations the progresses their colonies had made in African healthcare and, more in general, the importance Portugal attached to the health and well-being of the African populations under their rule.[220]

Adequate representation was not an easy task, however. The reports sent by Lavrador Ribeiro, the Angolan delegate to the second Pan-African Conference in Johannesburg in 1935, to the Minister of Colonies, for instance, reveal profound anxieties regarding his performance and about how Portugal had been perceived at the conference. He lamented that his conference paper had not been as brilliant as those of many other foreign colleagues, due to his belated nomination and subsequent lack of preparation time, the unavailability of adequate statistical data in Luanda and the impossibility to access many international medical journals, not to mention the language barrier. Moreover, he and his colleague from Mozambique had been unable to actively participate in most discussions, not only because of information deficits, but also because they had not been clearly briefed on the position they were supposed to defend on Portugal's behalf.[221]

The issue of scientific/medical marginalization persisted, however, and it is likely that it even grew in the Interwar Period. Two seminal publications on colonialism and science in Africa may be offered up as proof. Neither Lord Hailey, in his 'African Survey' (1938) nor one of his closest collaborators, Edgar Worthington, in his 'Science in Africa' – also published in 1938 – had much to say about the medical work (or scientific research in general) that had been carried out in the Portuguese colonies. "Little information is available on recent medical developments in Angola and Mozambique", Worthington claimed, and Hailey concluded that "there is little evidence that health work is being done in rural areas on a scale which may be compared with that of the French or Belgian Governments".[222] At any

[220] The importance of representation becomes apparent in the way the Ministries of Foreign Affairs and Colonies framed Portuguese participation in the various international conferences or expeditions. See, for instance, on the pan-African conference of 1935: Minister of Foreign Affairs, Armindo Monteiro, to Minister of Colonies, 29.06.1935, in: AHU, MU, DGAPC 7, Processo 35/1; on the International Conference of Tropical Medicine and Malaria in Amsterdam/Rotterdam of 1938, Ministério das Colónias - Repartição dos Serviços de Saúde e Higiene, *Decreto 28.649 - Representação portuguesa no Congresso Internacional de Medicina Tropical e Malarologia em Amsterdão e Roterdão, Sept 1938*, 14.05.1938, in: *Diário do Governo, Série I,* 14.05.1938, p. 771 and on the joint venture of a Mozambican-South African medical conference in Lourenço Marques in 1938, Manuel Gomes de Araujo Alvares (Chefe da Repartição dos Serviços de Saúde e Higiene), Informação 11, 25.02.1937, in: AHU, MU, DGAPC 7, Processo 37/3 (Congresso de Medicina em Lourenço Marques).
[221] Two different reports are archived, see Lavrador Ribeiro to Minister of Colonies, June 1936 and idem, s.d., both in: AHU, MU, DGAPC 7, Processo 35/1.
[222] Hailey, Malcolm (ed.), *An African Survey. A Study of Problems arising in Africa South of the Sahara, Issued by the Committee of the African Research Survey under the auspices of the Royal Institute of International*

rate, these opinions were not an exclusively British point of view. In reaction to Portugal's persistent marginalization in comprehensive works on African colonialism, José de Almada, the long-standing adviser for colonial matters at the Ministry of Foreign Affairs in Lisbon, admitted a couple of years later that there was a lack of tropical medicine and public health studies being conducted in the colonies.[223]

Third, the transnationally oriented debate on *assistência médica aos indígenas* in Angola reveals a particular reference framework or space of exchange, which must be critically assessed. From a *longue durée* perspective, it is interesting that Portugal's former tropical colony, Brazil, which was an important player in international debates on tropical medicine, does not seem to have functioned as a role model for Angola.[224] No Brazilian doctors or biologists attended the conference in Luanda in 1923, nor was Brazilian medical science directly represented at any of the other important medical conferences on African soil during the Interwar Period.[225] Moreover, while the sanitation works in Rio de Janeiro in the late nineteenth and early twentieth century were often cited and praised by Portuguese and other doctors, schemes of indigenous healthcare in Brazil seem not to have functioned as prototypes.[226] This is all the more surprising given the special relationship between Portugal and Brazil, which had survived decolonization in 1822 and was based on shared language,

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Affairs, London/New York/Toronto: Oxford University Press, 1938, pp. 1181-1182 (quote p. 1182), and on Hailey's general neglect of the Portuguese colonies, pp. xxi-xxii; Worthington, Edgar Barton, *Science in Africa. A review of scientific research relating to tropical and southern Africa,* London: Oxford University Press, 1938, pp. 502-503 (quote 502). Both studies are at the core of Tilley, *Africa*. For their contextualization, see *Ibid.,* pp. 4–5.

[223] José d'Almada, Parecer, 27.10.1944, in: AHD-MNE, 2. Piso, Armário 49, Maço 3.

[224] On Brazilian tropical medicine in international networks and discussions, see Sá, Magali Romero; Benchimol, Jaime Larry; Kropf, Simone; Viana, Larissa; Silva, André Felipe Cândido da, "Medicine, science and power. Relations between France, Germany and Brazil in the period 1919-1942", *História, Ciências, Saúde - Manguinhos* 16,1 (2009), pp. 247–261; Benchimol, Jaime Larry, *Cerejeiras e cafezais. Relações médico-científicas entre Brasil e Japão e a saga de Hideyo Noguchi,* Rio de Janeiro: Bom Texto, 2009; Edler, Flávio Coelho, "Pesquisas em parasitologia médica e circulação do conhecimento no contexto da medicina", in: Bastos, Cristiana; Barreto, Renilda (eds.), *A Circulação do Conhecimento. Medicina, Redes e Impérios,* Lisboa: Instituto de Ciências Sociais on-line, 2011, pp. 173–197.

[225] The most important reference to Brazil seems to have been Fred Soper's report on yellow fever in Brazil at the second pan-African conference in Johannesburg in 1935. Soper was not a Brazilian scientist, however, but the regional director of the Rockefeller Foundation's International Health Board in South America. See *Report of the Pan-African Health Conference (1935),* pp. 19–68.

[226] Within this context of succesful sanitation works, Rio de Janeiro is generally lauded together with Havana and Panama, see, for instance, Correia, *O clima,* p. 475; "Discussion de la question "Les progrès résultant des découvertes de Laveran et son école permettent-ils d'entrevoir les possibilités de l'acclimation de la race blanche en pays équatoriaux"", in: *Compte Rendu de la [.] Session tenue à Bruxelles, les 24, 25 et 26 mai 1920,* Bruxelles: Institut colonial international, 1920, pp. 107–156, here p. 130; Telles, Francisco Xavier da Silva, "Sur la climatologie inter-tropicale et les climats des colonies portugaises", in: Institut Colonial International (ed.), *Compte Rendu de la Session tenue à Rome, les 22, 23 et 24 avril 1924,* vol. 2, Bruxelles: Institut colonial international, 1924, pp. 7–112, here pp. 41–42. On sanitation in Rio de Janeiro, see Benchimol, Jaime Larry, *Pereira Passos. Um Haussmann tropical. A renovação urbana da cidade do Rio de Janeiro no início do século XX,* Rio de Janeiro: Prefeitura, 1992.

economic connections and migration patterns – Brazil was the main destination for Portugal's emigration flow – and the strong links that had, during the era of the slave trade, closely tied Angola to Brazil to the point that the former had often been referred to as a colony of Brazil rather than of Portugal.[227]

Of course, this finding must be viewed with some caution, insofar as it is not impossible that future research will reveal the presence of more important indirect linkages in tropical medicine between Brazil and Angola than the current historiography suggests, for instance through the schools of tropical medicine in Lisbon and Goa or informal contacts.[228] Even then, the (partial) neglect of Brazilian tropical medicine in Interwar Portuguese Africa remains indicative of several, partly overlapping and possibly even contradictory mental maps.

On the one hand, it reveals the importance of the empire as an organising principle of exchange. The umbilical connection between Angola and Brazil across the South Atlantic had been gradually severed in the second half of the nineteenth century, following Brazil's independence and the end of the slave trade and Angola's renewed subordination to Portugal.[229] Concurrently, the health services in Portuguese Africa were reoriented towards the metropole, and towards another 'subaltern' centre of medical training and research within the reconfigured empire, Goa.[230] In the late nineteenth and twentieth centuries, Brazil was no longer part of the Portuguese colonial medical circuit.[231]

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[227] On this, see particularly Alencastro, Luiz Felipe de, *O Trato dos Viventes. Formação do Brasil no Atlântico Sul Séculos XVI e XVII,* São Paulo: Companhia das Letras, 2000.

[228] Mónica Saavedra, however, has noted that, as far as malaria was concerned, medical science in Portugal did not pay much attention to research and researchers in Brazil, see Saavedra, Mónica, *"Uma questão Nacional". Enredos da malária em Portugal, séculos XIX e XX* (Doctoral Dissertation - Universidade de Lisboa, Instituto de Ciências Sociais), 2010, p. 76.

[229] Dias, Jill Rosemary, "Angola", in: Alexandre, Valentim; Dias, Jill Rosemary (eds.), *O Império Africano, 1825-1890* (Nova História da Expansão Portuguesa; 10), Lisboa: Editorial Estampa, 1998, pp. 319–556, here p. 387. For the renewed interest in Angola by Portuguese governments and entrepreneurs in the second half of the nineteenth century, see Alexandre, Valentim, "A questão colonial no Portugal Oitocentista", in: Alexandre, Valentim; Dias, Jill Rosemary (eds.), *O Império Africano, 1825-1890* (Nova História da Expansão Portuguesa; 10), Lisboa: Editorial Estampa, 1998, pp. 23–132, and more critically, Marques, João Pedro, *Os sons do silêncio. O Portugal de oitocentos e a abolição do tráfico de escravos,* Lisboa: Imprensa de Ciências Sociais, 1999, pp. 357–451.

[230] On the global circulation of indigenous knowledge and medical plants from Portuguese India in Early Modern Times, see Walker, Timothy, "Acquisition and Circulation of Medical Knowledge within the Early Modern Portuguese Colonial Empire", in: Bleichmar, Daniela; De Vos, Paula; Huffine, Kristin; Sheenan, Kevin (eds.), *Science in the Spanish and Portuguese Empires, 1500-1800,* Stanford: Stanford University Press, 2009, pp. 247–270; Walker, Timothy, "Stocking Colonial Pharmacies. Commerce in South Asian Indigenous Medicines from their Native Sources in the Portuguese Estado da India", in: Mukherjee, Rila (ed.), *Networks in the First Global Age 1400 - 1800,* Delhi: Primus Books, 2011, pp. 113–135. On the importance of Goa for the health services in late nineteenth and twentieth century Portuguese Africa, see the next section.

[231] See, for instance, the biographical information on Portuguese imperial doctors in the *Livro Mestre do Quadro de Saúde de Angola*, *1858-1913,* in: AHU, SEMU, DGAPC 895 and the *Livro de registo dos facultativos e pharmaceuticos que servem em comissão nas províncias ultramarinas, 1883-1896*, in: AHU, MU, DGAPC 455.

On the other hand, for Damas Mora, and possibly also for other European hygienists in colonial Africa, the reference framework for public health schemes had become mainly confined to tropical Africa (and Europe, of course). The tendency to dissociate tropical Africa from the rest of the tropics was revealed in virtually all of the intitatives for increased inter-imperial exchange and collaboration on the continent, from the West African conference in Luanda in 1923 to the plans for a third pan-African conference in Nairobi in 1940.[232] This tendency to regionalize was not exceptional *per se*. In fact, while attempts to promote regional integration were being made in Africa, the Americas had already experienced a similar – yet far more successful – regionalization of medicine and public health, with the Pan American Health Organisation (1902). The Far Eastern Association of Tropical Medicine (FEATM), created in 1908, and the Far Eastern Epidemiological Bureau in Singapore, established in 1925 by the LNHO with the support of the RF were the organizations for South and East Asia. The FEATM, for instance, convened ten international conferences between 1908 and its dissolution in 1938 and thus "provided a unique platform for research on tropical diseases and, despite political and cultural divisions, for the exchange of professional expertise across the tropical and sub-tropical regions of South, Southeast and East Asia."[233]

Regional integration did not automatically forestall inter-continental or global exchanges, especially when it came to bacteriological or drug therapy research. Yet the division of the world into smaller, more manageable units, often along continental or common (climatic or civilizational) intra-continental lines, had important implications for public health schemes. The exclusion of Brazil from the reference framework of a public health administrator like Damas Mora both reflected and reinforced the idea that in terms of health conditions and the general status of the indigenous population, tropical Africa differed from other regions and hence needed to be approached with specific means and measures. The perceived need to develop a specific 'African' response was grounded in entrenched ideas regarding the particular 'racial' backwardness of tropical Africans, as well as in their status as colonial subjects, which differentiated them for instance from the indigenous populations in Brazil.

[232] Of course, there were exceptions, such as the representation of the Indian medical services at the Pan-African conferences in Cape Town and Johannesburg as well as the report on yellow fever in Brazil at the second of these conferences.

[233] On the Far Eastern Bureau in Singapore, see Borowy, *Coming to Terms,* pp. 143–153, on the FEAMT, see Arnold, David, *Tropical Governance. Managing Health in Monsoon Asia, 1908-1938* (Asia Research Institute, Singapore – Working Papers Series; 116), 2009 and Arnold, David, "British India and the "Beriberi Problem", 1798–1942", *Medical History* 24 (2010), pp. 295–314, here pp. 304-305, quote 305. For the Pan American Health Organization, see the overview in Cueto, Marcos, *The Value of Health. A History of the Pan American Health Organization,* Washington DC: PAHO, 2007.

And fourth, the knowledge and practices that were observed and discussed, transferred and adapted between colonial powers in tropical Africa were by no means the sole product of European imagination and, lesser still, of the diffusion of European concepts from the metropole to the colonies. This is a broad field that ranges from the influence of indigenous knowledge about medicinal plants to the dependency of European doctors on African intermediaries. Most important here is the acknowledgement that European methods of healing were shaped and limited by African agency – in order for them to be effective, Portuguese (and other European) doctors often tried to adapt their methods to African customs and mentalities, or rather, to what they perceived as such. The discussion regarding how to hospitalize African natives serves as a good example. The issue of hospitalization was widely debated at the Luanda conference in 1923 as part of the larger and essential question of how to 'attract' African natives to the European health services, in other words of how to build their confidence in Western biomedicine. According to many doctors, early experiences with forms of hospitalisation, such as the segregation camps against sleeping sickness, had revealed that African natives were reluctant to accept individual hospitalization, as was common in Europe, and that this procedure was one of the main causes for evasions and avoidance. Therefore, doctors were now almost unanimous in advocating the establishment of so-called 'village-infirmaries' *(sanzalas-enfermarias)*, where patients, their condition permitting, would be treated and observed while they continued to live with their families. With this model of hospitalization, doctors hoped to pay respect to the customs, social necessities or the "sentimentality, sometimes misunderstood, of backward races", as one discussant put it, and thus to overcome the reluctance of Africans toward hospitalization. The fact that, in this model, patients would be nourished by their families also offered a practical solution to food provision problems and its high costs.[234] The *sanzala-enfermeria* became one of the basic units of (rural) African healthcare in Angola from the 1920s onwards.[235]

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[234] Germano Correia in Primeiro Congresso de Medicina Tropical da África Ocidental, "Acta da 2.a sessão (Compte-rendu de la 2ième séance). Saint-Paul de Loanda, le 17 Juillet 1923", *Revista Médica de Angola* 4,2 (1923), pp. 7–43, here pp. 19-23, quote p. 21; Correia, *Processos práticos,* p. 185; Santos, *Assistência médica aos Indígenas,* pp. 65–69; Sant'Anna, José Firmino, "O problema da assistência médico-sanitária ao indígena em Africa", *Revista Médica de Angola* 4,2 (1923), pp. 73–178, here pp. 129–130; Blanchard, Maurice, "Sur quelques facteurs moraux et matériels d'attraction des indigènes dans les centres de consultation", *Revista Médica de Angola* 4,2 (1923), pp. 201–207, here pp. 204–206. See also later Almeida, *Relatório do chefe,* pp. 36–37.

[235] See, for instance, Mora, *Assistência médica aos indígenas (1927)*; Direcção dos Serviços de Saúde e Higiene da Colónia de Angola, *Numero de formações sanitárias nos diferentes districtos desta colonia*, 10.05.1928, in: ANA Cx. 4958.

6. Assembling a Medical Staff: Strategies of Recruitment and Hierarchies of Race

Since the debate on African healthcare began at the turn of the century, virtually all of the colonial health services consistently invoked the scarcity of medical personnel as one of the main obstacles to bringing European biomedicine to the native population.[236] Accordingly, the expansion of AMI services in tropical Africa during the Interwar Period was intrinsically linked to the rapid increase of medical staff in that period. Both developments mutually preconditioned and reinforced each other. I will show that the colonial health services in Angola, like elsewhere in Africa, developed various strategies to cope with the recruitment problem. Although varying conditions between colonies and empires also gave birth to local peculiarities, the similarity in the solutions the various health services in colonial Africa adopted (or strove to adopt) is striking, notably those measures that regarded the employment of Africans and other non-Europeans. The analysis of these strategies, which were deeply informed by hierarchies of race, offers another good opportunity to examine one of Warwick Anderson's critiques of the national histories of colonial medicine, and to ask not "what is distinctive about Western medicine in a particular colonial, or protonational, setting", but "to look for what is colonial about Western medicine in any setting".[237]

After the First World War, the health services in Angola underwent two consecutive reforms that profoundly changed their internal organization and recruitment conditions. Following the example of Mozambique, the Angolan health services were separated from the army and given a civil organization with administrative autonomy in 1919.[238] Two years later, the administrative reform elaborated by Damas Mora altered recruiting conditions and salaries. Salaries were considerably raised in order to remedy what had been a common complaint, and without doubt an obstacle to colonial enrollment, for at least a decade.[239] As

[236] See the previous chapter, and, for instance, Vassal, J., "Aperçu Général sur l'Assistance Médicale Indigène en Afrique Equatoriale Française", *Revista Médica de Angola* 4,1 (1923), pp. 205–206, here p. 206.

[237] Anderson, *Postcolonial History,* p. 523.

[238] Gôverno Geral de Angola, *Portaria n.° 55-B - Organização dos Serviços de Saúde de Angola*, 01.03.1919, in: *Boletim Oficial da Província de Angola, Série I*, 1919, pp. 13–22. This shift was generalized for all Portuguese colonies in May of the same year, see Ministério das Colónias, *Decreto n. 5.727 sobre a reorganização dos serviços de saúde das colónias*, 10.05.1919, in: *Diário do Governo, Série I*, 10.05.1919, pp. 1143–1145, art. 1 and Mora, António Damas, "Les organisations sanitaires en général. Organisation sanitaire de l'Angola", *Revista Médica de Angola* 4,1 (1923), pp. 173–183, here p. 178. The return to civil organization had already been seriously contemplated a decade earlier, see Leitão, Alberto de Souza Maia, *Serviço de saude colonial. Sua reforma,* Porto: Imprensa Moderna, 1910, pp. 34–36 and Director da 5a Repartição da Direcção Geral das Colónias to Governor-General of Angola, 25.11.1910, in ANA, Cx. 396.

[239] The new salaries were almost twice as high as those listed for Angola in the 1919 reform of the imperial health services. Compare Alto Comissariado da República em Angola (Norton de Matos), *Decreto n. 74*, p. 317

late as 1920, deputy Manuel Ferreira da Rocha, soon to become Minister of Colonies, had complained during a parliamentary debate that doctors were “the worst paid civil servants in the colonies” and were “positively obliged to resort to private practice in order not to die of starvation”.[240] Furthermore, the reform eased the requirements that needed to be met for doctors to enter the medical service. They were now allowed to apply before having the necessary additional degree in Tropical Medicine, or even before completing their general studies of medicine for that matter. If there were not enough suitable candidates, the health services would recruit and start to pay them while they completed their studies in the metropole, in exchange for their future commitment to serve at least four years in the colonial health services.[241]

The efforts to attract more Portuguese doctors did not prove futile. As health expenditures grew significantly, the number of government doctors in Angola almost doubled from 25 to 51 between 1921 and 1923.[242] The recruitment problem, however, did not completely disappear. As in other colonies in tropical Africa, government doctors competed for the most lucrative posts within the colony, in general those with the most private patients, and they were particularly reluctant to accept positions in anti-sleeping sickness campaigns, and, from 1926 onwards, in the AMI sectors.[243] Both Vicente Ferreira and Damas Mora later recalled that the main difficulty in the implementation of the AMI programme had been to find enough qualified and motivated doctors.[244] Young and well-educated doctors, Mora noted, were those best suited for AMI, but they had a ‘natural inclination’ towards private practice, where they could earn much more.[245] To overcome at least part of their reluctance, the government in Angola opted for a remuneration system in which the AMI doctors received high bonuses on top of their regular salaries in compensation for the lack of private patients. In return, they were not permitted to treat in a private practice people who were not

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(Tabela A) with Ministério das Colónias, *Decreto n. 5.727 reorganizando os serviços de saúde das colónias*, 10.05.1919, in: *Diário do Governo, Série I*, 10.05.1919, pp. 1143–1145, here p. 1145 (Tabela A). In 1923, Damas Mora stated that, due to successive raises, doctors now earned almost as much as district governors, see Mora, *Les organisations sanitaires,* p. 181.

[240] Diário da Câmara dos Deputados, *Sessão de 22 de Junho de 1920*, pp. 35-38, quotes p. 36. See, for instance, also the complaints in Leitão, *Serviço,* pp. 29–31.

[241] Alto Comissariado da República em Angola (Norton de Matos), *Decreto n. 74*, art. 7-8. The Goverment in mainland Portugal had already established such a scheme in 1919, but had failed to meet its financial commitments, causing most doctors to abandon the scheme, see Diário da Câmara dos Deputados, *Sessão de 13 de Maio de 1920*, p. 5; Diário da Câmara dos Deputados, *Sessão de 22 de Junho de 1920*, p. 37.

[242] Mora, *Les organisations sanitaires,* p. 179. Simultaneously, health expenditures rocketed from a mere 164,000 escudos in the 1920-21 budget to 3.5 million in 1922-23 and 6.4 million in 1923-24. See Matos, *A Província de Angola,* pp. 86–87.

[243] For the generalized state of the issue, see Mora, *L'état actuel*, pp. 31-32; Mora, *Estado actual,* pp. 34–35.

[244] Ferreira, António Vicente, "Alguns aspectos da política indígena de Angola (1934)", in: Ferreira, António Vicente (ed.), *Estudos Ultramarinos,* vol. III, Lisboa: Agência Geral das Colónias, 1953-1955, pp. 35–50, here p. 46; *Dr. A. Damas Mora. A sua resposta*, in: A Província de Angola, 10.04.1930, p. 2.

[245] Mora, *Estado actual,* p. 35.

eligible for free state medical assistance, such as European settlers or African contract labourers. In exceptional cases, where there were no other doctors in the area, the money was earmarked to go to the CAI budget.[246] Upon his visit to Angola, Giovanni Trolli praised this high level of remuneration – which was much superior to that offered in the Belgian Congo – as an effective means of supplying the AMI services with personnel.[247] In 1927, his own attempts to enhance the appeal of such jobs in the Belgian Congo using a similar strategy had been frustrated by the opposition of the health department in the Colonial Ministry to his plan.[248] The same question was also hotly debated in other colonies.[249] Crozier's conclusion that pay was "a constant bone of contention" in the medical service in British East Africa was probably true for the whole of colonial Africa.[250]

Notwithstanding the many difficulties, the number of government doctors in Angola had increased to 95 by the end of 1928, 36 of which worked in the zones and sectors assigned to the AMI services.[251] Although this number was still fairly small for a population Damas Mora had estimated at 3.6 million, Angola did not compare unfavourably with its neighbours, on the contrary.[252] In French Equatorial Africa, there were only 51 doctors for roughly three million inhabitants in 1929.[253] The government in Belgian Congo employed about one hundred doctors in 1928 for a population that was estimated at approximately three times that of Angola.[254] As far as the number of state doctors was concerned, Angola had one of the best doctor-to-population ratios in West and Central Africa in the late 1920s.[255]

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[246] Alto Comissariado da República em Angola (Vicente Ferreira), *Diploma Legislativo n. 463*, art. 8-10; Mora, *Estado actual,* p. 35.

[247] Trolli, *Impression,* p. 404.

[248] Résumé succinct du memorandum du docteur Troli au sujet de la situation du service médical de la colonie auprès du departement et au Congo Belge, s.d.; Avis du service de l'Hygiène sur la proposition de M. le Gouverneur concernant la suppression de la clientèle privée au médecins de la catégorie C, 17.01.1927; [van Campenhout], Avis sur les propositions concernant l'organisation du Service Médical faites par M. le Médecin en Chef Trolli, 15.03.1927, all in: AA, A 11 – Hygiène, Box 4420, Folder 606.

[249] See, for instance, Crozier, Anna, *Practising Colonial Medicine. The Colonial Medical Service in British East Africa,* London/New York: I.B. Tauris, 2007, pp. 29–30. Sierra Leone adopted the same model as in Angola, see Mora, *L'état actuel*, pp. 31-32.

[250] Quote in Crozier, *Practising Colonial Medicine,* p. 27.

[251] *Conferência sanitária luso-belga (1928).* Not all of them were employed by the AMI services, as Trolli erroneously stated. Some were regular health delegates. See Trolli, *Impression,* p. 402. According to Damas Mora, 30 of them were employed in the AMI services, see Mora, *L'état actuel*, p. 34.

[252] Mora, *L'état actuel*, p. 24.

[253] Headrick, *Colonialism, Health and Illness,* pp. 228; 407.

[254] Numbers vary somewhat from source to source, see Trolli, Giovanni, *Colonie du Congo Belge - Rapport sur l'Hygiène Publique pendant l'année 1928,* Bruxelles: Albert Dewit, 1930, p. 4; Trolli, Giovanni, *Colonie du Congo Belge - Rapport sur l'Hygiène Publique pendant l'année 1930,* Bruxelles, 1931. Trolli estimated the total population in the Belgian Congo to be 13 million at the time, see Trolli, Giovanni, *L'Assistance Médicale aux Indigènes du Congo Belge et Notre Dynastie. Historique et nouvelle méthode adoptée par FORÉAMI,* Anvers, 1935, p. 13.

[255] Compare with the numbers in Headrick, *Colonialism, Health and Illness,* p. 407. See also the similar numbers in Mora, *L'état actuel*, p. 34 and Mora, *Estado actual,* p. 38.

Moreover, by the late 1920s, Damas Mora and other hygienists, such as João Camoesas, believed that the transition to preventive healthcare would substantially diminish the need for European doctors. According to Damas Mora, the international data he had compiled for his League of Nation report had shown that a well-trained and well-equipped mobile hygienist was able to cover 50,000 to 100,000 people, whereas a 'clinical' doctor could only assure individual medical assistance to 3,000 people. He calculated that 40 to 60 hygienists would thus be enough to offer coverage to the entire native population of Angola. Thus in the opinion of Damas Mora social medicine offered the solution that would put an end to the basic and interrelated problems of recruitment and the increasing strain the health services had placed on the colony's budget.[256]

In the meantime, Damas Mora made use of inner-imperial migrations and networks to resolve the shortage of medical personnel. Namely, he employed several doctors, as well as pharmacists and nurses, who had been deported to Angola because of their opposition to the military regime and/or participation in 'Reviralho' revolts that had erupted after the overthrow of the First Republic in 1926.[257] Some, like Jaime José Rodrigues Braga and Arnaldo Cândido Veiga Pires, were effectively stationed in the AMI sectors.[258] The most famous of these deportee doctors was without doubt the former Minister of Education João Camoesas. In the political turmoil following 1926, Camoesas had been assigned a residence in São Tomé, but Damas Mora, who admired Camoesas' work as a social hygienist in Lisbon in the 1920s, was

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[256] Mimoso Moreira, *Assistência Médica aos Indígenas. Entrevista com o sr. dr. Damas Mora, a propósito dum estudo de que o encarregou a Sociedade das Nações*, in: A Província de Angola, 10.01.1930, pp. 1–2; Mora, *L'état actuel,* pp. 10-11; 20-21. See also António Damas Mora, *Assistência Médica aos Indígenas, em Angola*, in: A Província de Angola, 06.-08.08.1934. In Mimoso Moreira, *Assistência Médica aos Indígenas. Entrevista com o sr. dr. Damas Mora, a propósito dum estudo de que o encarregou a Sociedade das Nações*, in: A Província de Angola, 10.01.1930, pp. 1–2, Damas Mora also referred to a study in which João Camoesas had drawn similar conclusions.

[257] The years between the demise of the First Republic in 1926 and the consolidation of the Estado Novo in 1932 saw revolts and political agitation, resulting in the forced exile to the colonies of many members of the military, politicians and intellectuals. The Reviralho was a movement in which many members of the political and intellectual elite of the former Republic participated, and given the large number of medical doctors among that elite, it is not surprising that they also figured prominently among the deportees. See Farinha, Luís, *O Reviralho. Revoltas Republicanas contra a Ditadura e o Estado Novo, 1926-1940,* Lisboa: Ed. Estampa, 1998 and, for a definition, p. 20. For studies on deportation in the late nineteenth and twentieth centuries, see Coates, Timothy, "Preliminary Considerations on European Forced Labor in Angola, 1880-1930. Individual Redemption and the "Effective Occupation" of the Colony", *Portuguese Literary and Cultural Studies* 15/16 (2010), pp. 79–106 and Barros, Victor, *Campos de concentração em Cabo Verde. As ilhas como espaços de deportação e de prisão no Estado Novo,* Coimbra: Imprensa Universidade de Coimbra, 2009.

[258] For a presumably complete list of deported doctors, pharmacists and nurses employed in Angola in the late 1920s, see Martins, Manuel Eduardo, "Relatório da Inspecção Extraordinária à Administração do Hospital Central de Luanda, 31.12.1930", *Boletim Oficial da Colónia de Angola, Série II*, 08.03.1930, pp. 168–184, here pp. 177–178. On Jaime José Rodrigues Braga, who headed the AMI sector of Mayombe in early 1929, see also Mora, *Luta contra a moléstia do sono,* pp. 181–182.

successful in relocating Camoesas' residence to Angola.[259] In September 1928, Camoesas would assume the direction of the *Boletim da Assistência Médica aos Indígenas* and publish several articles and statistics on public hygiene, until the political turmoil under High Commissioner Filomêno da Câmara in Angola induced him to leave for the United States in April 1929. Under Filomêno da Câmara, all deportee doctors would be dismissed from the health services for 'moral' and political reasons.[260] There had been nothing exceptional about Damas Mora's scheme, however. As the colonial bureaucracies generally lacked qualified employees, deportees were often offered important functions in the colonies during the late 1920s. Augusto Casimiro, for instance, former governor of the Congo district (1923-1926) and Secretary of the Interior in Angola, reassumed this latter position after his deportation.[261]

Another, more systematic strategy involved the recruitment of doctors from the Portuguese colony of Goa. On 31 May 1927, five young doctors who had recently graduated from Goa Medical School arrived in Luanda (Rómulo de Noronha, Gelásio Lobo, Bernardo Gomes Pinto, Bruno de Mesquita and José Agostinho João Francisco da Cruz) and two more would follow shortly thereafter.[262] The good relationship between Damas Mora and the Director of the Medical School of Goa, Froilano de Melo, who had been an invited researcher at the Institute for Scientific Research in Luanda in 1923-1924, had certainly facilitated this procedure.[263] However, their arrival to Luanda also resulted in large measure from historical precedents and from the contradictory position the Medical School of Goa and its graduates held within the framework of the Portuguese Empire. On the one hand, the Medical School of Goa, founded by local initiative in 1842, had developed a special focus on tropical diseases towards the end of the nineteenth century in order to legitimate its further existence. Its

[259] See the files in AHU, MU, GM 2832. The reasons for Camoesas' forced exile are not mentioned in these files and remain unclear. On Camoesas' early activities in politics, notably on the reform of public ecucation in Portugal, see Bandeira, Filomena, "Camoesas, João José da Conceição", in: Nóvoa, António (ed.), *Dicionário de Educadores Portugueses. 900 biografias de homens e mulheres que se dedicaram ao ensino e à educação nos séculos XIX e XX,* Porto: Edições Asa, 2003, pp. 237–241.

[260] Mora, *Publicações Médicas*, p. 18-19; Mora, *Luta contra a moléstia do sono,* pp. 183–184. On Camoesas' function in Angola, see also Trolli, *Impression,* p. 401. On the dismissal of deportee doctors under Filomêno do Câmara, see below in this chapter.

[261] See Farinha, *Reviralho,* p. 31 and *Boletim da Assistência Médica aos Indígenas* 2,1-8 (1928), p. 1.

[262] For short biographies of the first five of them, see Costa, Pedro Joaquim Peregrino da, "Médicos da Escola de Goa no Quadro de Saúde das Colónias (1853 a 1942)", *Boletim do Instituto Vasco da Gama* 57 & 58 (1943), pp. 1-62 & 1-88, n. 58, pp. 14-16. Two of them, Bruno de Mesquita and Bernardo Gomes Pinto, also received a biographical entry in Costa, Aleixo Manuel da, *Dicionário de literatura goesa*, 3 vols, Macau: Fundação Oriente, 1997, vol. II, p. 297-298 and vol. III, p. 61-62. I have been unable to determine the names of the last two, but in March 1928, Damas Mora indicated that there were seven auxiliary doctors from Goa, see Mora, *Os Serviços de Saúde (1928),* p. 88.

[263] It was reported that they had been selected by Froilano de Melo personnally, see Costa, *Dicionário*, vol. 3, p. 61 and Damas Mora's preface in Mesquita, *Considerações,* p. 29. For the career of Froilano de Melo, see Bastos, Cristiana, "From India to Brazil, with a Microscope and a Seat in Parliament: The Life and work of Dr. Indalêncio Froilano de Melo", *Journal of History of Science and Technology (HoST)* 2 (2008), pp. 139–189, online http://www.johost.eu/vol2_fall_2008/vol2_cb.htm, last accessed 29.12.2013.

director at the time envisioned the School not only as a future centre of research and education in tropical medicine, but also explicitly praised its Indian graduates as the ideal intermediaries for Portugal's civilizing (and medical) missions in the African colonies.[264] Graduates from Goa had already filled the ranks of the medical staff in Mozambique, Guinea and Angola from the 1850s onwards.[265] From hence forth, this 'mission' would become the core ideology of the Medical School of Goa in the twentieth century.[266]

On the other hand, in the twentieth century Goan physicians remained in a subaltern position in the empire, with limited career chances. While the supply of graduated doctors in Goa exceeded local demands, certainly when it came to government employment, they were not allowed to practice medicine in metropolitan Portugal or to hold leading positions in the colonial health services without further medical training at one of the medical schools in Portugal (Lisbon, Porto and Coimbra).[267] Racial contempt toward the 'not fully Portuguese' Goans certainly played a role, but it seems that these restrictions were also the result of protective strategies erected by Portuguese faculties and medical associations. Some Goa-born doctors who had studied or completed their studies in mainland Portugal managed to ascend to leading positions in other colonies (e.g. Bruto da Costa and Anibal Correia Mendes) and even in Portugal (e.g. Francisco Xavier Silva Telles).[268]

In Angola, the contracted Goan doctors were much valued for their contributions to both research and medical practice during the initial phase of the AMI in the late 1920s.[269] Although they were given large responsibilities – some were even appointed head of a sector – they were only offered temporary work contracts, and their title of 'auxiliary doctors' was a reflection of their subordinate position in the hierarchy. At least three Indian doctors (Bernardo Gomes Pinto, Bruno de Mesquita and José da Cruz) went on to study at Faculties

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[264] Bastos, Cristiana, "O ensino da medicina na Índia colonial portuguesa. Fundação e primeiras décadas da Escola Médico-cirúrgica de Nova Goa", *História, Ciências, Saúde - Manguinhos* 11, suplemento 1 (2004), pp. 11–39, here pp. 33–35.

[265] For Mozambique, see, for instance, Bastos, Cristiana, "Medical Hybridisms and Social Boundaries. Aspects of Portuguese Colonialism in Africa and India in the Nineteenth Century", *Jounal of Southern African Studies* 33,4 (2007), pp. 767–782, here pp. 774–777, for Guiné Havik, Philip J., "Bóticas e beberagens. A criação dos serviços de saúde e a colonização da Guiné", *Africana Studia* 10 (2007), pp. 235–270, here p. 254 and for Angola see Costa, *Médicos da Escola de Goa*, n. 58, p. 3-10 and the numerous Goa educated doctors in AHU, SEMU, DGAPC 895, Livro Mestre do Quadro de Saúde de Angola, 1858-1913.

[266] Bastos, *Ensino da Medicina,* pp. 16–17.

[267] *Ibid.,* p. 12; Bastos, Cristiana, "Race, Medicine and the Late Portuguese Empire. The Role of Goan Colonial Physicians", *Institute of Germanic & Romanic Studies* 5,1 (2005), pp. 23–35, here p. 30.

[268] On the career of these Goan doctors, see Chapter 1.

[269] See, for instance, "Os médicos da Escola da Índia", *Boletim da Assistência Médica aos Indígenas e da Luta contra a Moléstia do Sono* 3,4-6 (1929), pp. 429–432. They are mentioned in many reports of the time, generally in a very positive manner. By way of example, see Sousa, *Relatório missão Dande 1928,* pp. 48; 57 and Mora, *Luta contra a moléstia do sono,* p. 66.

of Medicine in Portugal at the end of their contracts, before later returning to join the medical department in Angola (or other African colonies) as full members.[270]

Similar intra-imperial employment schemes with a hierarchical divide also existed in other empires. The British, for instance, had employed doctors from the West Indies in their West African possessions throughout the nineteenth century as part of a broader employment scheme for West Indians in the colonial administration.[271] They were banned from the West African Medical Services (WAMS), however, at the beginning of the twentieth century, at the very moment that, on the other side of the continent, East African medical departments started to recruit Indian doctors.[272] However, like the Goans in the Portuguese colonies, the medical training of these 'imperial doctors' was not recognized as meeting European standards, and they consequently filled subordinate positions. In East Africa, although these Indian Assistant or Sub-Assistant Surgeons, as they were called, even outnumbered European doctors by 1914, they continued to be met with much resistance.[273] Yet, whereas Goans were able to enter the regular Portuguese colonial health services after studying or completing their studies in Portugal, racial prejudice completely barred British Indian subjects from becoming a medical officer in the British African colonies.[274]

In addition, the British, French and the Belgians employed foreign doctors as cheap and subordinate practitioners in their African colonies. Thus, Russian *émigré* doctors were employed in the health services of the AEF as *hygiénistes adjoints* from 1926 onwards, until medical practice was restricted to the holders of a French diploma, and the scheme was phased out in the mid-1930s. Like the Goan doctors in Angola, these foreign practitioners were usually employed in demanding AMI and anti-sleeping sickness campaigns.[275] In a similar vein, many of the Syrian doctors who were employed in the 1910s and 1920s by the British in the Anglo-Egyptian Sudan held positions as sleeping sickness doctors in the south

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[270] See the biographical works referred to in footnote 262.

[271] Patton, Adell, *Physicians, colonial racism, and diaspora in West Africa,* Gainesville: University Press of Florida, 1996. On the general employment of West Indians in the colonial administration of Sierra Leone in the nineteenth century, and the demise of this scheme at the end of the nineteenth century, see Blyden, Nemata Amelia, *West Indians in West Africa, 1808 - 1880. The African diaspora in reverse,* Rochester: University of Rochester Press, 2000.

[272] Lyons, Maryinez, "The Power to Heal. African Auxiliaries in Colonial Belgian Congo and Uganda", in: Engels, Dagmar; Marks, Shula (eds.), *Contesting Colonial Hegemony. State and Society in Africa and India,* London: I.B. Tauris & Co, 1994, pp. 202–223, here p. 321 note 13; Iliffe, John, *East African doctors. A history of the modern profession*, Cambridge: Cambridge University Press, 1998, p. 28.

[273] Iliffe, *East African doctors*, pp. 28; 61. Just before the outbreak of the First World War, the medical departments of Uganda and Kenya together employed 49 doctors and 61 Indian Assistant or Sub-Assistant Surgeons. Beyond a few scattered references in Iliffe's book, which "deals only with black Africans" (p. 1), this group of Indian doctors in East Africa seems to have received little attention. Crozier's study, then, only focuses on European doctors, see Crozier, *Practising Colonial Medicine*.

[274] Crozier, *Practising Colonial Medicine*, pp. 24; 42 and notes p. 164.

[275] Headrick, *Colonialism, Health and Illness,* pp. 229; 244; 364. For an example, see Bado, *Médecine coloniale,* p. 259.

of the colony.[276] The British Colonial Office even set up a scheme to employ Jewish refugee doctors as cheap government practitioners in the African colonies in the 1930s. According to Addae, some East African colonies admitted these doctors into their Medical Service, even as the scheme was boycotted on the other side of the continent in Ghana and Nigeria.[277] Furthermore, in the late 1920s, the health services in the Belgian Congo, which already employed many foreign doctors, most notably Italians, but also French, Spanish and Portuguese *hors cadre* – partly a legacy from the times of the Congo Free State – contemplated the temporary recruitment *hors cadre* of Syrian, Egyptian, and Slavic doctors for their sleeping sickness campaigns. In their choice of nationalities, it is hard not to see the influence that the practices in the neighbouring AEF and the Anglo-Egyptian Sudan had.[278]

The commonality of all these schemes lay in the practice of looking beyond the metropole in their search for inexpensive doctors, in order fill the heretofore unmet demand for doctors while simultaneously reducing costs to the empire. Indeed, in the early twentieth century, all colonies struggled to expand their health services without overstretching their limited budgetary capacities.[279] These mostly non-European doctors were given temporary contracts and could not enjoy the security of tenure that full members of the colonial health services were given; this last, in fact, was a privilege increasingly restricted to nationals or graduates of the national medical faculties of the colonial power. Their presence often met with resistance from within the administration and as a result many a scheme was eventually abolished. Their subordinate position to European doctors was dictated by beliefs of the intrinsic superiority of Europeans and the consequently established hierarchies of race, which foreshadowed how the position of African medical personnel would be handled.

The training programme of African medical personnel basically relied on the same premises. Colonial health services continued their efforts to recruit more European doctors and nurses, but, by the 1920s, it was widely accepted that it would be utterly impossible to set

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[276] Bell, Heather, *Frontiers of Medicine in the Anglo-Egyptian Sudan, 1899-1940,* Oxford: Clarendon Press, 1999, pp. 40–48.

[277] Addae, Stephen, *The evolution of modern medicine in a developing country. Ghana 1880 - 1960,* Edinburgh: Durham Academic Press, 1997, pp. 207–209. Crozier does not mention this scheme in her prosopographical study, but as she only looks at the regular Medical Officers, this does not necessarily contradict Addae's assumption, perhaps even the contrary. See Crozier, *Practising Colonial Medicine*.

[278] Inspecteur Général Émile Van Campenhout, Considérations sur le service de l'hygiene de la colonie, 17.12.1927, in: AA, A11 – Hygiène, Box 4420, Folder 606. On the employment of non-Belgian doctors in the Congo Free State and afterwards, see Vellut, Jean-Luc, "La médecine européenne dans l'État indépendant du Congo (1885-1908)", in: Janssens, Pieter G.; Kivits, Maurice; Vuylsteke, Jacques (eds.), *Médecine et hygiène en Afrique Centrale de 1885 à nos jours,* Bruxelles: Fondation Roi Baudoin, 1992, pp. 61–81 and Mertens/Lachenal, *History*, p. 1254.

[279] Mora, *Assistência Médica ao Indígena em África (1926),* p. 394; Mora, *Estado actual,* p. 34.

up a comprehensive health infrastructure for the African population using only European personnel. At the Luanda conference, Jerôme Rodhain, the head of the health services in the Belgian Congo (1920-1925), succinctly summarized this widespread view. “In a tropical colony”, he maintained, “we can in fact not seriously consider an endless augmentation of European civil servant doctors, which are expensive and often very hard to recruit. We must assist the natives with natives.”[280] Damas Mora would quote exactly these words in his important article in *A Medicina Contemporânea*, in which he expounded his ideas on the AMI services in Angola.[281]

In the 1910s, most colonial health services in tropical Africa began to consider the idea of providing medical training to Africans. At the time, such programmes had already proven successful in some Asian and North-African colonies.[282] Only very few medical schools for Africans would emerge on the continent before the 1950s, however. The first was established in Dakar in 1918, and after extended debates both within the colonies and within the Colonial Office, the British followed suit: one school was established as part of the Makerere Technical College in Uganda in 1923/24; another was created in Khartoum in 1924; and, in 1930, the Yaba Medical Training College was instituted near Lagos in Nigeria.[283] Most had a broad regional reach: the Medical School of Dakar trained Africans for all of French West Africa (AOF) but did not send any graduates to the AEF before the Second World War, despite recurrent requests; the Yaba School covered training for several West African colonies; and the Makerere College serviced Uganda, Tanganyika, Kenya and Zanzibar.[284] In the Interwar Period, the School in Dakar had by far the largest training programme.[285]

The African graduates of these schools were all accredited with a similar subaltern position in the medical hierarchy. Although the training programmes were extensive – they generally took five to six years – and were largely based on European programmes, Africans

[280] Rodhain, J., "Rapport sur l'organisation générale du service médicale au Congo Belge", *Revista Médica de Angola* 4,1 (1923), pp. 185–191, here p. 190. Similarly Heckenroth, F., "L'Oeuvre d'Assistance Médicale Indigène en Afrique Occidentale Française", *Revista Médica de Angola* 4,1 (1923), pp. 207–219, here p. 213.
[281] Mora, *Assistência Médica ao Indígena em África (1926),* p. 393
[282] See, for instance, *Ibid.,* p. 394.
[283] See, for Dakar: Blanchard, "La formation des auxiliaires médicaux dans les colonies françaises. L'école de médecine de l'AOF à Dakar", *Bulletin de l'Office International d'Hygiène Publique* 27,8 (1935), pp. 1575–1592; for Makerere: Iliffe, *East African doctors,* pp. 60-91, for the early years esp. pp. 60-62 and Lyons, *Power to heal*; for Yaba: Patton, *Physicians,* p. 33; for the Kitchener Memorial School of Medicine in Khartoum: Bell, *Frontiers of Medicine,* pp. 48–50. For the aborted project to establish a Medical School in Accra (Ghana) in the 1920s, see Addae, *Evolution,* pp. 264–274.
[284] Headrick, *Colonialism, Health and Illness,* p. 58; Lyons, *Power to heal,* p. 215; Iliffe, *East African doctors,* pp. 60–62.
[285] Until 1935, no less than 148 *aides-médecins* had already graduated from Dakar, with another 94 in formation, see Blanchard, *Formation,* p. 1578. Compare with the rather restricted numbers for the British schools, in Iliffe, *East African doctors,* p. 62; Lyons, *Power to heal,* pp. 215–217.

were not considered full doctors upon graduation, with the exception of the 'Arabic' students who graduated from the school in Khartoum. Elsewhere, they were not even called doctors, but were referred to as medical aides (*aide-médecins* in Dakar) or Senior Native (later African) Medical Assistant (Makerere). Thus, the position of *aide-médecin* from Dakar was to remain under the "strict and constant control of the doctor to whom he had been assigned".[286] European health services wanted highly educated African healthcare workers, while preserving their hegemony over medical knowledge production as well as the monopoly of medical prestige.[287]

The establishment of a Medical School was also considered in Angola, but the project was eventually rejected. In his reform proposal for the colonial health services of 1910, Maia Leitão had already argued in favour of creating Schools of Medicine in Luanda and Lourenço Marques.[288] Against the backdrop of similar discussions in other African colonies, the project resurfaced again in the early 1920s, meeting with the support of High Commissioner Norton de Matos.[289] Germano Correia also argued in favour of the idea at the Luanda Congress of Tropical Medicine in 1923. Germano Correia's arguments were manifold and paralleled those used in other colonies. He pushed past the 'scarcity of European doctors' argument, maintaining that, in rural areas, only native doctors familiar with the local customs and languages would be able to earn the trust of the population. They would also cost less and would be more resistant to the tropical climate and to local hygienic conditions.[290]

This was, in fact, an old aspiration. As early as 1844, the Overseas Ministry in Lisbon had decreed the establishment of a network of medical schools throughout the Portuguese Empire. Although this project did not materialize, Damas Mora, Germano Correia and many others after them claimed that the Portuguese had been the first to consider medical training for Africans, or when making reference to the Medical School of Goa, for natives in general.[291]

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[286] Heckenroth, *L'Oeuvre,* p. 214, here quote. See also Mora, *Estado actual,* p. 37.
[287] On this question of hegemony, see Lyons, *Power to heal*. In the 1920s, the struggle between those who advocated training full doctors according to the European model and the proponents of training mere 'medical assistants' was one of the main reasons why the project to institute a Medical School in Accra (Ghana) collapsed, see Addae, *Evolution,* pp. 264–274.
[288] Leitão, *Serviço,* p. 36.
[289] As retrospectively described by António Damas Mora, *Serviços de Saúde e Higiene. Considerações finais de um relatório do seu Director*, in: A Província de Angola, 27.06.1934, pp. 1–2.
[290] Correia, *Processos práticos,* pp. 194–200.
[291] On the 1844 decree, see Bastos, Cristiana, "Doctos for the Empire. The Medical School of Goa and its Narratives", *Identities. Global Studies in Culture and Power* 8,4 (2001), pp. 517–548, here pp. 518–520. For claims of Portuguese pioneering, see , for instance, Mora, *Rapport au sujet des services sanitaires de Dakar*, p. 18 (see footnote 55); Mora, *Assistência Médica ao Indígena em África (1926),* p. 394; Correia, *Processos práticos,* pp. 195–196. Some even referred to the first, and probably short-lived, experiences of medical teaching in Luanda in 1703 and 1791. As well as the two articles cited above, see Pina, Luís de, "História da medicina

Such expressions of national pride would not rescue the project from being dismissed, however. Damas Mora, who had repeatedly announced at the Luanda Conference that the local government was seriously considering the issue, actually turned out to be contrary to the idea.[292] As opposed to Maia Leitão and Germano Correia, Damas Mora maintained that, unlike in French or British West Africa, social conditions in Angola were not advanced enough for such a school. In his opinion, Angola lacked both the appropriate students and the professors. He placed the blame on the moral deficiencies of the Africans and also on the lack of adequate preparatory education, using more or less the same arguments as Vassal, the director of the health services in the AEF, albeit in a subtler manner. At the Congress in Luanda, Vassal had explained his opposition to a Medical School in the AEF by pointing to the moral and educational level of the population: with the exception of the coastal regions of Gabon and Loango, he stated, the AEF was populated by "savages who vegetate in the worst physical, intellectual and social misery".[293] For Vassal, Damas Mora, and probably many others, the success of African medical training depended on the "degree of civilization and especially of morality of the tribe where the student comes from".[294]

After the 1920s, the issue of training African doctors in Angola seems to have subsided altogether for some decades. It was only in 1962 – one year after the outbreak of the anti-colonial revolt – that university courses, including medicine, were established in Angola.[295] Yet, until the colony declared its independence in 1975, students "were

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imperial portuguesa (Angola)", *Boletim Geral das Colónias* 19,211 (1943), pp. 18–72, here pp. 62–67; Esaguy, Augusto d', *A abertura da Escola Médica de Sao Paulo da Assunção de Luanda, 1791,* Lisboa: Ed. Imperio, 1951; Correia, Maximino, "Nota sobre o ensino da Medicina em Luanda no século XVIII", *Jornal do Médico* 17,531 (1951); Teixeira, Waldemar Jorge Gomes, "Subsídios para a história da medicina portuguesa em Angola (Até à organização do Serviço de Saúde)", *Boletim do Instituto de Angola* 30/32 (1968), pp. 5–26; Walter, Jaime, *Um português carioca professor da primeira escola médica de Angola (as suas lições de anatomia) - 1791,* Lisboa: Junta de Investigações do Ultramar, 1970.

[292] Compare Mora, *Les organisations sanitaires,* p. 178; Mora, *La raison d'être,* p. 55 with Mora, *Assistência Médica ao Indígena em África (1926),* p. 394 and especially António Damas Mora, *Serviços de Saúde e Higiene. Considerações finais de um relatório do seu Director*, in: A Província de Angola, 27.06.1934, pp. 1–2, in which he stated that he had been opposed to the idea already in 1921.

[293] Vassal, J., "Utilisation des Noirs en afrique Equatoriale Françaies comme auxiliares du Service de Santé", *Revista Médica de Angola* 4,1 (1923), pp. 221–225, here p. 221.

[294] Mora, *Rapport au sujet des services sanitaires de Dakar*, p. 19 (see footnote 55). See, for instance, also the disparity of regional origins among the graduates of the Medical School in Dakar, in: Blanchard, *Formation,* p. 1578.

[295] Paulo, João Carlos, "Da 'educação colonial portuguesa' ao ensino no Ultramar", in: Bethencourt, Francisco; Chaudhuri, Kirti (eds.), *Último Império e Recentramento (1930-1998)* (História da Expansão Portuguesa; 5), Lisboa, 2000, pp. 304–333, here pp. 323–324; Carvalho, Paulo de; Kajibanga, Víctor; Heimer, Franz-Wilhelm, "Angola", in: Teferra, Damtew; Altbach, Philip G. (eds.), *African Higher Education. An International Reference Handbook,* Bloomington & Indianapolis: Indiana University Press, 2003, pp. 162–175, esp. pp. 163-164; 169; 173; Ministério do Ultramar - Gabinete do Ministro, *Decreto-Lei n. 44.530*, 21.08.1962, in: *Diário do Governo, Série I*, 21.08.1962, pp. 1131–1132 .

overwhelmingly white".[296] In the meantime, it was possible for Angolans to study medicine in the metropole, where they were organized in the *Casa dos Estudantes de Angola*, later changed and expanded to the *Casa dos Estudantes do Império* (1944-1965).[297] Agostinho Neto, for example, who would become the first Angolan president after independence, studied Medicine in Coimbra and Lisbon between 1944 and 1958, before opening a private practice in Luanda in 1959.[298] Whether it was possible for African doctors to enter government service is a question that future research must answer.

Whereas the project to educate native doctors was aborted, the very same rationale led to the successful creation of a training programme for nurses. This last aimed to replace European nurses with Africans, because the latter were deemed "more resistant to the climate, less demanding with regard to salaries, and in very special conditions, to be of benefit to the service of native assistance, given the fact that they speak the same language [as the locals] and hence they can influence the mind of the natives so that they follow the concepts of hygiene to which they are naturally opposed".[299] The first official attempts to systematically train and employ native nurses in the health services go back to governor Paiva Couceiro (1907-1909).[300] It was not until the late 1910s, however, that courses for native nurses became firmly established at the Nursing School of the Central Hospital in Luanda. In 1920, the courses, which were originally separate for natives and Europeans, were now merged into a single two-year course.[301] Additionally, the health reform of 1921 urged all health delegates – as the regular government doctors stationed throughout the colony were called – to teach elementary courses if there were enough appropriate candidates.[302]

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[296] Carvalho/Kajibanga/Heimer, *Angola,* p. 173 (quote). For the number of students in medicine in the late colonial period, see *Ibid.,* p. 169.
[297] On the *Casa dos Estudantes do Império* (CEI), see Castelo, Cláudia, "Casa dos Estudantes do Império (1944-1965). Uma síntese histórica", *Mensagem* número especial (1994-1995), pp. 23–29 and Faria, António, *Linha estreita da liberdade. A Casa dos Estudantes do Império*, Lisboa: Ed. Colibri, 1997.
[298] See http://www.agostinhoneto.org/index.php?option=com_content&view=article&id=766&Itemid=199 (last visited, 31.12.2013).
[299] Sant'Anna, *Problema da assistência,* p. 164.
[300] Couceiro, Paiva, *Angola. Dois anos de governo. Junho de 1907-Julho de 1909. Historia e Comentarios, Com Prefácio de Norton de Matos,* Lisboa: Edições Gama, 1948 [1910], pp. 289–290. Paiva Couceiro reported having successfully created schools for native nurses, in order to combat the chronic lack of personnel. These schools, however, probably did not take root. In 1911, the Junta de Saúde pointed out that there was no nursing school in Angola, see Junta de Saúde (Luanda), Sessão de 09.01.1911, in: ANA, Cód. 1867, pp. 183r-v.
[301] It seems that these courses were established for the first time in 1916 and re-organized several times between 1919 and 1921. See Governador Geral Fernado Pais Teles de Utra Machado, *Portaria n. 10*, 10.01.1916, in: *Boletim Oficial da Colónia de Angola, Série I,* 15.01.1916, p. 21 and the overview of the legislation between 1919 and 1945 in: Castro, J. F. Sampaio e, "Da Preparação e Aperfeiçoamento do Pessoal Técnico Auxiliar dos Serviços de Saúde de Angola", *Anais do Instituto de Medicina Tropical* 10,4.1 (1953), pp. 2871–2879, here pp. 2871–2874.
[302] Alto Comissariado da República em Angola (Norton de Matos), *Decreto n. 74*, art. 19 and 44.

Furthermore the 1921 reform specified that African 'native' nurses were to form a distinct group *(quadro)* within the medical staff. Their total number was fixed at 130, including ten native midwives, and they were subdivided according to their education and years of service into as many as seven different levels that went from 'native assistant nurse third class' *(enfermeiro auxiliar indígena de 3a classe)* to 'chief nurse' *(enfermeiro chefe)*.[303] This group was kept strictly distinct from that of European nurses, and entirely different salary scales and career opportunities applied. However, when in the 1930s native nurses began to reach the highest category within their group, some of them protested. In newspaper articles and petitions to the Governor-General and even to the Minister of Colonies, they protested against the unequal treatment they felt was based on racial prejudice. In spite of identical qualifications and job responsibilities, nurses from African or mixed descent were paid almost half that of their white 'European' colleagues with whom they had studied in Luanda. They also pointed to the contradictory use of the term 'native nurses', arguing that the general laws in the colony would consider many of them to be non-natives because of their educational level and Europeanized customs. Their demands for equal salaries and promotion opportunities were not met until after 1945, when Minister of Colonies Marcelo Caetano took up a recurrently advanced proposal and with it created non-racialized classes of nurses and assistant nurses.[304]

Before 1945, this discrimination meant that the job of 'native nurse' was not particularly attractive. But there were further reasons as to why the number of African nurses within the health department remained stable at such a low level during the Interwar Period – 76 in 1923, 70 in 1928 and 99 in 1937.[305] The merits of African nurses, notably the essential role they played as interpreters and cultural brokers in convincing African populations to

[303] *Ibid.*, art. 19, 34 and 44.

[304] See, for instance, *Enfermeiros Indígenas*, in: A Província de Angola, 23.05.1932; Luis Abel Traça, *Enfermeiros Indígenas*, in: A Província de Angola, 07.06.1932, p. 2; "Os enfermeiros nativos e europeus perante a questão dos vencimentos", *Angola. Revista de Doutrina e Estudo* 4,1 (1936), p. 11; "O caso dos enfermeiros nativos. Uma injustiça prestes a acabar", *Angola. Revista de Doutrina e Estudo* 14,99-104 (1945), pp. 2–5. In 1940, petitions from the native nurses Raimundo Abel Traça and Joaquim Dias Cordeiro were even discussed at the Council of the Colonial Empire *(Conselho do Império Colonial)* in Lisbon. The Council did not meet their demand to abolish the distinction that was made between native and European nurses, but recommended a revision of the salaries. See Parecer 53 (do processo 58) da 2a Secção do Conselho do Império Colonial, 28.10.1940, in: AHU, Conselho do Império Colonial, Livro de Pareceres 1940, Sessão Plena, 2a, 6a e 7a Secção. However, it appears that equal pay was only achieved when Minister of Colonies Marcelo Caetano abolished the distinction between the two groups in 1945, see Rodrigues, Eugénia, *A representação social do branco na imprensa angolana dos anos 30. A revista Angola da Liga Nacional Africana* (Dissertação de Mestrado - Universidade Nova de Lisboa, Faculdade de Ciências Sociais e Humanas), 1994, pp. 57–58 and for the health reform of 1945, where no such distinction is mentioned, see Ministério das Colónias, *Decreto 34.417 que reorganiza os serviços de saúde do Império Colonial Português*, 21.02.1945, in: *Diário do Governo, Série I*, 21.02.1945, pp. 95–111, esp. art. 96-111.

[305] Compare the figures in Mora, *Les organisations sanitaires,* p. 179; Direcção dos Serviços de Saúde e Higiene da Colónia de Angola, *Medicos e enfermeiros ao serviço desta Colónia em 31 de Março de 1928*, 09.05.1928, in: ANA, Cx. 4958 and Boletim Sanitário de Angola 1 (1937-1938).

accept western biomedicine, were occasionally sung in doctors' reports.[306] Indeed, some reports do hint at the extent to which the success of the medical assistance campaigns of the late 1920s and early 1930s hinged upon the collaboration of African intermediaries: members of the medical teams such as nurses and servants, but also catechists of nearby mission stations and local chiefs *(sobas)*. Especially *sobas* who had been soldiers in the colonial army were often reported to have been more open to European biomedical ideas and hence of great support in convincing their subjects of their value.[307]

Of course, it is questionable to what extent African nurses actively embraced the role assigned to them by European doctors. As Walima Kalusa has recently argued, to consider African nurses merely as agents of medical imperialism reifies the writings of European doctors and does not take into account the spaces of agency these auxiliary workers carved out for themselves.[308] Yet, Kalusa seems to have downplayed the fact that contemporary writings were already very critical of the role of African nurses. From the very beginning, many reports had emphasized that they were only valuable in a subordinate position and when kept under the strict control of European doctors or nurses.[309] It was commonly believed at the time that they were good at mastering basic technical processes, such as injecting medicine, but that it was far more difficult to instil them with a stable sense of morality. Were they to be left to manage a local health station on their own, many would abuse their power and turn to extortion.[310] It was also feared that, back in their traditional environment, they would gradually strip off the basic principles of western biomedicine that for them had only been a "thin layer of varnish without roots in the tradition" and thus return to their ancient practices of fetishism and charlatanism.[311] Yet despite all this criticism, African nurses were left in command of many of the local health stations *(postos sanitários)* all the same, especially in sleeping sickness ridden areas, because of the simple fact that not enough

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[306] See, for instance, *A obra da assistência ao indigena no Congo. A assistência médica - Limpêsa e derruba das matas - Política indígena*, in: A Província de Angola, 15.03.1929, p. 1; Pinto, Bernardo Ricardo Gomes, "Sector Sanitário Ambris-Dande. Posto Sanitário de Nambuangongo", *Boletim da Assistência Médica aos Indígenas e da Luta contra a Moléstia do Sono* 2,1-8 (1928), pp. 37–58, here p. 58; Gama, *Missão Volante,* p. 64.

[307] See , for instance, Costa, Alfredo Gomes da, "Relatório anual do chefe da zona sanitária do Cuanza Norte (1927)", *Revista Médica de Angola* 6 (1928), pp. 21–98, here p. 26; Gama, *Missão Volante,* pp. 61–63; *Assistência Médica aos Indígenas (1929),* p. 303.

[308] See Kalusa, Walima T., "Language, Medical Auxiliaries, and the Re-Interpretation of Missionary Medicine in Colonial Mwinilunga, Zambia, 1922-51", *Journal of Eastern African Studies* 1,1 (2007), pp. 57–78.

[309] See, for instance, Almeida, *Relatório do chefe,* pp. 42–43; Costa, *Relatório Cuanza Norte (1927),* p. 34.

[310] Mora, *Assistência Médica ao Indígena em África (1926),* p. 394. Administrators also criticized the misbehaviour of native nurses and wanted their actions to be more strictly controlled, see, for instance, José Ferreira Rodrigues Figueiredo dos Santos, *Relatório do Governador da Província de Luanda, referente ao ano de 1942*, pp. 97-99, in: AHU, MU, ISAU 1667.1

[311] Sant'Anna, *Problema da assistência,* pp. 164–165.

European personnel was available.[312] Although more research is needed here, it seems that accusations of misbehaviour and disciplinary sanctions such as dismissals were rather frequent.[313]

Very similar reservations and complaints were also voiced in neighbouring colonies at the time.[314] But compared to Angola, these colonies relied more heavily on African nurses. As Headrick has noted, the AEF opted for a "huge, poorly trained, marginally skilled corps of nurses", which already counted 500 African nurses by 1932.[315] One difference was that Angola continued to employ more European nurses, mainly recruited among the quickly growing settler population, an option that was less available to the colonies north of Angola. The official preference for these locally educated European nurses caused conflicts with candidates in the metropole, who saw their chances of being recruited severely affected.[316] There is also little doubt that, when financial austerity measures and unemployment hit the colony in the early 1930s, competition for job posts also broke out between 'white' and African nurses.[317] Throughout the Interwar years, the number of 'white' nurses remained slightly higher than that of the native staff.[318]

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[312] Among the many references to this state of affairs, see, for instance, Mora, *Luta contra a moléstia do sono,* pp. 65-66; 193-196; 219 and *Assistência Médica aos Indígenas (1929),* p. 297.

[313] See, for instance, the dismissal of Arnaldo António Lisboa in *Portaria*, 23.02.1928, in: *Boletim Oficial da Colónia de Angola, Série II*, 23.02.1928, p. 88 or the case of José Francisco da Costa, a native nurse who was dismissed by the Governor-General of Angola in 1938, but successfully appealed this disciplinary action in Lisbon. On this, see AHU, MU, DGAPC 50, maços 3 and 5.

[314] For AEF, see Headrick, *Colonialism, Health and Illness,* pp. 249-253; 359; 375; for the Belgian Congo and British Uganda, see Lyons, *Power to heal,* pp. 210-213; 221.

[315] Headrick, *Colonialism, Health and Illness,* pp. 228 and 253 (quote).

[316] Thus, a leading official in the Health Department of the Colonial Ministry protested in 1924 against the possible closure of the Nursing School at the Colonial Hospital in Lisbon. He wanted it to continue to be possible for people in the metropole to become colonial nurses and consequently requested that the Nursing School remain functional and that a quota for nurses from the metropole be enrolled in the *concursos* (Informaçõ do Chefe da Repartição Técnica de Saúde, 30.10.1924, in AHU, MU, DGAPC 3470). The preference for locally educated nurses in Angola is also documented in the correspondence between Angola and Portugal on this matter around 1930, in: AHU, MU, DGAPC 50, Maço 4.

[317] On this, see below in this chapter.

[318] They accounted for 115 in 1923, 94 in 1928 and 111 in 1937. See the references in footnote 305.

7. The "Portuguese Method" of Preventive Atoxylization and the Unstable Boundaries of Inter-Imperial Learning

When the Portuguese health services eventually intensified its campaign against sleeping sickness in the Interwar Period, it continued to use in combination the various possible approaches discussed in Chapter 1. Yet, in addition to the forced displacements, migration control, and measures aimed at the destruction of the habitat of the tsetse fly, the direct treatment of the human body through drug therapy took a more prominent role from the 1920s onwards. The methods of diagnosis and treatment involved in this approach also provide a good example of the complex interplay between nationalism and transnationalism in colonial medicine at the time.

In December 1926, the head of the newly created Cuanza Zone, Dr Alfredo Gomes da Costa, started to implement a rather expedient method of fighting sleeping sickness. It consisted of two inter-related parts: clinical diagnosis and preventive mass atoxylization. First, based on the clinical, i.e. symptomatic, verification of illness, sick individuals were separated from healthy individuals when they came together for the bi-weekly concentrations. Clinical diagnosis mainly consisted in palpating the cervical glands (in the neck), which were often (but not always) enlarged when people suffered from sleeping sickness. As the glands could also be swollen for other reasons, the group of sick individuals was in fact only a group of suspected cases that included people who showed some of the general symptoms but in fact did not have the disease. Second, all suspects, ambulant or in lazaretos, were given a series of curative injections with atoxyl or newer drugs, while all those considered to be healthy received a differently dosed and spaced series of atoxyl for preventive purposes. This method, which was probably developed *ad hoc* to cope with the local conditions, became the most salient and also most contested feature of Angola's anti-sleeping sickness programme before it was aborted in the early 1930s.[319]

To legitimize this "impertinent" measure, as Gomes da Costa himself called it, he invoked the urgency of the situation. Given the choice "between the mad empiricism of mass atoxylization and the disappearance and degeneration [of the population] we observed in the native villages, we opted for the former", he noted in his first annual report.[320] The preventive atoxylization of whole villages was thus justified as a response to elevated infection rates.

[319] Mass atoxylisation was not included in the basic legislation, Diploma Legislativo 463, and the question as to whether it rested upon Gomes da Costa's personal initiative or was based on the guidelines given by Damas Mora must remain unanswered here. See Alto Comissariado da República em Angola (Vicente Ferreira), *Diploma Legislativo n. 463*. For the origin of this method, see Costa, *Relatório Cuanza Norte (1927),* pp. 31–33.
[320] *Ibid.,* p. 32.

Sterilizing the blood of everyone was considered the best means to bring the epidemic spread of the disease to a stop.[321] As to the method of clinical diagnosis, Gomes da Costa, and after him many others, did not want to waste time with comprehensive microscopic analyses for which they did not have sufficient trained personnel. Such analyses were not only considered too time-consuming, but also untrustworthy, as it was claimed that cases often remained undiscovered if only a single microscopic analysis was done.[322]

This preference for clinical diagnosis was not a complete Portuguese exception. For similar reasons, the renowned doctor and entomologist J. Schwetz had applied and defended the very same procedure in the Belgian Congo in the 1910s and still in the early 1920s, when he headed the first large-scale medical mission (in Kwango-Kasai) to combat sleeping sickness in the Belgian Congo.[323] It is even likely that the Angolan health services had found legitimation in his work. Upon explicit invitation of Damas Mora, Schwetz had reported on his medical mission at the Luanda Congress in 1923.[324] His method of clinical diagnosis had been contested by Jamot, but not entirely dismissed by the other discussants, due to its practical advantages.[325] But times were changing, and the Belgians definitively abandoned purely clinical diagnoses a few years later.[326]

By the end of 1927, Gomes da Costa's team had administered some 300,000 injections.[327] From 1928 onwards, the measure was also adopted in parts of the Congo Zone and the total number of registered injections rose to more than one million yearly between

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[321] Infection rates in the Cuanza zone reportedly hovered at an average of 27% to 30% at the beginning of the campaign, see Alfredo Gomes da Costa, *Combate à doença do sono. Resposta ao Snr. Dr. Eurico de Almeida*, in: Portugal. Orgão do Nacionalismo Português em Angola, 22.02.1930, p. 2. On this rationale, see also, in hindsight, Ornelas, Augusto; Mesquita, Bruno Pereira de, *Relatório da missão médica de assistência aos indígenas do Cuanza, 1929* (Colecção de relatórios, estudos e documentos coloniais; 24), Lisboa: Agência Geral das Colónias, 1935, pp. 74–75.

[322] Costa, *Relatório Cuanza Norte (1927),* p. 32; Waldemar Gomes Teixeira, *Relatório da Zona Sanitária do Cuanza para 1930*, Junho de 1931, p. 62, in: AHU, MU, AGC 2336. See also, for instance, Sousa, *Relatório missão Dande 1928,* p. 47. Still in 1930, Avelino da Silva referred to studies according to which six per cent of cases remained undiscovered in blood and lymph fluid analyses. See Silva, Avelino Manuel da, *Serviço de Assistência aos Indígenas no distrito do Congo, 1930. Relatório elaborado pelo chefe da zona sanitária do Congo, Dr. Avelino Manuel da Silva* (Colecção de relatórios, estudos e documentos coloniais; 9), Lisboa: Agência Geral das Colónias, [193-], p. 18.

[323] Schwetz, J., "À propos du diagnostic le plus expéditif de la maladie du sommeil dans la pratique ambulatoire de la brousse", *Bulletin de la Société de Pathologie Exotique* 12,10 (1919), pp. 726–729; Schwetz, *Compte-rendu,* pp. 152–153.

[324] Damas Mora to Trolli, 04.02.1922 and Rodhain to Schwetz, 21.02.1923, both in: AA, GG 16792.

[325] Primeiro Congresso de Medicina Tropical da África Ocidental, *Acta da 6a Sessão*, pp. 42–45. On this discussion, see also Janssens, P. G., "Eugène Jamot et Emile Lejeune. Pages d'histoire", *Annales de la Société Belge de Médecine Tropicale* 75 (1995), pp. 1–12, here pp. 7–9.

[326] *Ibid.,* p. 8.

[327] Mora, *Assistência médica aos indígenas (1927),* p. 6. In 1927, the measure was still confined to the Cuanza zone, see the statistical overview of all districts for 1927 in *Ibid.,* pp. 3–11.

1928 and 1930.[328] The standard prophylactic procedure was a series of ten, and later six, injections of 0.5g of atoxyl every two weeks. In the Congo Zone, where concentrations could generally only be held once a month, doctors resorted to monthly injections of 1g each. The series were repeated at increasing intervals of three, four and six months, so as not to exceed the total dose of atoxyl still considered safe.[329]

What had probably started as forced improvisation to cope with dramatic infection rates as well as with the shortage of doctors and lack of trained microscopists (not to mention the lack of microscopes), had turned into and been rationalized as a deliberate system that was now referred to as the "Portuguese method", the ultimate goal of which was to eradicate the disease.[330] In a triumphalist tone, Damas Mora accordingly wrote to Rajchman in March 1929: "where preventive atoxylization is systematically applied, cases of sleeping sickness fully disappear. It is the victory of the system of preventive mass atoxylization over that of the periodic scrutiny of a region and the treatment of the diseased only, as it is practiced in the Belgian Congo and elsewhere."[331] Interestingly, Damas Mora would later report that the "Portuguese method" of mass atoxylization was in fact "an adaptation of the German method employed in Cameroon", but that he had not been aware of this precedent when the campaign in Angola was initiated.[332] Indeed, German doctors had employed preventive atoxylization in some heavily infested parts of Cameroon in 1913-14.[333]

Hopes for the total eradication of the disease also figured prominently in the writings of other supporters of the scheme, most notably in the elaborate defence of 'the Portuguese method' by Joaquim Pires dos Santos, the head of the Western Congo Sector between June 1927 and 1929 and member of a medical research mission to Catete in 1930-1931.[334] In the

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[328] For the numbers, see, for instance, Mora in Mesquita, *Considerações,* pp. 24; 28 and Mora, *Luta contra a moléstia do sono*, passim.

[329] *Conferência sanitária luso-belga (1928),* p. 381; Teixeira, *Relatório Cuanza 1930,* pp. 63–64; Mora, *Luta contra a moléstia do sono,* p. 62; Mora, António Damas, "Lições do curso de patologia exotica do Instituto de Medicina Tropical. Moléstia do Sono", *África Médica. Revista Mensal de Higiene e Medicina Tropical* 8 (1942), pp. 270-280 and 9 (1943), pp. 117-127; 169-185; 193-206; 219-238, here p. 237; Silva, *Serviço de Assistência Congo 1930,* pp. 17–18.

[330] For the improvisional character of the early campaign, see Teixeira, *Relatório Cuanza 1930,* p. 62.

[331] Damas Mora to Rajchman, Luanda, 12.03.1929, in: LONA, R. 5854, 8A/8999/687.

[332] Mora, *Luta contra a moléstia do sono,* pp. 62 (quotes); 233.

[333] See, for instance, Isobe, *Medizin und Kolonialgesellschaft,* pp. 255–256

[334] For this paragraph, see Amaral, Anthero Antunes de, *Relatório da missão médica de reconhecimento nosográfico de Catete, 1930-1931* (Colecção de relatórios, estudos e documentos coloniais; 27), Lisboa: Agência Geral das Colónias, 1935, pp. 71–88. There are strong indications that this chaotically organized text, probably written in 1931, was not entirely, if at all, authored by Amaral, the author mentioned on the cover page. The original (and uncensored) text of this report, which can be found in AHU, MU, AGC 2336, does not solve this question. But other publications strongly suggest that not Amaral but Joaquim Pires dos Santos was the author of the text in question, see *Assistência Médica aos Indígenas,* pp. 302–306, where similar arguments in favour of the 'Portuguese method' can be found, and Mora, *Luta contra a moléstia do sono,* pp. 187-188; 206-209. Similar hopes to eradicate sleeping sickness by using the 'Portuguese method' are also expressed in Silva, *Serviço de Assistência Congo 1930,* pp. 19–20.

opinion of Pires dos Santos, the combination of curative injections for all suspects and prophylactic injections for all others in the endemic sleeping sickness areas was the only way to eradicate the disease. All eradication efforts in other colonies had hitherto failed, he claimed, because doctors had been too cautious in their attempts to eliminate trypanosomes from their human reservoirs by restricting treatment to only the microscopically diagnosed cases. If the goal was to eradicate the disease, the microscopic examination of blood and lymph fluid was not helpful. Not only would it take far too much time – he calculated that with a team of 20 African microscopists, it would take 4 years to examine the estimated 300,000 people living in the Congo district – but, most importantly, too many people who did carry the parasite in their body would be overlooked if their bodily fluids were screened only once. These people would continue to constitute a reservoir of parasites for the tsetse flies, and the chain of contamination would never be interrupted. To avoid this, Santos claimed it was necessary to treat all people who, upon a general clinical examination, were suspected to have the disease as though they had indeed contracted it and to subject all others to preventive atoxylization.

Not everyone shared this view. In his otherwise very enthusiastic report on the recent medical efforts in Angola, the head of the health services in the Belgian Congo, Giovanni Trolli, clearly distanced himself from the mass atoxylization programme. He posited that the scheme was dangerous and should not be applied in the Belgian colony, without giving firm reasons, however.[335] It is likely that Trolli's disapproval was less of the preventive scheme in itself than the use of atoxyl on such a vast scale. While this arsenic drug was still widely and, despite its known dangers, often affirmatively used in Angola, and also for example by Jamot in French Cameroon, Trolli had already called for the sole use of tryparsamide and for the "exclusion of all other arsenics" in 1927. Yet it is important to note that for financial reasons, which certainly also played a role in the reasoning of the other colonizing powers, the much cheaper atoxyl was not banned as quickly as one might have expected.[336]

That atoxyl and not the idea of prevention lay at the core of Trolli's rejection is also suggested by the fact that the Belgians were testing chemoprophylaxis with another drug. As early as 1923, the head of the laboratory in Léopoldville, F. Vandenbranden, had started to conduct experiments on the preventive value of Bayer 205.[337] Further experiments with this

[335] Trolli, *Impression,* p. 406.

[336] Trolli, Giovanni, "Le traitement de la trypanose humaine par la Tryparsamide", *Annales de la Société Belge de Médecine Tropicale* 7 (1927), pp. 319–336, here p. 333.

[337] Vandenbranden, F., "Sur un essai d'administration de Bayer 205 prophylactique dans une agglomération indigène", *Annales de la Société Belge de Médecine Tropicale* 5 (1925), pp. 175–177; Vandenbranden, F.,

new and promising German drug, aimed at ascertaining the period of protection, were also conducted by doctors from Forminière, a big mining and agricultural enterprise in the Belgian Congo and even by the League of Nations mission to Entebbe.[338] All these studies strongly suggested that there was an immunizing effect, but the exact duration of that effect remained contested. The Portuguese were aware of these experiments, but preferred atoxyl over Bayer 205 for their preventive campaigns mainly because of the huge price difference and because they did not have sufficient people who were skilled enough to apply Bayer 205 (which had to be injected using a different method) on a large scale.[339] Thus Eurico de Almeida's request to repeat the Belgian experiments and to apply preventive Bayer 205 on some very resistant foci of sleeping sickness in the Cuanza Zone was denied because of the high cost of the drug.[340]

To the Belgians in the late 1920s, mass atoxylization must have appeared outdated and unacceptable. Yet preventive 'bayerization' of the healthy did not yet constitute a viable alternative. In spite of calls to apply this method on a large scale, the Health Department in the Belgian Colonial Ministry was strictly opposed to its generalization, because it was a very costly procedure and had not yet been sufficiently tested.[341] Moreover, British and French experiments contradicted the Belgian findings. According to the French sleeping sickness 'hero' Eugène Jamot, atoxyl was even better suited for preventive use than moranyl or Fourneau 309, as the French variety of Bayer 205 was called.[342] Nevertheless, mass

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"Seconde note préliminaire sur les essais d'administration de Bayer 205 prophylactique à des agglomérations indigènes", *Annales de la Société Belge de Médecine Tropicale* 7 (1927), pp. 147–149. For the general debate on Bayer 205, a new drug that German doctors presented as a miracle drug in the struggle against sleeping sickness, an argument often used in German colonial revisionism, see Headrick, *Colonialism, Health and Illness,* pp. 327–329; Isobe, *Medizin und Kolonialgesellschaft,* pp. 33–35 and Mertens/Lachenal, *History*.

[338] Fourche, J. A.; Ricklin, J., "Expérimentation du Bayer 205 au point de vue préventif dans la pratique itinérante", *Annales de la Société Belge de Médecine Tropicale* 8 (1928), pp. 143–160; Fourche, J. A.; Haveaux, G., "Germanine et trypanorsyl appliqués préventivement contre la trypanosomiase", *Bulletin de la Société de Pathologie Exotique* 24 (1931), pp. 557–562 and Duke, H. Lyndhurst; van Hoof, L., "Epidemiology of Sleeping-Sickness in the Upper Uele (Belgian Congo)", in: League of Nations - Health Organization (ed.), *Final Report of the League of Nations International Commission on Human Trypanosomiasis [= C.H. 629]* (Publications of the League of Nations; 1927.III.13), Geneva, 1928, pp. 346–362, here pp. 358–360.

[339] Camoesas, João, "Review of "Expérimentation du Bayer 205 au point de vue préventif dans la pratique itinérante, by J. A. Fourche et J. Rickliz"", *Boletim da Assistência Médica aos Indígenas e da Luta contra a Moléstia do Sono* 2,10 (1928), pp. 223–224; Alfredo Gomes da Costa, *Combate à doença do sono. Resposta ao Snr. Dr. Eurico de Almeida*, in: Portugal. Orgão do Nacionalismo Português em Angola, 22.02.1930, p. 2.

[340] Almeida, Eurico de, "Valor comparativo dos tripanocidas empregados pela zona sanitária do Cuanza", *Boletim da Assistência Médica aos Indígenas e da Luta contra a Moléstia do Sono* 2,10 (1928), pp. 183–189, here p. 188.

[341] "Report submitted by the Belgian Ministry of the Colonies. Trypanosomiasis in the Belgian Congo", in: *Report of the Second International Conference on Sleeping-Sickness, held in Paris, November 5th to 7th, 1928 (= C.H. 743)* (Publications of the League of Nations; 1928.III.18), Geneva, 1928, pp. 21–34, here p. 26. Besides the Forminière doctor Fourche, the delegates at the Second International Conference on Sleeping Sickness in November 1928 also recommended Bayer 205 for the protection of healthy individuals, see "Report of the Conference: Recommendations adopted", in: *Report of the Second International Conference on Sleeping-Sickness, Paris 1928,* pp. 5–10, here p. 10.

[342] Bossert, "Compte rendu de l'expérimentation du 309 Fourneau dans le Secteur de Prophylaxie n. 1 (Afrique Equatoriale Française)", *Bulletin de la Société de Pathologie Exotique* 20 (1927), pp. 460–464; Jamot, E., "La

bayerization would be increasingly used in the Belgian Congo during the 1930s and especially during the Second World War, in areas "where infection rates remained high in spite of the systematic treatment of the *trypanosés*" or where the population had become resistant to arsenics.[343]

Belgian criticism would eventually prove effective, as I will show, but the 'Portuguese method' of superficial, clinical diagnosis and mass atoxylization was also contested within the Angolan medical staff itself. Some had opposed the scheme in internal discussions from the very beginning, but criticism gained momentum from mid-1929 onwards and went hand in hand with calls for reform in the local press.[344] It is probably not a coincidence that this happened when Damas Mora, a staunch supporter of the scheme, was temporarily absent from the colony.[345]

Among the most overt opponents of the method were João Augusto Ornelas, Waldemar Teixeira and especially Eurico de Almeida. Differences in tone notwithstanding, their arguments against the current direction the anti-sleeping sickness campaign had taken in Angola were largely concurrent. They objected that the scheme was unscientific and too expensive, and they called for a 'scientific reorientation' of the programme. "Purely empirical methods", Ornelas summarized, "are anachronistic and a waste of time and money".[346] At the core of their reform proposals were two measures: first, the generalization of laboratorial examinations (of blood, gland liquid and cerebrospinal fluid), which would allow authorities to identify the diseased individuals, to classify them according to the different stages of the

maladie du sommeil au Cameroun en janvier 1929", *Bulletin de la Société de Pathologie Exotique* 22 (1929), pp. 473–497, here p. 487; Jamot, E.; Chambon, "Contribution à l'étude du pouvoir préventif du 205 Bayer - 309 Fourneau contre la maladie du sommeil", *Bulletin de la Société de Pathologie Exotique* 23 (1930), pp. 491–499. Lasnet, by contrast, reported a successful experiment with preventive moranyl in AEF, see Lasnet, "L'organisation de la lutte contre la maladie du sommeil dans les colonies françaises de l'Afrique", *Bulletin Mensuel de l'Office International d'Hygiène Publique* 22,2 (1929), pp. 279–284, here p. 284.

[343] On the large-scale preventive use of Bayer 205, see van Hoof, L.; Henrard, C.; Peel, E., "Chimioprophylaxie de la maladie du sommeil par la pentamidine", *Annales de la Société Belge de Médecine Tropicale* 26 (1946), pp. 371–384, here p. 381; Duren, A., "Une vue d'ensemble de la lutte contre la trypanosomiase au Congo belge", *Conférence Africaine de la tsé-tsé et la trypanosomiase, Brazzaville, 2-8 février 1948,* Toulouse: Impr. Régionale, 1950, pp. 418–425 and Rodhain, J., "Histoire de la recherche scientifique médicale et vétérinaire dans les territoires de l'Afrique au Sud du Sahara", *Annales de la Société Belge de Médecine Tropicale* 34 (1954), pp. 535–554, here p. 543 (here quote). On experiments with Bayer 205 and Bayerization, referred to as the "Belgian method", see also Lachenal, *Biomédecine,* pp. 133–134.

[344] For initial opposition to the scheme, see the references in Eurico de Almeida, *Questão momentosa*, in: Portugal. Orgão do Nacionalismo Português em Angola, 26.02.1930, p. 1; Waldemar Gomes Teixeira, *Doença do sono*, in: Portugal. Orgão do Nacionalismo Português em Angola, 26.02.1930, p. 2 and Mora, *Luta contra a moléstia do sono,* p. 230.

[345] Damas Mora would defend the scheme until the end of his term in Angola, see, for instance, Mora, *Luta contra a moléstia do sono,* pp. 62–64. For his accounts on the demise of the scheme, see also Mesquita, *Considerações,* p. 25 and Mora, *Luta contra a moléstia do sono,* p. 185. On his absence from Angola between April 1929 and April 1930, see in detail the next section.

[346] Ornelas/Mesquita, *Relatório Cuanza 1929,* pp. 76-78, quote p. 77.

disease and to adapt their treatment accordingly; and, second, the abandonment of preventive mass atoxylization.[347]

The fiercest criticism and most detailed reform proposals came from Eurico de Almeida, the very prolific and to that point much acclaimed head of the medical laboratory of the Cuanza Zone.[348] In January 1930, Almeida represented Angola at the second Luso-Belgian medical conference in Léopoldville.[349] While, upon his return, he publicly criticized the poor condition of a portion of the medical infrastructure and the lack of cleanliness in Léopoldville – allegations that caused great annoyance in the Belgian Congo – he was full of praise for the methods the Belgians (and also the French in the AEF) used in their campaign against sleeping sickness.[350] In a series of articles, published in the new daily newspaper 'Portugal', Eurico de Almeida described the Belgian-French method, which, in his opinion, compared very favourably with the Angolan scheme. He claimed that, in the neighbouring countries, diagnosis was based on microscopical examinations of bodily fluids, that diseased individuals were classified into different stages and treated accordingly, and, that, in highly infected areas, doctors preferred the removal and resettlement of villages over the chemical prophylaxis of mass atoxylization. In special cases, he added, the population was subjected to preventive bayerization. Not only did this scheme allow for a more adequate treatment of the sick, the restricted use of atoxyl also greatly diminished the costs of the campaign as well as the risk for arseno-resistant trypanosoma. In conclusion, it was imperative that Angola – which was "not on the right path from a scientific point of view or from an economic point of

[347] Eurico de Almeida, *Questão momentosa*, in: Portugal. Orgão do Nacionalismo Português em Angola, 26.02.1930, p. 1; Waldemar Gomes Teixeira, *Doença do sono*, in: Portugal. Orgão do Nacionalismo Português em Angola, 26.02.1930, p. 2.

[348] As part of the Angolan delegation, Eurico de Almeida had presented no less than ten contributions at the International Conference of Tropical Medicine in Cairo in 1928, of which nine were later published in the conference proceedings, see Khalil, M. (ed.), *Comptes Rendus du Congrès International de Médecine Tropicale et d'Hygiène, Le Caire, Egypte, Décembre 1928*, 5 vols, Le Caire: Imprimerie Nationale, 1929-1932. For a complete and impressive list of his publications in 1928-1929, see Almeida, Eurico de, *Laboratorio da Zona Sanitaria do Cuanza,* Luanda: Tip. Minerva, 1930, pp. 13–21. While most of his articles were published in the Angolan journals *Boletim da Assistência Médica aos Indígenas* and *Revista Médica de Angola*, some of them were reprinted or summarized in French or English translations in renowned journals such as the Tropical Diseases Bulletin, the Bulletin Mensuel de l'OIHP or the Bulletin de l'Institut Pasteur de Paris. See also the praise given him in Mora, *Luta contra a moléstia do sono,* p. 66, Trolli, *Impression,* p. 405 and the laudatory preface by Carlos de Almeida, a prominent doctor in Angola, in Almeida, *Laboratorio*, also reprinted in Eurico de Almeida, *Do Natal à Quaresma*, in: Portugal. Orgão do Nacionalismo Português em Angola, 10.03.1930, p. 2.

[349] *Relações luso-belgas*, in: Portugal. Orgão do Nacionalismo Português em Angola, 18.01.1930, p. 1.

[350] For his critique, see *Combate à Doença do Sono. Uma entrevista com o Sr. Dr. Eurico d'Almeida*, in: Portugal. Orgão do Nacionalismo Português em Angola, 15.02.1930, pp. 1; 5 and 17.02.1930, p. 2. For the Belgian annoyance, see below.

view" – adhere to the superior and cheaper methods of their scientifically highly acclaimed neighbours.[351]

Without doubt, Almeida's press articles intended to raise the pressure placed on decision-makers to finally implement these reforms, which had already been decided on several occasions by the medical staff of the Cuanza Zone, but had apparently been overruled. Indeed, at the same time that an anonymous article appeared in the journal *A Província de Angola*, Gomes da Costa's successor as head of the Cuanza Zone, João Augusto Ornelas, issued, in May 1929, a circular announcing the end of the first "empirical" phase of the anti-sleeping sickness campaign, the phase of "assault", and the start of the "scientific" second phase.[352] And at the first *journées médicales* held in Dalatando, the participating doctors of the Cuanza Zone, including Ornelas and Almeida, had equally adopted a motion in favour of a more scientific turn to the campaign.[353]

However, Almeida's strategy to go public and to buttress his reform calls with comparisons with Angola's neighbours backfired. Many of the public responses to his polemic articles promoted a sentiment of national pride and attacked Almeida for having discussed these issues in public. In this spirit, Gomas da Costa warned against the precipitous adoption of Belgian or French methods, the advantages of which he did not deem to have been proven yet.[354] Even Waldemar Teixeira, who had opposed clinical diagnosis and mass atoxylization from the outset and had not applied these procedures in the sector under his responsibility, contested some of Almeida's assertions, emphasizing, for instance, the lack of uniformity in the methods employed in the Belgian Congo and the AEF. He defended the decisions taken by the health services and concluded his article by paraphrasing Salazar: "In the struggle against sleeping sickness, the knowledge and competence of our doctors are not

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[351] *Ibid.*; Eurico de Almeida, *Doença do Sono. Uma economia superior a 1:000 contos e um melhor e mais científico combate do terrível flagelo, Resposta ao Snr. Dr. Gomes da Costa*, in: Portugal. Orgão do Nacionalismo Português em Angola, 25.02.1930, p. 1 (here quote); Eurico de Almeida, *Questão momentosa*, in: Portugal. Orgão do Nacionalismo Português em Angola, 26.02.1930, p. 1; Eurico de Almeida, *Problema sanitário. Ocupação de Cabinda*, in: Portugal. Orgão do Nacionalismo Português em Angola, 28.02.1930, p. 1; Eurico de Almeida, *Molestia do sono. Profilaxia administrativa, profilaxia quimica*, in: Portugal. Orgão do Nacionalismo Português em Angola, 07.03.1930, p. 2; Eurico de Almeida, *Doença do sono. Preparação do pessoal técnico*, in: Portugal. Orgão do Nacionalismo Português em Angola, 10.03.1930, pp. 1 and 5.

[352] *A Luta contra a doença do sono nos sectores de profilaxia da Zona Sanitária do Cuanza*, in: A Província de Angola, 25.04.1929, pp. 1–2; 26.04.1929, p. 2; 29.04.1929, p. 1; 03.05.1929, p. 2 and 07.05.1929, p. 2. See also Ornelas/Mesquita, *Relatório Cuanza 1929,* pp. 74–78, and *Circular 413*, 08.05.1929, reprinted in *Ibid.,* pp. 76–78. The use of exactly the same expressions and phrases in both texts suggests that Ornelas was also the author of the press article.

[353] On this conference, see *1.a Jornada Médica de Dalatando*, in: A Província de Angola, 29.10.1929, p. 2; "Os dias médicos de Dalatando", *Boletim da Assistência Médica aos Indígenas e da Luta contra a Moléstia do Sono* 3,7-12 (1929), pp. 527–531. The term 'jornada médica' referred to the so-called 'Journées Médicales de Paris' or 'de Bruxelles', the famous medical conferences that took place annually in both cities.

[354] Alfredo Gomes da Costa, *Combate à doença do sono. Resposta ao Snr. Dr. Eurico de Almeida*, in: Portugal. Orgão do Nacionalismo Português em Angola, 22.02.1930, p. 2.

less valuable than those of our neighbours, and they are sufficient to fight the scourge."[355] The director of the Congo Zone, for his part, judged that Eurico de Almeida had been misinformed by the Belgians with regard to Portuguese accomplishments, adding that it was "only at congresses" that the Belgians presented "perfect things".[356] Finally, Carlos de Almeida publicly exhorted Damas Mora to dismiss the 'denationalized' colleague who had, in Léopoldville and then in the Angolan press, diminished the prestige of the Angolan health services.[357]

The result was that Almeida's reform proposals did not meet with success. The commission for the reorganization of the sleeping sickness services, which had been appointed in response to Almeida's report on the Luso-Belgian conference to the High Commissioner, did not produce any tangible results.[358] Nor did the detailed reform project that he had submitted with José da Silva Neves to the Third National Colonial Congress in Lisbon in May 1930. The scientific impetus of the project was obvious: among other things, it called for the establishment of four sleeping sickness research centres in northern Angola and of laboratories, segregation camps and schools for African microscopists in each of the fifteen prophylactic sectors.[359] And, given the pressure he was under from (some of) his colleagues, Eurico de Almeida was forced to leave the Angolan health services. He was transferred to São Tomé and later to Guinea. Significantly, Damas Mora explained to his Belgian counterpart Trolli that this removal had to do with Almeida's criticism of the medical infrastructure in Léopoldville and not with his pervasive calls for inter-imperial borrowing.[360]

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[355] Waldemar Gomes Teixeira, *Doença do sono*, in: Portugal. Orgão do Nacionalismo Português em Angola, 26.02.1930, p. 2.
[356] Avelino Manuel da Silva, *Doença do Sono. Uma carta*, in: A Província de Angola, 08.05.1930, p. 2 and 09.05.1930, p. 2. The *Província de Angola* noted that Avelino Silva's article had been sent to the journal 'Portugal' on 9 March 1930, but it was not printed.
[357] Carlos de Almeida, *Carta aberta ao Exmo. Director dos Serviços de Saúde*, in: A Província de Angola, 04.04.1930, pp. 1–2.
[358] *Doença do Sono. Reunião importante*, in: Portugal. Orgão do Nacionalismo Português em Angola, 11.03.1930, p. 2. The commission members were: the doctors Eurico de Almeida, Silva Neves and Waldemar Teixeira and the director of the Native Affairs Department, Ivo de Cerqueira. On this commission, see also Carlos de Almeida, *Carta aberta ao Exmo. Director dos Serviços de Saúde*, in: A Província de Angola, 04.04.1930, pp. 1–2. The commission did not recommend reorganization, see Teixeira, *Relatório Cuanza 1930,* p. 5.
[359] Neves, José da Silva; Almeida, Eurico de, "Projecto regulamento da profilaxia da doença do sono em Angola", *III Congresso Colonial Nacional de 8 a 15 de Maio de 1930. Actas das Sessões e Teses,* Lisboa: Tip. e Pap. Carmona, 1934.
[360] Speech by Damas Mora, 17.09.1930, and Compte-Rendu de la 3ième Conférence médicale luso-belge tenue à Léopoldville, 17.09.1930, both enclosed in Governor-General Tilkens to Minister of Colonies, AA, A11 – Hygiène, Box 4465, Folder 929. On Almeida's further career, see, for instance, Almeida, Eurico de, *Da Assistência Médica aos Indígenas na Colónia da Guiné Portuguesa. Conferência realizada no decorrer da 'Semana Militar' na Sala do Ginásio, da Companhia de Polícia Indígena da Guiné, Bolama, Junho 1935,* Bolama: Imprensa Nacional, 1935. Later, Eurico de Almeida also served in Mozambique, and in 1946 he was appointed head of the health services in Timor, see África Médica, 12.1 (1946), p. 18.

In July 1930, the new head of the Cuanza Zone, Waldemar Teixeira, decreed the general use of laboratorial diagnosis and that, from now on, mass atoxylization would be used only and exclusively in heavily infested areas. Instead of referring to Angola's neighbours or to fundamental flaws in the method, he legitimated his decision with the general decline of infection rates, praising the efforts of his predecessors and confirming the legitimacy that their methods had in the past.[361] This time, the decision was implemented. Atoxylization numbers fell quickly and preventive mass atoxylization was practically abandoned in the Cuanza Zone by the end of 1930.[362] This did not mean that the method in itself was discredited or dismissed: in the Congo Zone, where the registered infection rates were much higher, the procedure continued to remain in place. There, the number of preventive injections still rose in 1930 and only plummeted after mid-1931, apparently due to a lack of money, personnel and atoxyl. As a doctrine, preventive atoxylization was abandoned in the Portuguese Congo in the second half of 1932 on the grounds that the number of new cases had dropped significantly and that ecological and administrative measures, which had always accompanied chemoprophylaxis, would be sufficient from that moment forth.[363] In other words, the method was officially abandoned not because of its disadvantages, but because its success had rendered it superfluous. Accordingly, Damas Mora continued to be in favour of mass atoxylization in regions that were being newly occupied by the AMI services.[364]

What is striking about the rise and fall of this mass atoxylization scheme is that concerns over the well-known toxic side effects of atoxyl seem to have been ignored for a long time – at least they did not find their way into the published reports – and did not play a major role in the abandonment of the scheme. This corresponded to the positive view Angola-based doctors had of atoxyl in the first half of the 1920s. These last – at least publicly – assumed that harmful side effects could be prevented with the correct dosage and pauses between the series. However, it also reflected the deliberate choice to subordinate individual health risks to the greater good of collective health and security. It was claimed that accidents that occurred within the context of the "injections of health", as some Africans allegedly

[361] Circular n. 434, 09.07.1930, reprinted in Teixeira, *Relatório Cuanza 1930,* pp. 55–57.
[362] Teixeira, *Relatório Cuanza 1930,* pp. 59; 67.
[363] Compare Silva, *Serviço de Assistência Congo 1930,* p. 46; Silva, Avelino Manuel da, *Serviço de Assistência aos indígenas no distrito do Congo, 1° Semestre de 1931* (Colecção de relatórios, estudos e documentos coloniais; 10), Lisboa: Agência Geral das Colónias, 1931, p. 28 and the accounts by Damas Mora and Simões do Amaral in Mora, *Luta contra a moléstia do sono,* pp. 210-213; 220. This is more or less congruent with the later account of Cardoso de Albuquerque, according to which "quimoprophylaxis with atoxyl was practically abandoned from 1931 onwards", see Albuquerque, Armando Cardoso de, "O Combate à doença do Sono em Angola. Métodos utilizados e resultados obtidos", *Boletim Sanitário de Angola* 11 (1953-1957 (printed 1959)), pp. 159–214, here p. 165.
[364] Mora, *Luta contra a moléstia do sono,* p. 233.

referred to them, were rare, affirmations that later statements would call into question.[365] In a similar vein, resistance against the campaign, if mentioned at all, was usually depicted as the work of a few *civilizados*, who were supported by European farm owners more concerned with labour shortages than with the health of their employees.[366]

Once the programme had been terminated, the discussion moved to the legacy it had left. Some staunch supporters of mass atoxylization like Damas Mora and Pires dos Santos but also others like Ornelas maintained that the programme had yielded very positive and tangible results. In reference to the available statistical data, they claimed that between 1926 and 1929/1930 there had been a sharp decline in the incidence of new infections in both the Cuanza and the Congo Zones and that the negative balance between mortality and natality had been inverted, due to this decline in overall mortality and the stark increase in the birth rate.[367] Waldemar Teixeira, by contrast, was much more critical in his analysis of both the programme and the statistics. Due to the pauses of three to six months between each series of injections, he asserted that mass atoxylization had, at its best, protected the population for only three months a year, and this because it was practically impossible, he argued, to keep a population of many tens of thousands of Africans under medical surveillance for years. As to the statistics, he suspected the registered number of new cases to be considerably below the real number. If there had been a decline, and he placed emphasis on the 'if', this had been due more to the treatment of the diagnosed victims than to any systematic atoxylization of the general populace.[368]

While parts of the method may have been adopted *ad hoc*, the idea of prophylaxis in itself certainly was not. As I have shown above, prevention was a central issue of social medicine. In Angola, mass atoxylization fit perfectly with the Copernican turn Damas Mora wanted to bring about, since it targeted the healthy in order to protect them from sickness. In defence of this idea, Damas Mora more than once drew a parallel between atoxylization and

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[365] Armando de Albuquerque mentioned frequent "toxic accidents" as one of the main disadvantages of the method, see Albuquerque, *Combate à doença do Sono,* p. 173. For the quote, see *Assistência Médica aos Indígenas,* p. 306.

[366] See, for instance, Costa, *Relatório Cuanza Norte (1927),* p. 33; Sousa, *Relatório missão Dande 1928,* p. 48. While the published verion of Jacinto da Sousa's report only blames *civilizados*, his uncensored version harshly criticizes European plantation managers for not allowing an AMI nurse to atoxylise the Africans on their farms. See Jacinto de Sousa's report in AHU, MU, AGC 2336, p. XV-XVII and LVIII.

[367] See, for instance, Mora in Mesquita, *Considerações,* pp. 26–27; Simões da Amaral in Mora, *Luta contra a moléstia do sono,* pp. 212–213; Pires dos Santos in Amaral, *Relatório Catete 1930-1931,* pp. 82; 86-87 and what were presumably the original conclusions of Ornelas' report for 1929, cited extensively by Mora in António Damas Mora, *Dr. João Augusto Ornelas*, in: A Província de Angola, 05.06.1930, p. 1. These conclusions are not in the printed version of the report; see Ornelas/Mesquita, *Relatório Cuanza 1929,* p. 169.

[368] Teixeira, *Relatório Cuanza 1930,* pp. 61–65.

'quininization', or the preventive use of quinine against malaria.[369] But while the preventive use of quinine was mainly limited to Europeans, atoxylization targeted the African – individual and social – body.[370] With the exception of smallpox, sleeping sickness was indeed the first disease against which colonial powers implemented large-scale prophylactic measures, as Guillaume Lachenal has stated. However, this was not a 'Franco-Belgian' invention or *primeur*, as Lachenal has maintained, but widely applied by the Portuguese before bayerization concluded its experimental stage, and long before similar campaigns with the new drug pentamidine or lomidine were initiated.[371]

Indeed, experiments on the preventive value of a new family of trypanocides, of which pentamidine or lomidine would prove the most efficient, revived the idea of chemoprophylaxis during and after the Second World War.[372] Following one of the recommendations of the International Conference on Tsetse and Trypanosomiasis in Brazzaville in 1948, the Portuguese launched a new campaign of mass chemoprophylaxis with this new drug, alongside all other colonial powers in West and Central Africa.[373] As Armando Cardoso de Albuquerque later remarked, this campaign was based on the same principles as the Portuguese atoxylization campaign in the late 1920s.[374] Indeed, aside from the use of a more powerful drug, the main difference with the campaign of twenty years before was that the four (later five) pentamidization brigades made a thorough distinction between the healthy and the diseased using teams of African microscopists, a practice that had become common in the early 1930s. Basically, they continued to use the same procedure of sterilizing the blood of all healthy people, including the old, young and pregnant, injecting a

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[369] Mora, *Luta contra a moléstia do sono,* p. 63.

[370] On the distribution of quinine (to Europeans) in Angola, see Neves, José da Silva; Ornelas, Augusto, "Indice endémecio palustre da cidade de S. Paulo de Luanda", *Boletim da Assistência Médica aos Indígenas e da Luta contra a Moléstia do Sono* 2,9/10 (1928), pp. 95-116; 155-181, here pp. 96-97; 103. The health authorities thought it impossible, partly due to the lack of funds, to 'quininize' the entire African population, but also lamented that many Europeans did not make use of the drug either, see Neves/Sousa, *Assistência Médica aos Indígenas,* p. 438 and Neves/Ornelas, *Indice endémico,* pp. 103; 106.

[371] Compare Lachenal, *Biomédecine,* pp. 178–181.

[372] On the discovery and testing phase of this new drug, see *Ibid.,* pp. 123–143 and the reports in "Chimioprophylaxie de la trypanosomiase humaine", in: *Conférence Africaine de la tsé-tsé et la trypanosomiase, Brazzaville, 2-8 février 1948,* Toulouse: Impr. Régionale, 1950, pp. 220–240. While the French, Belgians and British had widely tested these diamidines, no tests had been conducted in the Poruguese colonies before the drug was introduced in 1948, see Fonseca, L. Pinto da, "Suplemento às instruções elaboradas para orientação dos médicos chefes dos sectores sanitários", *Boletim Sanitário de Angola* 8 (1945 [printed 1948]), pp. 155–162.

[373] Albuquerque, *Combate à doença do Sono*, esp. pp. 173-190; Sarmento, Alexandre, "História breve de uma grande obra. O combate à doença do sono em Angola", *Boletim Clínico e Estatístico do Hospital do Ultramar, 2a série* 7,3 (1953), pp. 23–38, here pp. 32–35. This was only one of many recommendations of the conference, which also continued (like in previous decades) to recommend administrative measures and measures of vector control, see "Recommendations of committees, approved in plenary sessions of conference", in: *Conférence Africaine de la tsé-tsé et la trypanosomiase, Brazzaville, 2-8 février 1948,* Toulouse: Impr. Régionale, 1950, pp. 83–93, and pp. 86-87 for chemoprophylaxis. On the Conference, see Shapiro, *Medicine,* pp. 244ff. On 'lomidinisation' in French Cameroon, see Lachenal, *Biomédecine,* pp. 145–173.

[374] Albuquerque, *Combate à doença do Sono,* pp. 172–173.

toxic drug with “non-negligible undesirable effects”.[375] Supported by evidence of quickly falling infection rates, doctors in the early 1950s again believed that this procedure was going to bring about the complete eradication of the disease.[376]

[375] On the side effects of pentamidine, see World Health Organization, *African Trypanosomiasis(sleeping sickness). Factsheet n. 259 (October 2010)*, http://www.who.int/mediacentre/factsheets/fs259/en/ (last accessed 28.11.2013) and World Health Organization, *Human African Trypanosomiasis. Drugs,* http://www.who.int/trypanosomiasis_african/drugs/en/ (last accessed 28.11.2013). It is worth noting that until 2006, the highly toxic melarsoprol (also known as Mel B) was still used in more than 80% of second-stage cases of sleeping sickness, mainly by NGOs. After 2006, percentages dropped quickly as the safer eflornithine started replacing melarsoprol. See Simarro, Pere P.; Diarra, Abdoulaye; Postigo, Jose A. Ruiz; Franco, José R.; Jannin, Jean G., "The Human African Trypanosomiasis Control and Surveillance Programme of the World Health Organization 2000–2009. The Way Forward", *Public Library of Science - Neglected Tropical Diseases* 5,2 (2011), pp. 1-7 (e1007. doi:10.1371/journal.pntd.0001007), here pp. 2–3.

[376] See, for instance, Sarmento, *História breve,* pp. 32–35. In the late 1950s, Albuquerque noted that the incidence of the disease had been reduced to such a low level that “it had stopped being a problem of sanitary nature”, but that the success and eventual eradication of the disease hinged upon a nearly perfect control of the population, see Albuquerque, *Combate à doença do Sono,* pp. 178; 190.

8. *Estado Novo*, Colonial Order and the AMI Crisis

The technical discussion among doctors as to whether mass atoxylization was an appropriate technique coincided with a more general attack on the AMI services in 1929-1930, from which this last would not entirely recover before the end of the Second World War.

In 1929, the administration of the new High Commissioner Filomeno da Câmara Melo Cabral modified the financial and administrative foundations of the AMI services. In a series of decrees, he suppressed the financial autonomy of the Commission for Native Assistance *(Comissão de Assistência Indígena* or CAI*)*, more or less halved the bonuses for the medical staff in the AMI sectors and, eventually, abolished the Commission itself.[377] These were profound changes. Between 1926 and 1929, the CAI had functioned as the executive board of the AMI services. Presided by the High Commissioner or Governor-General and composed of the directors of the most relevant departments, the Commission had been vested with exceptional powers. It had decided in all matters and had also directly administered the Native Assistance Fund *(Fundo de Assistência Médica)*, the financial backbone of the AMI services, which was created to house the original loan of seven million escudos and could also rely on new means of income, thereby avoiding complicated standard bureaucratic procedures. On both the practical and symbolic level, the CAI had epitomized the unity and collaboration of the colonial administration vis-à-vis the important task of managing African healthcare.[378] It was, in fact, an institutionalized form of the fruitful interdepartmental collaboration Damas Mora had observed in the AOF during the West African study tour. Its abolition, in 1929, had enormous consequences.

Simultaneously, the High Commissioner curtailed the budget of the Native Assistance Funds. Among other measures, he abolished the share (3.5%) of native tax previously allocated to the Funds and even eliminated the yearly allowance from the colony's general

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[377] Alto Comissariado da República em Angola (Filomeno da Câmara Melo Cabral), "Diploma Legislativo n. 18 (27.02.1929)", *Boletim da Assistência Médica aos Indígenas e da Luta contra a Moléstia do Sono* 3,3 (1929), pp. 368–369; Alto Comissariado da República em Angola (Filomeno da Câmara Melo Cabral), *Diploma Legislativo n. 143*, 17.08.1929, in: *Boletim Oficial da Colónia de Angola, Série I,* 17.08.1929, pp. 487–490; Alto Comissariado da República em Angola (Filomeno da Câmara Melo Cabral), *Diploma Legislativo n. 160*, 02.09.1929, in: *Boletim Oficial da Colónia de Angola, Série I,* 07.09.1929, pp. 540–541.

[378] The CAI was established in November 1926, see Alto Comissariado da República em Angola, *Diploma Legislativo do Alto Comissariado n.° 452, criando um fundo especial, denominado "Fundo de Assistência aos Indígenas"*, 20.11.1926, in: *Boletim Oficial da Província de Angola, Série I*, 20.11.1926, pp. 604–607. This decree nominated the directors of the Departments of Health, Finance, Public Works and Native Affairs and, in the case of the colony insofar as it was ruled by a High Commissioner, also the provincial secretaries of the Interior, Agriculture and Finance. In practice, further department directors were added to the board, compare the lists on the first page of each number of the *Boletim da Assistência Médica aos Indígenas e da Luta Contra a Moléstia do Sono*.

budget.[379] For the financial year 1929-1930 this meant that, while the needs had been calculated at 5.5 to 6 million angolares (Ags.), less than a third of the money was (likely to be) effectively attributed.[380] Finally, further legislation restricted the functional and geographical scope of the services: the integral approach was replaced by an (almost) exclusive focus on sleeping sickness, and several zones and sectors – such as the Zaire-Cabinda Zone – as well as the mobile missions were abolished.[381]

How can this volte-face, which destroyed nearly all of the salient characteristics of the African healthcare system in Angola, be explained? Although censorship and the scarcity of available archival sources on this episode mean that it cannot be explained in all its details, it seems safe to say that these revisions were the result of a handful of contingent, but intersecting and mutually reinforcing factors. As I will discuss below, political changes and new financial constraints played an important role, notably the arrival of a new extremely conservative High Commissioner in February 1929 and the personal and political conflicts that the arrival of this trusted member of the nascent Estado Novo entailed; the recentralization of the Portuguese colonial empire; Salazar's new austerity regime, which led to severe cuts in public spending; and the effects of the world economic crisis. Within this context, pre-existing tensions among Angola's medical staff about diverging remuneration schemes surfaced. Equally important, however, were structural causes, such as pervasive worries about the racialized colonial order in Angola and Portugal's incapacity to deal with issues of public health at home in the metropole. These structural causes, which went beyond the political and financial conjunctures that partly conditioned them, help to explain why the AMI services never recovered after Filomeno da Câmara's forced departure in March 1930 and the end of his altogether rather ephemeral reign.

To begin, the theory of a personal vendetta must be discussed. According to an anonymous article printed in the *Província de Angola* – a newspaper that had consistently

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379 Mora, *Luta contra a moléstia do sono,* pp. 162–163.

380 See Neves/Sousa, *Assistência Médica aos Indígenas,* p. 441 and, for a detailed enumeration of the financial cuts, see Recurso de Francisco Venâncio da Silva ao Ministro das Colónias, 29.08.1929, p. 8r, in: Processo disciplinar contra Francisco Venâncio da Silva (= Processo 226/23A/1930 da Secção Técnica de Saúde), in: AHU, MU, DGAPC 3438. The Diploma Legislativa 143 approved a budget of 5.16 million angolares, although it was already clear that only about 1.5 million would be made available. Compare Alto Comissariado da República em Angola (Filomeno da Câmara Melo Cabral), *Diploma Legislativo n. 143*, and the information made public by José da Silva Neves in *Assistência Médica aos Indígenas*, in: A Província de Angola, 21.08.1929, p. 2. The director of the Finance Department had even calculated that the CAI would need 6.6 million, see Ferreira Martins (Director dos Serviços de Fazenda de Angola) to Chefe do Estado Maior, 27.07.1929, in: Processo disciplinar contra Francisco Venâncio da Silva, anexo 51, in: AHU, MU, DGAPC 3438.

381 Alto Comissariado da República em Angola (Filomeno da Câmara Melo Cabral), *Diploma Legislativo n. 206*, 20.09.1929, in: *Boletim Oficial da Província de Angola*, Nov. 1929, pp. 667–668.

supported the AMI programme from the start and to which Damas Mora was a regular contributor – Filomeno da Câmara's 'attack' on the AMI services had been driven by a "desire for revenge" against Damas Mora, "his personal friend since Timor, with whom he had fallen out shortly after his arrival in Luanda."[382] While there is not enough evidence to prove such a causal link between personal conflict and professional 'revenge', it is obvious that some occurrence in Luanda had indeed severed the bonds of friendship that had been forged between the two during their first extended collaboration in Timor some fifteen years earlier and that, beyond his reform decrees with regard to the AMI services, the High Commissioner targeted the health services in other ways as well.[383]

There is little doubt that Damas Mora's return to Europe in April 1929, officially for health reasons, was already the result of a dispute: Damas Mora later explained his leave of absence with the fact that Filomeno da Câmara had refused to consult the Direction of the Health Services on any health related subject, thus practically forcing him to leave.[384] The timing of his return to Angola corroborates this – it is hardly coincidental that Damas Mora embarked for Angola almost immediately after the "illiterate caveman", as Damas Mora called Filomeno da Câmara now, had been forced out of Angola.[385] Moreover, during Damas Mora's absence, the High Commissioner had launched an investigation of parts of the Health Services. In the resulting reports, Damas Mora and many other health officers were accused of the "embezzlement of public funds" and goods, notably in order to pay for the services of political deportees.[386]

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[382] Anonymous, *Desfazendo Mentiras*, A Província de Angola, 02.06.1930, p. 1.

[383] Interestingly, Damas Mora did not give details of the history of his rupture with Filomeno da Câmara in any of his extensive writings. Filomêno de Cabral was Governor-General in Timor from 1910 to 1913 and 1914 to 1917. In this second period, Damas Mora headed the health services on the island, see Mora, *Serviço de Saúde em Timor*. Indicative of their good relationship in these early years is Damas Mora's public praise for Filomeno da Câmara in Mora, António Damas, "A Granja República na Ilha de Timor", *Ilustração Portuguesa* 756 (1920), pp. 99–103 as well as his welcoming speech as acting Governor-General ad interim at the arrival of Filomeno da Câmara in Luanda, reproduced in *O 4.° Alto Comissário da República em Angola*, in: A Província de Angola, 02.02.1929, p. 1.

[384] See, for the official reason, *Serviços de Saúde*, A Província de Angola, 27.04.1929, p. 2. and for the retrospection Mora, *Publicações Médicas*, p. 57.

[385] On his embarkment in Lisbon, see *Dr. A. Damas Mora*, A Província de Angola, 10.04.1930, p. 2. He arrived in Luanda on 23 April, see Mora, *Luta contra a moléstia do sono,* p. 186. For the quote, see António Damas Mora, *Dr. João Augusto Ornelas*, in: A Província de Angola, 05.06.1930, p. 1.

[386] For the quote, see Dr. A. Damas Mora, *A sua resposta*, in : A Província de Angola, 10.04.1930, p. 2. Parts of the reports have been published, see Martins, Manuel Eduardo, "Relatório da Inspecção Extraordinária à Administração do Depósito Central de Medicamentos, 31.12.1930", in: *Boletim Oficial da Colónia de Angola, Série II,* 08.03.1930, pp. 161–168; Martins, *Relatório Inspecção Hospital Central*; Martins, Manuel Eduardo, "Relatório das investigações sobre vários serviços da Direcção dos Serviços de Fazenda", in: *Boletim Oficial da Colónia de Angola, Série II,* 14.03.1931, pp. 147–151. On deportees, see Martins, *Relatório Inspecção Hospital Central,* pp. 177–178. It is unclear whether the accusations had consequences. After the fall of Filomeno da Câmara, the next Governor-General Bento Roma sent one of the inspection reports to the Colonial Ministry in Lisbon, where António Oliveira Salazar, acting Minister of Colonies at the time, decided that the allegations

Under Filomeno da Câmara, all political deportees were dismissed from the health services. Some, like João de Camoesas and Jaime Braga, had been close collaborators of Damas Mora, the former as Head of the Technical Section of the Health Services and editor of the *Boletim da Assistência Médica aos Indígenas*, the latter as head of the Mayombe Sector in Cabinda. But other staff members close to Damas Mora were also harassed and driven out of Angola, notably Jacinto de Sousa and temporarily also Francisco Venâncio da Silva.[387] Venâncio da Silva, for instance, was dismissed as head of the Congo Zone and condemned to 30 days of prison in July 1929, mainly for having conspired together with Damas Mora in Lisbon, according to the prosecution, against the Interim Director of the Health Services, José da Silva Neves.[388]

Yet, although Damas Mora later complained to Ricardo Jorge that "madman Filomeno" had managed to drive out all of his capable collaborators, there was more at stake than personal enmity.[389] The persecution of political deportees, for instance, was not confined to the Health Services and was dictated by the High Commissioner's political ideas. Ideologically, Filomeno da Câmara was close to the ultraconservative monarchist movement in Portugal, the *integralismo lusitano*, and he had also become a supporter of Mussolini's Italian fascism, political views he shared with his powerful *chefe de gabinete*, Lieutenant Morais Sarmento.[390] Although there were also right-wing deportees in Angola – like Henrique Galvão, who had been deported after the failed revolt of the *Fifis* of February 1927, in the aftermath of which Filomeno da Câmara himself had been deported as one of its leaders to São Tomé – most were left-wing republicans, many of which were members of the army who had opposed the conservative military dictatorship in one of the various 'Reviralho' counter-revolts following the overthrow of the Republic on 28 May 1926.[391] In general, Filomeno da Câmara's mandate as High Commissioner of Angola (February 1929 – April 1930) was stained with numerous attacks against close collaborators of his predecessor, Vicente Ferreira, and political opponents of all kinds. Incidentally, it was this authoritarianism that provoked a climate of political instability and eventually sparked a military revolt in Luanda, which

should be investigated in Angola. See the correspondence in Processo 20/2/1930 da Secção Técnica de Saúde, in: AHU, MU, DGAPC 3438.

[387] Mora, *Luta contra a moléstia do sono,* pp. 182–183. On the dismissal of José Braga, see also Braga to Minister of Colonies, 20.01.1935 and Informação do Chefe da Repartição de Saúde, José da Silva Neves, 26.01.1935, in AHU, MU, DGAPC 407.

[388] On this and other accusations, see Processo disciplinar contra o capitão-médico de Angola, Francisco Venâncio da Silva, in: AHU, MU, DGAPC 3438.

[389] Damas Mora to Ricardo Jorge, 06.01.1931, in: Private Letters LDM.

[390] Pimenta, Fernando Tavares, *Angola, os Brancos e a Independência,* Porto: Edições Afrontamento, 2008, pp. 150–151.

[391] For on overview of the Reviralho revolts between 1926 and 1940, see Farinha, *Reviralho*.

ended with the death of Morais Sarmento and the dismissal of the High Commissioner, the first "man of confidence" (Torres) of the nascent Estado Novo in Luanda.[392]

This explanation was not the official version, of course. In the preambles to his reform decrees, Filomeno da Câmara legitimated his actions mainly with financial arguments. The CAI's luxurious and inequitable bonus policy had not only created a huge wage difference between the medical staff of the AMI services and the regular health delegates, it was also symptomatic of the general financial mismanagement that had pushed the scheme to the verge of financial collapse, he claimed. To avoid financial calamity, stricter financial supervision and lower bonuses were the only solution.[393] His argument against the integral approach was of a financial nature as well, according to which the AMI scheme suffered from its own, excessive ambitions, which were not "proportional to the resources of the colony", and that the available funds would be better invested if the AMI services were restricted to combatting sleeping sickness only.[394]

Leading members of the health services contested each of these charges. They defended high bonuses for the medical staff as legitimate in the face of the risks and deprivations of their itinerant life and of the prohibition of opening private practices. Moreover, doctors continued to affirm that the overall expenses were commensurate with the colony's resources. In a programmatic article on the future of the scheme, written shortly after Filomeno's arrival, João de Camoesas had already tried to forestall the use of the financial argument:

> "The implementation of this set of technical measures is immediately commensurate with the resources of the colony, even under the condition of a sharp reduction in public spending. Its future development, which does not need to be detailed here – also in order not to supply the ignorant with arguments that would consign it to the utopic realm – can be afforded by the Angolan budget. The political, administrative, economic, social and biological advantages that it will produce will more than compensate for all the expenses that its execution will demand."[395]

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[392] On the government of Filomeno da Câmara, see Galvão, Henrique; Selvagem, Carlos, *Império ultramarino português. Monografia do Império, III Volume: Angola,* Lisboa: Empresa Nacional de Publicidade, 1952, pp. 136–137; Pimenta, *Angola,* pp. 149–156. For a preliminary analysis of the military revolt, see also Torres, Adelino, "Angola. Conflitos políticos e sistema social (1928-1930)", *Revista de Estudos Afro-Asiáticos* 32 (1997), pp. 163–183, who erronously dates the revolt March 1929 instead of March 1930. For his part in the revolt of the 'Fifis' in 1927, Filomeno da Câmara was deported to São Tomé.

[393] See especially the long preamble in Alto Comissariado da República em Angola (Filomeno da Câmara Melo Cabral), *Diploma Legislativo n. 143*, which was also reprinted in the daily press, see A Província de Angola, 22/23/27.08.1929.

[394] Alto Comissariado da República em Angola (Filomeno da Câmara Melo Cabral), *Diploma Legislativo n. 160.*

[395] Camoesas, *Organização AMI,* p. 149. See also, for instance, Amaral, *Relatório Catete 1930-1931,* pp. 64–65; Mora, *Luta contra a moléstia do sono,* pp. 162–163.

Yet this position would not prevail, as many in Angola's colonial society and also in Portugal proved to be openly receptive to allegations of financial abuse and excess.

The bonus system, for instance, had sparked discontent within the medical staff, particularly among the larger group of regular health delegates who were not entitled to these rewards, though some of them were stationed in the same areas as their AMI colleagues. In response to this 'injustice', a few had even refused to continue treating the African population for free, as the law so obliged them.[396] In the wider society, too, this remuneration system was little understood. A lead article in the journal *O Comércio de Angola* aptly set the tone. Applauding Filomeno's 'moral intervention', it condemned the avarice of the AMI doctors and celebrated the disinterested medical work of past heroes, at times "when not every step taken corresponded with a hand full of money, when not every piece of work was rewarded with an immediate and lucrative salary".[397]

The Colonial Ministry was not insensitive to financial arguments either. Although leading members of the health services had warned Minister Bacelar Bebiano of the imminent threat to the continuity of the AMI services, neither he nor his successors seems to have intervened to temper Filomeno da Câmara's policy.[398] Certainly, there were legal restrictions. As High Commissioner, Filomeno da Câmara had far-reaching prerogatives. It was only with the promulgation of the *Colonial Act* in July 1930 and the abolition of the High Commissioner system in Portugal's main colonies, Angola and Mozambique, that the colonial administration in Angola was more strictly subordinated to the Colonial Ministry.[399] More decisive than these legal issues was probably the fact that Filomeno da Câmara's measures were clearly in line with the overarching doctrine of austerity and balanced budgets that Salazar had already begun to extend to the colonial realm.[400] Subsequent developments corroborate this.

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[396] See Alto Comissariado da República em Angola (Vicente Ferreira), *Diploma Legislativo n. 744*, 24.03.1928, in: *Boletim Oficial da Colónia de Angola, Série I,* 24.03.1928, pp. 112–115, paragraph 5.

[397] *Assistência Indígena*, in: O Comércio de Angola, 24.08.1929, p. 1.

[398] During his short visit to Angola in June 1929, Bacelar Bebiano had received a report on the AMI services from two leading members of the medical staff, in which the financial problems were mentioned. See Neves/Sousa, *Assistência Médica aos Indígenas*, esp. pp. 440-441. The available sources do not reveal the respective personal opinion the three colonial ministers during 1929 and 1930 (Bacelar Bebiano, Eduardo Marques and Oliveira Salazar) had of this matter.

[399] On the High Commisioner's prerogatives, see Ministério das Colónias, *Decreto 15.917 que promulga a Carta Orgância de Angola*, 01.09.1928, in: *Diário do Governo, Série I,* 01.09.1928, pp. 1793–1804 and Ministério das Colónias, *Decreto 16.158 que fixa determinadas atribuições ao novo Alto Comissário da República em Angola*, 21.11.1928, in: *Diário do Governo, Série I,* 21.11.1928, p. 2373.

[400] Leal, Francisco Cunha, *Oliveira Salazar, Filomeno da Câmara e o Império Colonial Português,* Edição Propria: Lisboa, 1930, esp. pp. 30-40. On Salazar's austerity policy and further implications for Angola, see Chapter 5.

Upon his return to Angola, Damas Mora struggled to revoke Filomeno da Câmara's reforms and thus to re-enact his own previous legislation. His plans were backed by interim governor Bento Esteves Roma and his successor José de Sousa e Faro and also received the support of the Technical Health Section within the Colonial Ministry, but these efforts were rejected from further up in the hierarchy of the Colonial Ministry.[401] Salazar's position on this matter – Salazar was Minister of Colonies between January and July 1930 – is not known but it is likely to have been similar to that of Armindo Monteiro, one of the main architects of the Colonial Act and Minister of Colonies from 1931 to 1935.[402] In Monteiro's opinion, Damas Mora's plans were too expensive and were not aligned with the policy of financial austerity. Empowered by the Colonial Act to exercise strict control on colonial budgets, Monteiro accordingly thoroughly revised Angola's budget proposal for the economic year 1931-1932. Instead of the scheduled 4.8 million Ags., he only allowed the colony to spend 2.7 million Ags. for the AMI services, "a sum", Monteiro said, "which does not permit luxurious bonuses, but which allows an efficient establishment of services."[403] Until the Second World War, the budget remained more or less at the same level, i.e. at less than 50% of what it had been in the late 1920s, as Gomes da Costa complained.[404]

There is no doubt that immediate financial concerns and the imperative of balanced budgets were important reasons that led to the continued underfinancing of the AMI services. Yet I argue that, beyond cyclical financial constraints, there were also structural causes that contributed to the general receptiveness with regard to the financial cuts in the African healthcare programme. These causes were deeply rooted in colonial ideology.

Firstly, the unwillingness to invest large sums in the health and 'regeneration' of the African population must also be considered in the face of Angola's (gradual) evolution towards a settler colony and, within this evolution, the insufficient health provisions for an

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[401] See the correspondence in processo 4/3/1930 da Secção Técnica de Saúde, in: AHU, MU, DGAPC 3438, including telegrammes to the Colonial Ministry from the Governor-General dated 17.05.1930, 04.07.1930, 17.07.1930 and 05.10.1930 and positive recommendations of the Technical Health Section dated 20.05.1930, 07.07.1930 and 19.07.1930.

[402] On Armindo Monteiro, see Oliveira, Pedro Aires, *Armindo Monteiro. Uma biografia política (1896-1955),* Lisboa: Bertrand Editora, 2000.

[403] Ministério das Colónias, *Decreto 20.071 - Orçamento Geral da receita e da despeza da colónia de Angola no ano económico de 1931-1932*, 08.07.1931, in: *Diário do Governo, Série I,* 14.07.1931, pp. 1505–1525, preamble p. 1507 and art. 46 (p. 1512). Prior to that, Armindo Monteiro had already revoked Diploma Legislativo 162, 29.11.1930, see Ministério das Colónias, *Portaria 7.053*, 20.03.1931, in: *Diário do Governo, Série I,* 20.03.1931, p. 476.

[404] Costa, Alfredo Gomes da, "Assistência Médica ao Indígena e Combate à Doença do Sono", in: Mouta, Fernando (ed.), *Generalidades sobre Angola. Para o 1.° Cruzeiro de Férias às Colónias Portuguesas,* Luanda: Imprensa Nacional, 1935, pp. 59–64, here p. 61. The budget allocated to the AMI services in the 1930s oscillated around 2 million ags., see Colónia de Angola - Repartição Técnica de Estatística Geral (ed.), *Anuário Estatístico de Angola, ano de 1939,* Luanda: Imprensa Nacional, 1941, p. 467.

increasing part of the European population. In the 1930s, Angola had one of the largest, if not the largest, white (settler) population in Equatorial and Central Africa.[405] Official estimates set the figure at nearly 60,000 whites in Angola for 1931, a spectacular increase from the 20,700 in 1920. Even if one adheres to the opinion of Alberto de Lemos, the head of the Statistical Department in Angola in the 1930s to 1950s, whereby this number was much exaggerated, his very conservative estimate of 30,000 whites in 1930 still placed Angola ahead of its Central African neighbours. In 1940, the first general census counted approximately 44,000 whites.[406] Certainly, the recentralization of the Portuguese colonial empire, which began after the military coup of 1926 and culminated in the Colonial Act of 1930, had diminished the direct influence of the settler population on political decision-making in and for Angola, and various revolts against this reconfiguration and deterioration of their position during the 1930s were violently suppressed.[407] Beyond this apparent loss of influence, however, they still played a central role in opinion-making and their aspirations could not be completely ignored, especially given the government's fears of independentist movements. These aspirations were not only political, but also social in nature.

In the early 1930s, the combined woes of the world economic crisis and Lisbon's budget restriction policy severely affected the private and the public sectors, exacerbating the issue of poor whites in Angola.[408] For the Portuguese government, as for many others, impoverished whites constituted a threat to colonial rule as their misery endangered the image of European superiority. A few hundred were repatriated at the expense of the colony and the shipping companies, and as a preventive measure immigration restrictions were established

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[405] For comparative numbers, see Clarence-Smith, William Gervase, "The effects of the Great Depression of the 1930s on industrialisation in Equatorial and Central Africa", in: Brown, Ian (ed.), *The economies of Africa and Asia in the inter-war depression,* London: Routledge, 1989, pp. 170–202, here pp. 190–191.

[406] In his analysis of the 1940 census, Alberto de Lemos criticized the 1931 estimate as being too high in light of the 1940 census. He claimed that the white population could not have declined between 1931 and 1940, since net migration, although negative between 1932 and 1937, had been positive for the 1930s as a whole. However, he also believed that the number of whites in the 1940 census was too low because many whites had declared themselves *mestiços* due to racial mixing in past generations. Since, in many cases, this influence was no longer visible in somatic, psychological nor civilizational terms, 8,410 *mestiços* should additionally be considered whites. For the official estimates in the early 1930s, see, for instance, Colónia de Angola - Repartição Técnica de Estatística Geral (ed.), *Anuário Estatístico 1939,* p. 21. For the critique on these estimtes and the 1940 census itself, see Lemos, *Introdução ao primeiro censo,* pp. 61–64. For reasons that are unclear, Alberto de Lemos later indicated only 30,000 whites for 1930, see, for instance, Lemos, Alberto de, "Censo da população de 1950. Nota introdutória", in: Repartição Técnica de Estatística Geral da Província de Angola (ed.), *II Recenseamento Geral da População, 1950,* vol. 1, Luanda: Imprensa Nacional, 1953-1956, pp. 7–65, here p. 16. As João Pereira Neto has pointed out, this new low number is rather implausible, see Neto, João Pereira, *Angola. Meio século de integração,* Lisboa: Instituto Superior de Ciências Sociais e Política Ultramarina, 1964, pp. 187–189.

[407] See, for instance, Pimenta, *Angola,* pp. 160–164.

[408] On the effects of the world economic crisis on Angola's economy, see Clarence-Smith, William Gervase, *The Third Portuguese Empire, 1825-1975. A Study in Economic Imperialism,* Manchester: Manchester University Press, 1985, pp. 178; 182; Clarence-Smith, *The effects of the Great Depression*.

and enhanced.[409] These measures were not watertight, however, and the problem would never totally disappear.[410] Repatriation was not the only strategy. To mitigate the effects of the crisis, the colonial government resolutely sided with white Europeans in those occasions in which they competed for labour with Africans. Many Africans were expelled from public services and replaced by Europeans, even at the lowest levels of the administration.[411] But, in general, policy under Minister Armindo Monteiro (1931-1935), a declared opponent of state-supported mass migration to the colonies, was "marked by the absence of [state] support" for poor and sick settlers, who were left to turn to charities within the European communities.[412] Leading doctors of the AMI services did not ignore the precarious health situation of many Europeans. As early as 1929, they had pointed to the necessity of extending the programme to them. Shrinking resources, however, prevented this.[413]

Within this context of political discontent, social crisis and radical cuts in public spending, the public support for a large and expensive African healthcare programme, which had probably never been overwhelming, must have dwindled. In the Angolan press, some raised the question as to why the state spent millions on healthcare and other provisions for the native population, while some Europeans, like the families of deceased state employees, were forced to resort to private charity.[414] Not all explicitly asked for a cut in African healthcare expenses, as for example a retired administrator did.[415] The comparison was primarily used to place pressure on the government to provide more protection and free medical services for all Europeans.[416] But such contributions were indicative of existing resentment among the European population over what was perceived as differential treatment. Although more research on settler ideology in Interwar Angola is needed, it is very likely that,

[409] The problem of 'poor whites' had already been addressed in the local press in the mid 1920s, leading to the first incidents of repatriation. See Rodrigues, *Representação Social,* p. 54. According to Henrique Galvão, about 300 people were repatriated between 1932 and 1936, see Galvão, Henrique, "Zonas colonizáveis de Angola e soluções aconselháveis para intensificar a sua colonização", in: Comissão Executiva dos Centenários (ed.), *Memórias e comunicações apresentada ao Congresso Colonial (IX Congresso)* (Publicações do Congresso do Mundo Português; 14-16), vol. 15, Lisboa, 1940, pp. 269–400, here p. 311. On the colonial state's fear of the effects poor whites would have on colonial rule, see Castelo, Cláudia, *Passagens para África. O Povoamento de Angola e Moçambique com Naturais da Metrópole (1920-1974),* Porto: Edições Afrontamento, 2007, pp. 287–288. For further information on poor whites, see Neto, *Angola,* pp. 183–185.
[410] See, for instance, the unemployment rates for 1955 in Clarence-Smith, *Third Portuguese Empire,* p. 177.
[411] Rodrigues, *Representação Social,* pp. 55–56.
[412] Castelo, *Passagens para África,* pp. 75-77; 86 (quote); 287-288.
[413] Neves/Sousa, *Assistência Médica aos Indígenas,* p. 442; Camoesas, *Organização AMI,* p. 149.
[414] Eurico Lopes Cardoso, *Montepio Oficial de Angola*, in: A Província de Angola, 10.05.1930, p. 2.
[415] Joaquim da Costa, *Assistência Indígena – Assistência Europeia*, in: A Província de Angola, 14.05.1930 and 02.06.1930, p. 2.
[416] See , for instance, Chaves da Silva, *Assistência Indígena – Assistência Europeia*, in: A Província de Angola, 17.06.1930, p. 2; António Augusto Dias, *Assistência,* in: A Província de Angola, 20.05.1933, p. 2

as the crisis deepened, such feelings grew in intensity.[417] António Videira, for example, an influential publicist and representative of settler interests, criticized in 1932 that in Luanda alone hundreds of unemployed poor whites were left almost uncared for, whereas there was enough money to fund charity works for African babies and their mothers. The article by Videira, who had already voiced his opposition to the AMI programme in the mid-1920s, instigated a protracted polemic with Damas Mora in the local press about the treatment of the African population.[418] What Videira and others criticized was not that the state 'cared' for the African population but rather that, notably through the AMI services, the colonial administration had (in their opinion) prioritized them over its own "brothers in colour" and thereby had reversed the colonial order.

Secondly, and this argument proceeds along similar lines as the first, the health provisions for the African population in Angola must also be compared to those provided to the Portuguese population in the metropole. Indirectly, Minister of Colonies Eduardo Marques had given another reason for Portugal's reluctance to inject more money into the Angolan health system when he pointed out in a journal interview in 1929 that "in Angola as well as in Mozambique, the medical and nursing services are much better than in many places in the metropole".[419] Although it was intended as praise of the efforts of the colonial health services, this comparison also revealed the wretched state of public health in the metropole.

Indeed, Portugal's public health system was still in its embryonic phase in the late 1920s and compared unfavourably with the rest of Europe.[420] The state, which had relied on a centuries-old tradition of charity *(beneficência)* in administering healthcare, had kept its involvement to a minimum. In theory, there was a country-wide network of so-called health (sub)delegates, but in practice there was significant geographical disparity between urban and rural spaces, and many rural areas did not have access to state health services at all. Moreover,

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[417] In his studies on the 'white' population in Angola, Fernando Pimenta has strongly focused on nationalist thinking among European settlers, highlighting their push for more autonomy and their role in independence movements. Questions of racism and native policy have been completely ignored. See Pimenta, Fernando Tavares, *Brancos de Angola. Autonomismo e nacionalismo (1900 - 1961),* Coimbra: Minerva, 2005 and Pimenta, *Angola*.

[418] António Videira, *Providências imediatas*, in: A Província de Angola, 19.08.1932, p. 1 (here quote). Eight articles in total were published between the 19 August and 9 September 1932 in the journal A Província de Angola. On António Videira, see Pimenta, *Angola,* pp. 148; 169. On Videira's initial opposition against the establishment of an African healthcare program, see Mora, António Damas, "O serviço de assistência médica aos indígenas, em Angola", *Boletim da Agência Geral das Colónias* 5,48 (1929), pp. 121–124, here p. 122.

[419] *As declarações do sr. Ministro das Colónias [Eduardo Marques]*, in: A Província de Angola, 06.07.1929 and 07.09.1929, both p. 1.

[420] The history of public health in Portugal has received very little attention until today. There is still no overview covering the first half of the twentieth century. This unsatisfactory state of affairs is partly due to the fact that historians have been unable to locate the archives of the Health Department *(Direcção Geral de Saúde)*. For archival issues as well as a valuable international contextualization of Portugal's public health services, from the perspective of the struggle against malaria, see Saavedra, *Questão Nacional,* pp. 24-28; 83-86; 147-162.

many state doctors combined their status as health delegates with that of the private practitioner, only providing the poorest with free clinical assistance. Thus healthcare had remained largely in the hands of religious charities such as the *Misericórdias*, an institution that had spread all over mainland Portugal and its colonies since the sixteenth century, and more recent 'mutualities' *(associações de socorros mútuos)* and philanthropic institutions.[421]

While this situation might not have been exceptional in Europe around the turn of the century, it gradually became more so in the decades to follow. Although ideas of social medicine also circulated in Portugal at the time, they did not lead to large state reforms and improvements on the ground.[422] At a time when, in Europe, most states started to invest large amounts of money and human capital in mass programmes of both curative and preventive medicine, successive Portuguese governments continued to underfinance the Health Department *(Direcção-Geral de Saúde)*, thus preventing the extension of the healthcare infrastructure, long overdue urban sanitation measures and the development of comprehensive prophylactic campaigns.[423]

On the surface, this ran counter to the strong representation of the 'medical class', as many doctors used to term their professional group, in political and social life. Doctors and pharmacists occupied on average fifteen per cent of the seats in the Portuguese Parliament during the First Republic, an exceptionally high percentage by contemporary European standards.[424] The explanation for this apparent paradox probably resides in the misleading

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[421] Sobral, José Manuel; Lima, Maria Luísa; Sousa, Paulo Silveira e; Castro, Paula, "Perante a Pneumônica. A epidemia e as respostas das autoridades de saúde pública e dos agentes políticos em Portugal", *Varia História* 25,42 (2009), pp. 377–402, here pp. 380–384. In 1915, 241 of 251 hospitals in Portugal were still privately managed, see *Ibid.,* p. 382. On the *Misericórdias*, see Sá, Isabel dos Guimarães, *Quando o rico se faz pobre. Misericórdias, caridade e poder no império português, 1500-1800,* Lisboa: Comissão Nacional para as Comemorações dos Descobrimentos Portugueses, 1997; Sá, Isabel dos Guimarães; Lopes, Maria Antónia, *História breve das Misericórdias Portuguesas, 1498-2000,* Coimbra: Imprensa da Universidade de Coimbra, 2008.

[422] Sobral/Lima/Sousa/Castro, *Perante a Pneumônica,* p. 384; Viegas et al. 2006, pp. 25; 27-30. For the rise of social medicine in medical thought in Portugal, see Garnel, *Consolidação*.

[423] Between 1910 and 1930, the budget of the health services stagnated. See Garnel, Maria Rita Lino, "Médicos e saúde pública no Parlamento republicano", in: Catroga, Fernando; Almeida, Pedro Tavares de (eds.), *Res publica. Cidadania e representação política em Portugal, 1820-1926,* Lisboa: Assembleia da República, 2010, pp. 230–257, here p. 236 and Faria, José Alberto de, *Administração sanitária,* Lisboa: Imprensa Nacional, 1934, pp. 350–354. The idea of Portugal's backwardness in this matter was also forcefully expressed in the preamble of the health reform of 1926, see Ministério da Instrução Pública, *Decreto 12.477 que promulga a reorganização geral dos Serviços de Saúde Pública,* in: *Diário do Governo, Série I,* 12.10.1926, pp. 1519–1529. On the health policies of the First Republic, see also Alves, Jorge Fernandes, "Saúde e Fraternidade. A Saúde Pública na I República", in: Comissão Nacional para as Comemorações do Centenário da Republica (ed.), *Corpo. Estado, medicina e sociedade no tempo da Ia República,* Lisboa: Imprensa Nacional - Casa de Moeda, 2010, pp. 111–129, here pp. 126–129. On the rapid development of public health in Europe in the Interwar Period, see Borowy, Iris; Gruner, Wolf D., "Introduction", in: Borowy, Iris; Gruner, Wolf D. (eds.), *Facing Illness in Troubled Times. Health in Europe in the Interwar Years,* Frankfurt am Main: Peter Lang, 2005, pp. 1–16.

[424] Almeida, Pedro Tavares de; Fernandes, Paulo Jorge; Santos, Marta Carvalho dos, "Os deputados da 1.ª República Portuguesa. Inquérito prosopográfico", *Revista de História das Ideias* 27 (2006), pp. 399–417, here pp. 406–411; Garnel, *Médicos e saúde pública,* pp. 231–232. On the intellectual and social power of doctors in

character of the term ‘medical class’. Obviously, the fact that so many doctors decided to partake in a political career was rather the expression of their search for individual prestige and influence than of a common ‘class’ strategy designed to advance the issue of public health.[425] A close reading of the legislative activities of the doctors in Parliament corroborates the view that the great majority of them attached little importance to such a reform.[426] One can guess that, among other things, they feared that such a reform might infringe upon their lucrative private practices.[427]

Hence, it is symptomatic that, even in the wake of the devastating epidemics that afflicted Portugal in 1918-1919, most notably the Spanish flu, but also smallpox, dysentery and typhoid fever, Ricardo Jorge’s 1919 reform bill, which aimed to create a modern public health system was not even discussed in Parliament before the demise of the Republic in 1926.[428] Ricardo Jorge (1858-1939), however, was not just anybody: he was the ‘father’ of modern thought on public hygiene in Portugal and continued to be its most prominent representative until his death on the eve of the Second World War. It had been under his decisive influence that the first state Health Department *(Direcção-Geral de Saúde e Beneficência Pública)* was established in 1899, together with the Central Institute of Hygiene *(Instituto Central de Higiene)* in Lisbon, two institutional bodies that he would direct until his retirement in 1928. Jorge had also authored the landmark Public Health Regulations of 1901.[429] Moreover, he represented Portugal at the OIHP (1912-1930s) in Paris and on the Health Committee of the League of Nations for many years (1924-1930s).[430] However, he

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Portugal at the turn of the twentieth century, see Garnel, Rita, "Poder Intelectual do Médico", *Revista de História das Ideias* 24 (2003), pp. 213–254. On the apparent paradox between the political and intellectual power of the ‘medical class’ and the continuous lack of reforms to create a more comprehensive public health system, see also Garnel, Maria Rita Lino, *Vítimas e violências na Lisboa da I República* (Universidade de Coimbra, Faculdade de Letras), 2005, p. 121 and Alves, *Saúde e Fraternidade,* p. 112.

[425] For this argument, see Saavedra, *Questão Nacional,* pp. 91-92; 153.

[426] Garnel, *Médicos e saúde pública*.

[427] Oral communication by Rita Garnel, autumn 2010.

[428] See Ricardo Jorge’s bitter comments in Jorge, Ricardo, "A propósito de Pasteur. Crítica da Sanidade e da Mentalidade Portuguesas. Discurso proferido em Comemoração do Centenário Pastoriano na Faculdade de Medicina de Lisboa aos 25 de Abril de 1923", in: Jorge, Ricardo, *Sermões dum leigo. Discursos e Alocuções,* 2, aumentada ed., Lisboa: Instituto de Alta Cultura [1974], pp. 181–230, here pp. 208–209. On the influenza epidemics of 1918-1919, see Sobral/Lima/Sousa/Castro, *Perante a Pneumônica* and Sobral, José Manuel; Lima, Maria Luísa; Sousa, Paulo Silveira e; Castro, Paula, *A Pandemia Esquecida. Olhares Comparados sobre a Pneumónica 1918-1919,* Lisboa: Imprensa de Ciências Sociais, 2009.

[429] Alves, Jorge Fernandes, "Ricardo Jorge e a Saúde Pública em Portugal", *Arquivos de Medicina* 22,2/3 (2008), pp. 85–90, here p. 89; Viegas et al. 2006, pp. 22–25.

[430] On this, see Jorge, Ricardo, "Les pestilences et la Convention Sanitaire Internationale", *Arquivos do Instituto Central de Higiene. Secção de higiene* 3,1 (1926), pp. 1–110, here p. v. Jorge’s interventions at the OIHP between 1919-1925 are bundled in *Ibid.* On his presence in Geneva, see Borowy, *Coming to Terms,* pp. 123; 470.

proved incapable of effectively using his international prestige to transform the Portuguese health services.[431]

In a public lecture in 1923, Jorge bitterly complained about Portugal's sanitary situation, which was not only discouraging but also embarrassing before the rest of the world: Portugal still did not have functioning prophylactic services against diseases such as tuberculosis, syphilis, rabies and smallpox, which continued to ravage the country.[432] Two years later, he even refused to write a report on the state of health in Portugal for the League of Nations' International Health Yearbook, invoking the failure of his attempts to improve the sanitary situation.[433] It was only after the military coup of 1926 that a reform of the health services, probably authored by Ricardo Jorge, was promulgated.[434] The issue of public health, however, would not be a priority for the military dictatorship or the early Estado Novo, and prior to the end of the Second World War, few structural advances were achieved.[435]

Of course, there was no direct, inextricable link between investment schemes in healthcare in Portugal and Angola. But with the reduced autonomy of the colonies and the recentralization of the Empire in Lisbon in the late 1920s and early 1930s, both spheres became more closely bracketed in terms of governance. One can argue that, in this changing context, the health conditions in the metropole and prevalent attitudes towards state involvement in this domain increasingly had an effect on Angola. When he rejected the original AMI budget in 1931, because it was disproportionate, Armindo Monteiro may have assessed the investments in African healthcare not only with regard to the needs of the population in Angola (and financial constraints, of course), but also with regard to health conditions and investments in Portugal. While the large autonomy of Angola in the 1920s had allowed governors and health services to 'develop' the colony in greater independence from the metropole, the recentralization of the empire also implied its re-hierarchization and the full subordination of Angola to the designs of the colonial ministry and the central government.

Because they highlight the often implicit geographies and hierarchies of colonial rule, these explanations are tentative. Yet, they are an attempt to move beyond both financial determinism and the contingency of one man's rule in order to understand Angola's

[431] Saavedra, *Questão Nacional,* p. 235.
[432] Jorge, *A propósito de Pasteur,* pp. 205–209.
[433] Borowy, *Coming to Terms,* pp. 180–181. Along with Albania, Portugal would be the only European country that was not represented in at least one of the six Yearbooks between 1924 and 1930, see *Ibid.,* p. 182.
[434] Ministério da Instrução Pública, *Decreto 12.477 que promulga a reorganização geral dos Serviços de Saúde Pública,* in: *Diário do Governo, Série I,* 12.10.1926, pp. 1519–1529. The decree was issued by Artur Ricardo Jorge, Minister of Education and son of Ricardo Jorge, see Saavedra, *Questão Nacional,* p. 155.
[435] *Ibid.,* pp. 147; 157.

comparative retrogression in state-sponsored African healthcare in the 1930s. Angola differed from the French and Belgian colonies in West and Central Africa due to the greater importance of its settler population and its increasing dependence on a poor and, in public health issues, progressively underdeveloped metropole. In fact, these other colonies and their respective metropoles, which were also impacted by the world economic crisis (and thus had to cope with financial constraints), did not discontinue their investments in African healthcare, as I will discuss below.

António Damas Mora himself framed the crisis in somewhat different terms. Aside from the new financial constraints, Damas Mora blamed the slow and incomplete recovery of his scheme on indifference and ignorance. When he returned to Angola in April 1930, nearly all of the departmental directors in the public administration of the colony had been replaced, and Damas Mora complained that whereas their predecessors had supported his endeavour before 1929, indifference and incomprehension now reigned supreme. Under these circumstances, he saw no use in trying to re-establish the CAI.[436] This episode illuminates the severe rupture in personal and intellectual continuity, which occurred in the colonial bureaucracy in the pivotal years of 1929-1930. It also underlines the dependency of the AMI services on the support of other departments, something Damas Mora and other doctors, too, had repeatedly stated.

However, because of his negative experiences under the First Republic in 1923/24, Damas Mora knew well enough that the lack of support for his ideas was not linked to a particular political regime in the metropole. When he had presented his reform ideas in the 1920s, he had already noted the resistance the proposal would possibly encounter from conservative colleagues, administrators and the more general public.[437] Later, he repeatedly denounced the 'social environment' *(meio social)* of Portugal and of Angola, for neither was receptive to his ideas of public hygiene. Resistance to such reforms was deeply rooted in Portuguese society, he complained, and only exceptional men like Norton de Matos and Vicente Ferreira had been able to overcome it.[438] In a similar vein, his colleague Anthero Antunes de Amaral blamed the intellectual backwardness and the strong conservatism of Portuguese society. In a vehement preface to a medical report from 1931, he concluded that

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[436] Mora, *Luta contra a moléstia do sono,* pp. 186–188.
[437] See, for instance, Mora, *Os Serviços de Saúde (1928),* p. 94.
[438] António Damas Mora, *Serviços de Saúde e Higiene. Considerações finais de um relatório do seu Director*, in: A Província de Angola, 27.06.1934, pp. 1–2; Mora, António Damas, "História da Escola de Medicina Tropical", *África Médica. Revista Mensal de Higiene e Medicina Tropical* 7 (1941), pp. 196-206; 231-241; 270-278; 298-307; 338-350, here pp. 349–350.

"health services always meet with the greatest resistance in those countries where education is very poor and illiteracy prevails". The report received great praise from Damas Mora, but when it was published a few years later, the greater part of the preface had not survived censorship.[439]

In spite of its grave financial straits, especially in the years 1929-32, the AMI services did not cease to exist, and after the eventual approval in May 1932 of a reform plan, which conformed to the new financial framework, most of the abandoned sectors were reoccupied, medical surveillance reintroduced and the 'integral approach' revalorized.[440] Because reports are lacking, however, it is difficult to assess the quality of the medical work of the 1930s. Both the *Revista Médica de Angola* and the *Boletim da Assistência Médica aos Indigenas* were discontinued in the crisis of 1929, reportedly as a result of financial cuts, the hostility displayed towards the AMI services, and the "progressive anaemia due to the lack of interest on the part of the public and the collaborators", as Damas Mora put it.[441] It was only in 1940 that this gap was partly filled with the first issue of the *Boletim Sanitário de Angola*, which strictly speaking was not a journal, but a more modest and statistically oriented yearbook.[442] Yet, there are several elements to suggest that the application of the AMI doctrine on the ground had lost momentum.

One powerful indication is the deterioration of the collaboration with the health services in the Belgian Congo and the accusations of this last. Contrary to the agreements reached in the Luso-Belgian sanitary convention of 1927 and the repeated promises of the Portuguese to keep them in check, some border areas, like Portugese Mayombe in the Cabinda enclave and large parts of the former Zaire Zone, were left without AMI doctors and efficient medical assistance throughout parts of the 1930s.[443] This provoked tensions with the Belgian medical authorities, who repeatedly denounced, internally as well as in official

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[439] Compare Amaral, *Relatório Catete 1930-1931* with the original draft *Relatório da Missão de Reconhecimento Nosográfico de Catete, 1930-1931*, in AHU, MU, AGC 2336, quote p. 6. For Damas Mora's praise, see Mora, *Luta contra a moléstia do sono,* p. 209.

[440] Governo Geral de Angola, Diploma Legislativo 351, 17.05.1932; Mora, *Luta contra a moléstia do sono,* pp. 212–225. On the revalorization of the integral approach, see also António Damas Mora, *Assistência Médica aos Indígenas, em Angola*, in: A Província de Angola, 06.-08.08.1934.

[441] The last issue of the Boletim da Assistência Médica aos Indígenas, with regard to the period July-December 1929 was published only two years later. See Mora, *Publicações Médicas,* pp. 18; 20 and the 'explanatory note' in the issue.

[442] Direcção dos Serviços de Saúde e Higiene da Colónia de Angola (ed.), *Boletim Sanitário de Angola, referente ao Biénio 1937-1938,* Luanda: Imprensa Nacional, 1940.

[443] Mora, *Luta contra a moléstia do sono,* pp. 182; 233; Eurico de Almeida, *Problema sanitário. Ocupação de Cabinda*, in: Portugal. Orgão do Nacionalismo Português em Angola, 28.02.1930, p. 1; José Melo dos Santos, *A defesa sanitária da população indígena*, in: A Província de Angola, 16.03.1932, p. 1; Magova, *Noqui, terra d'Angola*, in: A Província de Angola, 22.08.1934, p. 2. For Portuguese promises, see, for instance, *Conferência sanitária luso-belga (1928),* p. 375.

correspondence with Angola, the incomplete medical occupation of Angola's border regions. They complained that, in this manner, important foci of disease remained intact and periodically swept over into the Belgian Congo, especially since many Angolans were able to cross the common border without previous examination or medical passports. Belgian efforts to combat communicable diseases such as sleeping sickness and smallpox were thus partly vitiated, they lamented, by Portuguese negligence.[444] Overall, relations between the health services markedly deteriorated in the first half of the 1930s. For unknown reasons, the Angolan health services, in clear violation of the convention, also failed to communicate medical reports on the border regions to the Belgians between 1931 and 1935.[445] The regular exchange of these reports seems to have resumed only from 1936 onwards.[446] In addition, both colonies mutually accused the other of not having sent notifications of the outbreak of epidemic diseases listed in the convention, such as bacillar dysentery and bubonic plague.[447]

Another indication of the inability of the AMI to rebound is that, even after 1932, low and stagnating budgets and staff numbers obviously did not allow for the expansion of the geographical coverage of the AMI scheme to the entire colony, as had been projected in the late 1920s. The programme remained confined to the northwestern zones of Cuanza and Zaire-Congo, with only a few new sectors created in 1938.[448] Overall, Damas Mora's ambitious project of a Copernican revolution in the administration of healthcare remained unaccomplished. He admitted at the end of his term in Angola that he had not succeeded in converting the basic orientation of the general health services from individual treatment to public hygiene. Even with regard to the AMI services, he stated that there was still a long way to go.[449] Indeed, some of his most prominent concerns, such as the establishment of model

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[444] See, for instance, G. Trolli, *Résumé de la situation medicale à la frontière luso-belge*, 20.10.1930; Dr. Dupuy, *Rapport sur la situation sanitaire de la frontière luso-belge du secteur du Bas-Congo*, 17.12.1931 and Dr. Dupuy, *Rapport sur la frontière luso-belge du Congo-Kasai*, 18.11.1931, p. 25 and 35; Dr. Gabba, *Rapport pour la conférence luso-belge*, 11.07.1933; Dr. Dupuy, *Rapport sanitaire Luso-Belge*, 28.05.1935, all in: AA, A11 – Hygiène, Box 4465, Folder 929; A. Mineur (Légation de Belgique à Lisbonne) to Minister of Foreign Affairs, Cesar de Souza Mendes, 20.09.1932, in: AHD-MNE, 3. Piso, Armário 12, Mç 192. See also Governor-General Ryckmans to (Belgian) Minister of Colonies, 23.02.1938 (and the annexes), in AA, A11 – Hygiène, Box 4465, Folder 928.

[445] Dr. Dupuy, Rapport sanitaire Luso-Belge, 28.05.1935, p. 13 in: AA, A11 – Hygiène, Box 4465, Folder 929.

[446] See the reference in Augusto Pereira Brandão, *Relatório Anual para 1937*, s.d., in: AA, A11 – Hygiène, Box 4465, Folder 929.

[447] For such accusations, see, for instance, Governor-General of Angola, Eduardo Ferreira Viana to Minister of Colonies, 08.03.1934, in: AHU, MU, DGAPC 410 and, for the Belgian counter-accusations, Émile van Campenhout to (Belgian) Minister of Colonies, 19.06.1934, in: AA, A11 – Hygiène, Box 4465, Folder 928.

[448] See map 10 annexed to Costa, *Assistência Médica ao Indígena* and the map in Direcção dos Serviços de Saúde e Higiene da Colónia de Angola, *Boletim Sanitário de Angola para 1937-1938*, p. 133. For the personnel, see, for instance, *Ibid.,* p. 135.

[449] António Damas Mora, *Serviços de Saúde e Higiene. Considerações finais de um relatório do seu Director*, in: A Província de Angola, 27.06.1934, pp. 1–2.

villages and programmes against infant mortality were not or only marginally implemented before the end of the Second World War.

The case of sleeping sickness, conversely, is more complicated. In his final report on the disease from 1934, Damas Mora maintained that, due to the consistent and continuous Portuguese efforts, sleeping sickness had lost its exceptional position in the nosology of Angola and had become just one endemic disease among many others. He based this assertion on statistical material that suggested that both the number of new cases and the total number had plummeted in the occupied areas between 1927 and 1933. In the Cuanza Zone, the total number had fallen from – a probably underestimated – 2.96% to 0.93% of the observed population and in the Congo Zone, where early statistics were deemed still less accurate, from 6 to 15%, depending on the sector, in 1928 to a mere 0.80% in 1933.[450] Of the 408,176 Africans under medical surveillance in 1933, he summarized, only 3,510 had sleeping sickness, and the new infection rate was inferior to 0.40%.[451] Moreover, the disease had also lost its appalling mortality rates due to early recognition and improved drug treatment. In 1933, only 197 people were recorded to have died from the disease.[452]

In light of this development, Damas Mora was proud to conclude that "in these two former districts, the disease is no longer the scarecrow of the administration and the scourge of the population, and should be ranked in a moderate position among all the other social illnesses that have to be put under permanent surveillance without the need for noisy and costly combat structures."[453] Although he knew that some other parts of the colony in which sleeping sickness was endemic were not yet under control, he announced the end of the scourge for Angola as a whole.[454] Subsequent statistics would not contradict his position: while the number of observed Africans increased to more than 600,000 until 1939, official new infection rates would continuously oscillate around 0.30% throughout the rest of the decade.[455]

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[450] For the Cuanza zone, see Mora, *Luta contra a moléstia do sono,* p. 218 and Costa, *Assistência Médica ao Indígena,* pp. 61; 63, for the Congo Zone, see Mora, *Luta contra a moléstia do sono,* pp. 224; 231-232. These numbers were based upon the annual reports by the directors of each zone.
[451] *Ibid.,* p. 225.
[452] *Ibid.,* pp. 225; 232.
[453] *Ibid.,* p. 215.
[454] *Ibid.,* pp. 232–233.
[455] See the numbers in Costa, *Assistência Médica ao Indígena,* p. 63; Direcção dos Serviços de Saúde e Higiene da Colónia de Angola (ed.), *Boletim Sanitário de Angola, referente ao ano 1939,* Luanda: Imprensa Nacional, 1941, p. 66

While these – presumably underestimated – numbers showed that the disease was not yet eradicated, they also suggested that the disease was under control.[456] Damas Mora, who had never been in favour of an exclusive focus on sleeping sickness, used the statistics to transform sleeping sickness into a "banal disease" and to shift the attention to other illnesses, which, in line with his integral approach, deserved equal or even more attention. In his opinion, helminthiasis was actually causing greater damage in Angola than sleeping sickness. Yet for Damas Mora the most important medical problem of all were the "terrible infant mortality" rates and he urged the Health Services to concentrate all possible efforts to put a stop to this calamity.[457]

[456] In the first years following the Second World War, the yearly number of diagnosed cases almost doubled, very likely because of better prospection methods and more regular controls, as Armando de Albuquerque conjectured, see Albuquerque, *Combate à doença do Sono,* pp. 174; 179.
[457] Mora, *Luta contra a moléstia do sono,* p. 233 (here also quotes).

Conclusion: Inter-Imperial Borrowing and Hierarchies of Prestige

In October 1930, shortly after the demise of the Native Assistance Commission (CAI) and the budget and personnel cuts to the AMI services, a similar and potentially even more powerful organization was created in neighbouring Belgian Congo: the FORÉAMI (Fonds Reine Elisabeth pour l'Assistance Médicale aux Indigènes du Congo Belge). In many of its basic aspects, this "first test [by the Belgian state] in *service d'assistance médicale indigène (S.A.M.I.)*, that is to say, [a] medical crusade against all endemic diseases", as Trolli had announced it before Damas Mora[458], mirrored the initial structure of the CAI and its African healthcare scheme in Angola: it was financed through a special fund; it functioned as an autonomous entity parallel to the regular health services; it was dedicated to integral medical assistance; it attached the greatest importance to a complete survey of the population as the cornerstone of all medical action; and it was initially launched in a small area, the Lower Congo *(Bas-Congo)* district along the western border with Angola, to be extended and/or moved in the future.[459]

As former director of the health services in the Belgian Congo (1922 and 1925-1931), the architect and first medical director of FORÉAMI at its administrative headquarters in Brussels, Giovanni Trolli, had been in regular contact with his Angolan colleagues.[460] After the first Luso-Belgian Health conference in Luanda in October 1928, he had even made an extended visit to some of the prophylactic sectors in northern Angola. He went on to praise the Angolan scheme as "perfection in this field" in a long and detailed article published in the Belgian medical press.[461] Overall, doctors in the Belgian Congo must have been well informed of the developments in Angola. In March 1928, Damas Mora had already outlined the Angolan AMI system at the *Journées Médicales de Bruxelles*, a contribution later

[458] G. Trolli, Résumé de la situation medicale à la frontière luso-belge, 20.10.1930, in: AA, A11 – Hygiène, Box 4465, Folder 929.

[459] See *Constitution du Fonds Reine Elisabeth*, 08.10.1930, in: *Bulletin Officiel du Congo Belge*, 1930, pp. 943–947 and especially Trolli, *Assistance Médicale aux Indigènes*. On the first years 'on the ground', see also Trolli, Giovanni, "L'activité du Fonds Reine Elisabeth pour l'Assistance Médicale aux Indigènes du Congo Belge (Foréami) (1931-1935)", *Bulletin des Séances de l'Institut Royal Colonial Belge* 8 (1937), pp. 99–124. Based on the same principles, a reformed colony-wide Service de l'Assistance Médicale aux Indigènes (S.A.M.I.) was decreed a year later, in December 1931, see Trolli, Giovanni, "Extraits de la circulaire du 10 décembre 1931 fixant les principes du nouveau Service d'Assistance Médicale aux Indigènes", in: FOREAMI (ed.), *Rapport Annuel 1935,* Bruxelles, 1936, pp. 140–147.

[460] For biographical details, see Rodhain, Jerôme, "G. Trolli, 1876-1942 (Nécrologie)", *Annales de la Société Belge de Médecine Tropicale* 22 (1942), pp. 91–94. Trolli was one of many Italian doctors who had started his career in the Congo Free State. On the important role of Italian doctors in the Belgian Congo, see Lagae, *Het echte belang van de kolonisatie,* p. 137. Aside from the administrative direction in Brussels, there was also a medical director of Foréami on the ground.

[461] Trolli, *Impression,* p. 406. Trolli also left a very flattering message in the guest book at the headquarters of the Cuanza Zone in Dalatando, see *Conferência sanitária luso-belga (1928),* p. 375.

published *in extenso* in the same Belgian journal.[462] It also appears that even Henri Gillet, the director of the health services of Forminière, a large mining company in the Belgian Congo, visited the Angolan AMI services in 1928. In a personal letter to Damas Mora, he liberally praised what he had observed and learned: "It is in your colony that I have seen the most judicious ideas carried out in the most complete manner: your medical service is a model from which all those who deal with medicine in tropical Africa should draw their inspiration. For my part, I will benefit from it and I will take with me, from my visit in Angola, lessons that I will make sure not to forget."[463]

Although these elements strongly suggest that Angola was not always merely at the receiving end of innovations in medicine and public health, they do not of course irrefutably prove that FORÉAMI was modelled upon its Angolan counterpart. Inspiration might also have come from Forminière, which had already adopted an integral healthcare approach earlier on, not only for its 25,000 African workers, but for all Africans living in the company's area of activity.[464] Yet Gillet's statements above reveal that this scheme might also have been partly shaped by inter-imperial borrowing from Angola. More generally, the visits of both Trolli and Gillet are an invitation to reconsider (and to enlarge) the rather unidimensional and unidirectional image Jorge Varanda has conveyed of the relations between Forminière and Diamang, its sister company in Angola, and their respective national and transnational connections with state health services.[465]

Given the striking parallels between the schemes and the obvious transfer of information, it is surprising, however, that in his writings on the genealogy of FORÉAMI Trolli

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[462] Mora, António Damas, "Assistance Médicale Indigène. Conférence tenue pendant les Journées Médicales de Bruxelles de 1928", *Bruxelles-Médical. Revue hebdomadaire des sciences médicales et chirurgicales* 9 (1928), pp. 16–17 and Mora, *Assistance Médicale Indigène (1928)*. During his stay in Brussels in November-December 1929 for the preparation of the report for the League of Nations, Damas Mora had held a further conference in Brussels, this time at the Union Coloniale Belge, see Mimoso Moreira, *Assistência Médica aos Indígenas. Entrevista com o sr. dr. Damas Mora, a propósito dum estudo de que o encarregou a Sociedade das Nações*, in: A Província de Angola, 10.01.1930, pp. 1–2.

[463] Gillet to Damas Mora, 02.12.1928, quoted in the brief notice "Assistência Médica aos Indígenas", *Boletim da Assistência Médica aos Indígenas e da Luta contra a Moléstia do Sono* 3,2 (129), p. 234 and Mora, *O serviço de assistência médica aos indígenas (1929).*

[464] Gillet, Henri, "Le Service Médical des Sociétés Minières du Kasai", *Annales de la Société Belge de Médecine Tropicale* (1928), pp. 233–249.

[465] See Varanda, *Um cavalo de Tróia*; Varanda, *Crossing Colonies and Empires*; Varanda, *Asa protectora*. This critique does not invalidate the essence of Varanda's argument that there were strong relations and a lot of exchange between the health services of both companies. But his exclusive focus on the connections between both companies has obscured a more complex system of circulation of information, in which both companies were also connected with state health schemes. Not only has Varanda downplayed the exchange between Diamang and the Angolan Health Services, asserting that the latter had received the methodology of its anti-sleeping sickness campaigns (1927-1933) exclusively from its Belgian sister company, while it was also, in many aspects, similar to the very system which was being installed in northern Angola from 1926 onwards (and thus prior to Diamang's first prospection), he has also failed to consider the fact that health practices by Forminière were possibly influenced by state schemes, and even those from Angola. These blind spots are partly due to the lack of attention he has given to government sources and to archival sources from Forminière.

did not acknowledge any Angolan or other foreign influence and instead placed such emphasis on the originality of FORÉAMI's methods.[466] Probably, this discretion was the result of a deliberate – without a doubt a fairly common – choice that poses a challenge to transnational history writing and that has hitherto not sufficiently been reflected upon. First, international rivalry and nationalist thinking would have been strong incentives to hide transnational influences and, in this case, to confine the genealogy of Foreami's 'original method' within the borders of the Belgian Congo. Nonetheless, the striking difference between Damas Mora's overtly transnational and Trolli's eminently internal genealogy of their respective AMI schemes suggests that there was maybe also something else at stake.

I believe that inter-imperial comparisons and borrowings were governed by economies or hierarchies of prestige. For Portuguese scientists, such as Damas Mora, acknowledging transnational borrowing from bigger, richer or reputedly more advanced neighbours might have buttressed their claims with additional authority, at least when they were announced without offending national sensibilities. Arguably, the 'backward' image that was painted of Portuguese colonialism did not allow Trolli to do the same. Citing Angola as an example would only have weakened, rather than strengthened his argument. The way colonial nations perceived their position and that of their rivals on the hierarchical ladder of prestige, not only dictated to whom they looked for inspiration and from whom they wanted to learn, but also conditioned the degree to which their inter-imperial borrowing was overt.

[466] See, for instance, Trolli, *Assistance Médicale aux Indigènes,* pp. 3–17. On the originality of Foréami's method, see also Trolli, Giovanni, "Méthode originale d'Assistance médicale aux indigènes en milieu rural appliquée au Congo belge. Fonds Reine Elisabeth pour l'Assistance Médicale aux Indigènes", *Bruxelles-Médical. Revue hebdomadaire des sciences médicales et chirurgicales* 20,7-10 (1939-1940), pp. 147-184; 217-253; 272-308; 324-348, title and, for instance, p. 149.

Chapter 3

Reproducing the Population: Race, Demography and the Politics of Motherhood

Introduction

1. Pronatalism, Eugenics and the '*Mestiço* Problem'
2. Medical Demography and the Spectre of Infant Mortality
3. Reducing Infant mortality: Medicalizing Childbirth and Reforming Motherhood

Conclusion

Introduction

In June 1931, approximately two hundred delegates gathered in Geneva to attend the International Conference on the African Child. Convened by the Save the Children International Union (SCIU), a philanthropic organization with a strong Christian background, the conference brought together doctors, missionaries, social scientists, philanthropists as well as official representatives of colonial powers and international institutions like the League of Nations and the International Labour Office and even a few representatives of African associations. Most of the delegates were connected to the British Empire, but other colonial powers were represented as well. There were only two Portuguese participants, but one of which, acting as vice-president and chairman of one of the sessions, was the Count of Penha Garcia, one of Portugal's foremost colonial experts and diplomats of the time.[1] For four days, issues considered key to the welfare of African children were discussed: the medical and socio-economic causes and solutions to stillbirth and infant mortality, the education of school age children, and the question of adequate working conditions for children and adolescents.[2]

The conference had been carefully prepared for several years. About 1,500 copies of a detailed questionnaire had been sent to colonial representatives all over Africa, many of them missionaries, and on the basis of the 358 replies, nineteen selected experts had prepared reports each of which dealt with one of the questions on the agenda for a specific part of the continent. These studies had been circulated in advance among the participants and served as the basis for the discussions at the conference.[3]

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[1] The Count of Penha Garcia, José Capello Franco Frazão was not only a member of the Mandates Commission of the League of Nations (since 1928), he was also the director of the Escola Superior Colonial (ESC) in Lisbon (since 1926), president of the Geographical Society of Lisbon (since 1928) and member of the Portuguese High Council for the Colonies *(Conselho Superior das Colónias).* For biographical information, see Vieira, Benedicta Maria da Fonseca Duque, "O Conde de Penha Garcia e a sua vida pública. Ensaio Biográfico", *Estudos de Castelo Branco* 31 (1969), pp. 26-51; 33 (1970), p. 28-65; 34 (1970), pp. 79-121; 35 (1971), p. 36-65; 39 (1972), pp. 90-133; 41 (1972), pp. 131-171.

[2] On the conference, see Save the Children International Union, *Proceedings of the International Conference on African children, Geneva, June 22-25, 1931,* Geneva: Save the Children International Union, 1932 and the account given by the English 'novelist and social commentator' Sharp, Evelyn, *The African Child. An Account of the International Conference on African Children, Geneva, With an Introduction by Lord Lugard,* London/New York/Toronto: Longmans, Green and Co., 1931. A list of members and associates of the conference can be found in *Ibid.,* pp. 98–108. For a first analysis of this conference, see Marshall, Dominique, "Children's Rights in Imperial Political Cultures: Missionary and Humanitarian Contributions to the Conference on the African Child of 1931", *International Journal of Children's Rights* 12,3 (2004), pp. 273–318. In French, the SCIU was called Union Internationale de Secours aux Enfants (UISE).

[3] Save the Children International Union, *Proceedings*, pp. iii-viii. A copy of the questionnaire (168 questions) can be found in Archives d'État de Genève (hereafter, AEG), Union Internationale de Secours aux Enfants (hereafter, UISE), 92.4.2. On the questionnaire, see also Marshall, *Children's Rights,* pp. 283–285. As Marshall has remarked, only four of these 358 replies have been conserved in the SCIU funds of the Archives d'État de Genève, see *Ibid.,* p. 305 note 49. The reports were distributed in advance among the conference participants. They can be found in: AEG, UISE, 92.4.10.

Although the first of its kind in Europe, the Geneva conference had not materialized out of nothing. In industrialized nations, the issue of infant and child welfare had received growing attention from governments, municipalities and philanthropic organizations since the last quarter of the nineteenth century and had gained considerable momentum in the early twentieth century. Gradually, the attention had shifted from the ‘abnormal’ – i.e., abandoned, dependent and delinquent – children to ‘normal’ working and middle-class children, a process that had occurred in tandem with the medicalization of childhood.[4] In the twentieth century – declared the “century of the child” – infant and child welfare had also become an object of intense inter- and transnational debate and intervention.[5] Founded in Geneva in 1920, the SCIU was only one of several international child welfare organizations operating during the Interwar Period.[6] It had celebrated one of its greatest successes by initiating the Geneva Declaration of the Rights of the Child, which was eventually adopted by the General Assembly of the League of Nations in 1924.[7] What was new to this context of international humanitarianism in 1931, however, was the focus on African children.

While this initiative certainly helped to raise the profile of the SCIU in a competitive landscape, the official position of the organization placed emphasis on the humanitarian and demographic urgency of the situation. The president of the conference, Lord Noel-Buxton, in his opening speech emphatically stated that "the whole future of Africa" depended on the welfare of the African child. Yet, that very future was being threatened. Although Africa “share[d] with South America and Australia the characteristic of being underpopulated”, there was “no part of the world where the dissipation of human life [was] so great.”[8] Indeed, while rapporteurs and conference participants advanced a wide variety of statistical numbers, causes and solutions – which hinged on statistical methods, personal convictions or the particular

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[4] Rooke, P. T.; Schnell, R. L., "'Uncramping child life'. International children's organisations, 1914-1939", in: Weindling, Paul (ed.), *International Health Organisations and Movements, 1918-1939,* Cambridge: Cambridge University Press, 1995, pp. 176–202, here pp. 177–178; Cooter, Roger, "Introduction", in: Cooter, Roger (ed.), *In the name of the child. Health and welfare, 1880-1940* (Studies in the social history of medicine), London, New York: Routledge, 1992, pp. 1–17, here pp. 1 and 11. See also Downs, Laura Lee, *Childhood in the Promised Land: Working-class movements and the colonies de vacances in France, 1880-1960,* Durham: Duke University Press, 2002.

[5] The expression “century of the child” was coined in a book title by the Swedish author Ellen Key. See also Schumann, Dirk (ed.), *Raising citizens in the "century of the child". The United States and German Central Europe in comparative perspective,* New York, Oxford: Berghahn Books, 2010.

[6] Its activities partly overlapped with those of the League of Red Cross Societies, the Save the Children Fund, the International Association for the Promotion of Child Welfare and the Child Welfare Committee of the League of Nations, see Rooke/Schnell, *Uncramping child life*.

[7] On the history of SCIU, see Rooke/Schnell, *Uncramping child life,* pp. 182–189; Bolzman, Lara, "The advent of child rights on the international scene and the role of the Save the Children International Union, 1920-1945", *Refugee Survey Quarterly* 27,4 (2008), pp. 27–37. On the Geneva Declaration, see also Marshall, Dominique, "The Construction of Children as an Object of International Relations. The Declaration of Children's Rights and the Child Welfare Committee of League of Nations, 1900-1924", *International Journal of Children's Rights* 7 (1999), pp. 103–147.

[8] Save the Children International Union, *Proceedings*, pp. 3-4 (here quotes).

region with which they were familiar – they all agreed that infant mortality rates in Africa were "intolerably high".[9] In his comments on the conference debates, the eminent British colonialist Lord Lugard concluded that "not less than half the babies die" and that "to this must be added a very heavy percentage of stillbirths and miscarriages and of deaths in infancy subsequent to the first year. The number, therefore, which reaches maturity must, if these assumptions are correct, be a comparatively small percentage of the potential increase, and this in a continent which needs to be re-populated in order to recover from the tribal wars, the slave raids, and the epidemics of the past."[10] For Lugard, like for Noel-Buxton, infant mortality in Africa was not only a humanitarian, but also a demographic and economic problem.

The direct, practical outcome of the debates in Geneva was limited. The resolutions passed by the conference were not binding and rather general. With regard to the problems of stillbirth and infant mortality, they called for the further study of causes and remedies, such as studies on nutrition, social diseases and pernicious African customs; for more collaboration and exchange between governments and private associations, even across national boundaries; and for the deployment of more trained doctors, nurses and midwives in colonial Africa. The SCIU capitalized on the networks created by the conference and founded the Permanent Bureau for African Child Welfare (1932) and the Eglantyne Jebb Office for the Protection of Children of non-European Origin (1933) to promote and coordinate international efforts, but these institutions were short-lived.[11] In the mid-1930s, the European movement for the protection of African children was stalled, as humanitarian attention shifted to the tragedies of the Spanish Civil War and the Second World War, and the SCIU only resumed its activities in Africa around 1950.[12]

Yet the conference in Geneva was more than an ephemeral episode in the history of European humanitarianism and internationalism: its importance lay elsewhere. The desire expressed by Noel-Buxton, Lugard and others for growing populations by combating infant mortality and low fertility was deeply embedded in the colonial biopolitical agenda of the Interwar Period. The very organization of the conference and the participation of so many high-ranking representatives, albeit with different but partially overlapping interests, testified to the strong and growing attention colonial governments, missionary societies, philanthropists and international organizations were devoting to the issue of infant mortality

[9] *Ibid.*, p. 17 (quote).
[10] Sharp, *The African Child*, pp. v-ix, here p. vi.
[11] AEG, UISE, 92.4.14.
[12] Marshall, *Children's Rights,* p. 275.

and child welfare in colonial Africa. Reports and discussions captured and reified colonial anxieties regarding underpopulation and excessive infant mortality, self-induced abortions and the spread of venereal diseases, the status of *mestiço* children and the inaccuracy of demographic statistics. Quite a few rapporteurs and discussants were also far more critical of colonial rule than the polished conclusions might suggest. They accused colonial land-grabbing, labour migration, and exploitation of contributing to infant mortality rates by worsening the social determinants of health.[13] The chairmen, however, were anxious to stick to the topics included in the narrowly defined agenda of the conference and thus avoid the possibility of being sidetracked by other topics. Therefore, some related subjects were only barely touched upon, such as the problem of low birth rates. The SCIU, however, would later take up this issue in 1932 after repeated petitions to do so from quite a few individuals.[14]

The importance attached to infant mortality and birth rates was contingent upon a recent historical shift contingent. In most of colonial Africa, the study of population decline had initially focused on the role of epidemic diseases like sleeping sickness. It was only shortly before the First World War that this issue began to be viewed through the lens of reproduction, and for the vast majority of African colonies it would take until the 1920s before corresponding policies were adopted.

In this chapter, I will first show how this novel view on depopulation emerged in Angola, in close connection with evolving discourses in other colonies and Europe. Consequently, I will also discuss how, against the backdrop of eugenic thought, scientists and colonial officials debated the desirability of racially mixed people in Angola. Then, I will analyse how colonial doctors-turned-demographers struggled to establish trustworthy quantitative measures of the infant mortality rates and birth rates, so as to ascertain the veracity of the anxieties regarding the extremity of the first and the decline in the second. I will argue that the demographic data they produced were used to downplay fears of low fertility and to redefine the problem of reproduction as primarily one of appallingly high infant mortality rates. In the final section, I will examine the practical measures taken by government doctors, mission societies and private associations of European women to reduce infant mortality.

[13] On this point, my reading of the conference debates diverges from Allman, Jean, "Making Mothers. Missionaries, Medical Officers and Women's Work in Colonial Asante, 1924-1945", *History Workshop* 38 (1994), pp. 23–47, here pp. 23–25. Critical views on "migrant and forced labour, cash-cropping or taxation" (Allman) indeed were not included in the conclusions, but these issues were recurrently addressed in the discussions and in some of the rapports. See for instance Save the Children International Union, *Proceedings*, pp. 36-37; 38-39; 44-45; 47-48 and Torday, Emil, *La mortinatalité et la mortalité infantile au point de vue économique et social - Afrique Centrale* (Reports to the International Conference on African Children; 9), Genève: UISE, 1931.

[14] Séance de la commission pour l'enfance indigène non-européenne du 5 août 1932, in: AEG, UISE, 92.4.14.

1. Pronatalism, eugenics and the '*mestiço* problem'

Before the First World War, doctors and administrators in Angola rarely mentioned low birth rates or high infant mortality rates as important causes of depopulation. Instead, they commonly identified the medical and social epidemics of sleeping sickness, smallpox and alcoholism to be the main scourges affecting the African population in the colony.[15] Certainly, there were exceptions. In his 1901 report on sleeping sickness in the hinterland of Luanda, medical doctor Maia Leitão had surprisingly identified the "tremendous mortality among native children", which he estimated at 90%, and not sleeping sickness as the principal cause of depopulation. Ranking third on his list, but still before sleeping sickness, were the low fertility rates of contract labourers *(serviçães)*.[16] Yet neither the health services nor the administration devised policies to invert these demographic trends.[17]

Right around the First World War, attitudes began to change. In his first annual report (published in 1914) as director of the Native Affairs Department, José de Oliveira Ferreira Diniz readily advocated the introduction of protective measures for pregnant women and newborns, an issue that was addressed in the *portaria provincial* 406, Norton de Matos' first and failed attempt to bring biomedical healthcare to the African population.[18] Diniz also defended the introduction of a birth bonus *(prémio de natalidade)* in certain regions. His corresponding law project determined that married mothers with five or more living children from the same husband could apply for remuneration from the state. This project, which may have been inspired by similar pronatalist measures and anti-polygamist concerns in the neighbouring Belgian Congo, pursued various aims: it was designed to foster population growth, to 'moralize' African customs by rewarding monogamy, and to incentivize Africans

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[15] Martins, João Augusto, "Revista Sanitária das Províncias Ultramarinas, referida ao ano de 1909", *Archivos de Hygiene e Pathologia Exoticas* 3 (1910), pp. 239–260, here pp. 243–244; Martins, João Augusto, "Revista sanitaria das Províncias Ultramarinas referida aos anos de 1910 e 1911", *Archivos de Hygiene e Pathologia Exoticas* 4 (1913), pp. 213–243, here p. 215; Alfredo Martins da Silva Borges, *Circunscrição de Cacongo - Relatório sobre assistência aos indígenas e profiláxia da varíola, paludismo e doença do sono*, 1913, pp. 32–33, in: ANA Cx. 3374; Costa, Eduardo Augusto Ferreira da, *Estudo sobre a Administração Civil das Nossas Possessões Africanas. Memoria apresentada ao Congresso Colonial Nacional,* Lisboa: Imprensa Nacional, 1903, p. 187. It is significant that the questionnaire sent by the Ministry of Colonies to the government doctors in Angola in 1904 did not mention these issues, nor did the responses. See Ministério dos Negócios da Marinha e Ultramar, "Portaria regia de 30.11.1904", *Collecção Official da Legislação Portuguesa, Anno de 1904,* Lisboa: Imprensa Nacional, 1905, pp. 525–526 and the 13 responses in AHU, SEMU, DGU 3025.

[16] Leitão, Alberto de Souza Maia, *Relatório da visita sanitaria aos concelhos da léste de Loanda mais victimados pela doença do somno,* Porto: Typ. A Vapor da Empreza Litteraria e Typographica, 1901, pp. 127-128, quote p. 128. For another reference to elevated infant mortality, see Resumo do estado da saúde pública da Província d'Angola no Anno de 1906, pp. 6-7, in: AHU, SEMU, DGU 943.

[17] The issue was not discussed by the Junta de Saúde in Luanda until at least 1911. See Repartição de Saúde, *Copiador de actas da Junta de Saúde, 1891-1912*, ANA, Cód. 1867.

[18] Diniz, José de Oliveira Ferreira, *Negócios indígenas. Relatório do ano 1913,* Luanda: Imprensa Nacional de Angola, 1914, p. 101. A preprint of the decree from 27.03.1914 can be found in *Ibid.,* pp. 93–96.

to register their children with the local administrative authorities. The birth bonus project was imbued with the European ideal of a married, monogamous couple with numerous offspring. It was also based on the idea that, at least in certain regions, birth rates were not high enough.[19] Diniz again defended it in the mid-1920s, but all in vain. This pronatalist measure was eventually adopted only in 1931, when the new tax regulations exempted men with four or more (still living) children from the same woman from paying the 'native tax' *(imposto indígena)*.[20] The direct taxation of polygamy was experimented as well, but the law was abolished after a few years for being impossible to effectively control.[21]

In 1914, the demographic intelligence that underpinned Diniz' proposal could only have been very fragmentary. Civil registry was not yet obligatory for the African population – although it also figured among Diniz' law projects – and administrative censuses generally conveyed no information about birth and fertility rates, infant mortality, or even the general evolution of the population in Angola.[22] As I will discuss further on in this chapter, quantitative data on these issues would only become available in the late 1920s when medical doctors conducted the first scientifically based demographic studies in Angola. The complaint of the health delegate of the Cabinda enclave in 1913 that Africans "are born and die without the authorities knowing" in reality applied to most of the colonial territory at that time.[23]

Hence, the concern with reproductive and infant welfare issues extant in the projects of Ferreira Diniz and Norton de Matos must have been triggered by qualitative rather than

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[19] *Ibid.,* p. 101; Projecto sobre a instituição de prémios de natalidade a indígenas, in: Diniz, José de Oliveira Ferreira, *Populações indígenas de Angola,* Coimbra: Imprensa da Universidade, 1918, p. 730. On pronatalist policies in the early years of the Belgian Congo, see Hunt, Nancy Rose, *A Colonial Lexicon of Birth Ritual, Medicalization, and Mobility in the Congo,* Durham: Duke University Press, 1999, p. 4. For early critiques of polygamy in the Belgian Congo, see Hunt, Nancy Rose, "Noise over camouflaged polygamy, colonial morality taxation, and a woman-naming crisis in Belgian Africa", *Journal of African History* 32,3 (1991), pp. 471–494, here pp. 472–475.

[20] Diniz, José de Oliveira Ferreira, *A missão civilisadora do estado em Angola,* Lisboa: Centro Tipograpfico Colonial, 1926, p. 17; Colónia de Angola, *Regulamento do recenseamento e cobrança do imposto indígena. Aprovado por Diploma Legislativo n.° 237, de 26 de Maio de 1931,* Luanda: Imprensa Nacional, 1931-1932, preamble and art. 2. See also Rita, José Gonçalo Santa, "O contacto das raças nas colónias portuguesas. Seus efeitos políticos e sociais. Legislação portuguesa", in: Comissão Executiva dos Centenários (ed.), *Memórias e comunicações apresentada ao Congresso Colonial (IX Congresso)* (Publicações do Congresso do Mundo Português; 14-16), vol. 15, Lisboa, 1940, pp. 13–70, here pp. 68–69. The previous tax law from 1920 did not yet contain such a stipulation, see Governo Geral de Angola, *Regulamento do recenseamento e cobrança do imposto indígena. Aprovado por portaria provincial n.° 30-A de 22 de Janeiro de 1920,* Loanda: Imprensa Nacional, 1920.

[21] The tax law from 1920 stipulated that polygamous husbands had to pay taxes for every wife except the first. In 1923, Norton de Matos revoked this measure and from then onwards, all women were generally exempted from paying tax. See Governo Geral de Angola, *Regulamento do recenseamento (1920)*, art. 4; Colónia de Angola, *Regulamento imposto indígena*, preamble and art. 2 and Matos, José Mendes Ribeiro Norton de, "Síntese das medidas aconselháveis para impulsionar o povoamento indígena de Angola", in: Comissão Executiva dos Centenários (ed.), *Memórias e comunicações apresentada ao Congresso Colonial (IX Congresso)* (Publicações do Congresso do Mundo Português; 14-16), vol. 15, Lisboa, 1940, pp. 479–525, here p. 485. For the debate on polygamy, see below as well. A further elaboration on native taxation can be found in Chapter 5.

[22] For Diniz' civil registry project, see Diniz, *Populações indígenas,* pp. 645–654.

[23] Borges, *Circunscrição de Cacongo – Relatório,* p. 33.

quantitative information. Along with medical opinion, ethnographic reports from local administrators may have been a decisive factor in calling attention to these aforementioned issues. Diniz himself revised some of these reports, bundling them in the voluminous *Populações Indígenas de Angola* (1918). They provided a varied, but mostly pessimistic view of birth practices and maternal and infant healthcare among the 'native' populations. These reports highlighted, among other things, that in most 'tribes' neither pregnant women nor infants received any special care and that, while breastfeeding continued until the age of two or three years, infants were often given solid food, like manioc or maize flour, mere weeks or even days after they were born. Along with the customs of polygamy and premature marriage, Diniz concluded, these practices "damaged and limited the population."[24] Such ethnographic information contributed to pre-existent fears of depopulation and led to the gradual entrenchment of the idea that population decline was not only caused by epidemic and endemic diseases, and consequently by high mortality, but also by anomalies on the reproductive side of the population balance, namely low birth and high infant mortality rates.

Concerns regarding low and/or falling birth rates and excessive infant mortality – which would become much more widespread in the 1920s to the 1940s – were not only grounded in medical, ethnographic and later also demographic intelligence from within the colony itself, they must also have drawn from similar emergent anxieties and debates that had evolved more or less simultaneously in other African colonies.[25] Although I have not found any explicit cross-references to European debates in colonial sources, it is hard to conceive that colonial anxieties were not also in someway connected with and informed by similar concerns in Europe.[26]

Indeed, for most of Europe, demographic statistics had started to indicate a decrease in the birth rates around 1900. This prompted the pervasive spread of anxieties, which, along a causal chain, linked 'denatality' to depopulation and depopulation to the decline of the nation. Such preoccupations developed particularly early on, and with force, in France. In most

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[24] See Diniz, *Populações indígenas*, passim and the summary pp. 567-570 (quote p. 568).

[25] See, for instance, with regard to the German colonies, Grosse, Pascal, *Kolonialismus, Eugenik und bürgerliche Gesellschaft in Deutschland 1850 - 1918,* Frankfurt am Main: Campus-Verlag, 2000, pp. 136–138; for the British colonies Summers, Carol, "Intimate Colonialism. The Imperial Production of Reproduction in Uganda, 1907-1925", *Signs* 16,4 (1991), pp. 787–807. For the Belgian Congo, there was some early concern before 1914, but anxieties over falling birth rates soared, especially in the 1920s, and, according to Sanderson, resurged in the 1940s and 1950s. See Hunt, Nancy Rose, "Le Bébé en brousse. Europen Women, African Birth Spacing and Colonial Intervention in Breast Feading in the Belgian Congo", *International Journal of African Historical Studies* 21,3 (1988), pp. 401–432; Hunt, *Noise,* p. 475 and Sanderson, Jean-Paul, "Le Congo belge entre mythe et réalité. Une analyse du discours démographique colonial", *Population* 55,2 (2000), pp. 331–355, here pp. 339–340.

[26] Nancy Rose Hunt has also claimed such a 'spill-over' in Belgium and the Belgian Congo, see Hunt, *Colonial Lexicon,* pp. 243–244.

départements, the total fertility rate had already begun to decline in the early nineteenth century. This evolution had not gone unnoticed and instigated “a barrage of alarmist literature” from the mid-nineteenth century onwards, as fears over population size raised the spectre of declining political and military power.[27] Yet although there was a large pronatalist consensus in French society throughout the Third Republic, which was reflected in the emergence of a multitude of often powerful associations and societies such as the *Alliance Nationale pour l’accroissement de la population française*, state interventions were rather hesitant and piecemeal until the *Code de famille* was promulgated on the eve of the Second World War (1939).[28]

Pronatalism and eugenics in Portugal

Portugal, conversely, was hardly touched by the debate on declining birth rates until the 1920s. According to contemporary statistics, the birth rates in Portugal remained more or less stable at a relatively high level and only started to markedly fall in the 1930s.[29] On the basis of these statistics, influential scholars like Ricardo Jorge and Bento Carqueja were confident in the 1910s that Portugal was not facing a natality problem and that, in this matter, it

[27] On the exceptionally early decline of the total fertility rate in France, see Coale, Ansley J., "The Decline of Fertility in Europe since the Eighteenth Century as a Chapter in Human Demographic History", in: Coale, Ansley J. (ed.), *The decline of fertility in Europe. The revised proceedings of a Conference on the Princeton European Fertility Project (July 1979),* Princeton: Princeton University Press, 1986, pp. 1–30, here pp. 15, 25, 37-39 and the illuminating maps 2.1-2.4 at the end of the book. Quote: Quine, Maria Sophia, *Population politics in twentieth century Europe. Fascist dictatorships and liberal democracies* (Historical connections), London: Routledge, 1996, p. 53.

[28] For France, see for instance Tomlinson, Richard Peter, "The "Disappearance" of France, 1896-1940. French Politics and the Birth Rate", *The Historical Journal* 28 (1985), pp. 405–415; Pedersen, Susan, *Family, dependence, and the origins of the welfare state. Britain and France, 1914 - 1945,* Cambridge: Cambridge University Press, 1995, pp. 59–76 and Cole, Joshua, *The power of large numbers. Population, politics, and gender in nineteenth-century France,* Ithaca: Cornell University Press, 2000. For Great Britain, see Soloway, Richard Allen, *Demography and degeneration. Eugenics and the declining birthrate in twentieth century Britain,* Chapel Hill: University of North Carolina Press, 1990. A long-term quantitative assessment of fertility decline in Europe by demographers can be found in Coale, Ansley J. (ed.), *The decline of fertility in Europe. The revised proceedings of a Conference on the Princeton European Fertility Project (July 1979),* Princeton: Princeton University Press, 1986. For a broader European perspective, see Cova, Anne, "Où en est l'histoire de la maternité", *CLIO. Histoire, femmes et sociétés* 21 (2005), pp. 189–211.

[29] Garrett, António de Almeida, "Tendências demográficas de Portugal metropolitano", in: Comissão Executiva dos Centenários (ed.), *Actas, memórias e comunicações do Congresso Nacional de Ciências da População* (Publicações do Congresso do Mundo Português; 17-18), vol. 17, Lisboa, 1940, pp. 31–60, here pp. 33–35; Machado, José Timóteo Montalvão, "Alguns aspectos da natalidade", *Revista do Centro de Estudos Demográficos* 10 (1956-1957), pp. 95–156, here pp. 101–105. Research on behalf of the Office of Population Research in Princeton later confirmed the stability of birth rates between the first census in 1864 and 1930. According to Bacci, the decline set in after the First World War, but birth rates only clearly fell in the 1930s, and again remained stable between 1940 and 1960. See Livi Bacci, Massimo, *A century of Portuguese fertility,* Princeton: Princeton University Press, 1971, pp. 55–60.

compared very favourably with most of Europe.[30] From the 1920s onwards, however, this positive assessment was gradually superseded by a more pessimistic outlook. One of the most arduous and influential proponents of the denatality and depopulation thesis was the Catholic gynaecologist and university professor Sebastião Cabral da Costa-Sacadura, who used his position as President of the Society of Medical Sciences of Lisbon *(Sociedade das Sciências Médicas de Lisboa)* between 1923 and 1927 to draw ample attention to the issue.[31] As early as 1923, Costa-Sacadura claimed that Portugal had slid into a demographic crisis due to declining birth rates and high infant mortality. One of Costa-Sacadura's main concerns was the impact neo-Malthusian practices of birth control, notably 'voluntary restriction' (contraception) and 'criminal abortion', were having on the number of births in Portugal, an issue that would haunt him for many years. Costa-Sacadura did not believe in the efficiency of aggravating the already existing legal punishments as a means to stem the tide, and instead stressed the need for more economic and moral assistance to be given to expectant mothers.[32]

Curiously, there was no strong statistical basis to support his depopulation thesis. Costa-Sacadura had based his assumptions on scanty evidence from hospitals and the civil registry in Lisbon, and in particular the data that was relevant to the unrepresentative crisis years of 1918-1920.[33] Despite the fall in the birth rates during the 1930s, Portugal still had one of the highest birth rates in the 'Western' world at the eve of the Second World War. Even the country's net reproduction rate, a much more precise demographic method to measure the natural reproduction of a population than the birth rates, which was developed by the German statistician and demographer Robert René Kuczynski, was still fairly positive and, in Europe, was only surpassed by that of Russia and Bulgaria.[34]

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[30] Jorge, Ricardo, "Demogenia e mortalidade das cidades portuguesas", *Arquivos do Instituto Central de Higiene. Secção de higiene* 1,1 (1913), pp. 85–100, here pp. 87–88; Carqueja, Bento, *O Povo Portuguez: aspectos sociais e económicos,* Porto: Lello & Irmão Editores, 1916, especially pp. 166-185; 500; 506.

[31] For a short biography, see Pereira, Artur Torres; Botelho, Luiz Silveira; Soares, Jorge, *A Sociedade das Ciências Médicas de Lisboa e os seus Presidentes (1835-2006),* Lisboa: Fundação Oriente, 2006, pp. 181–184.

[32] Costa-Sacadura, S. C. da, *Despopulação em Portugal. Discurso lido na sessão inaugural, de 17 de Março de 1923, da Sociedade das Sciências Médicas de Lisboa,* Lisboa: Imprensa Africana, 1923; Costa-Sacadura, S. C. da, *O abôrto criminoso em Portugal. Conferência feita na sessão da Sociedade das Sciências Médicas de Lisboa de 30 de Abril de 1929,* Lisboa: Tipografia do Comércio, 1929; Costa-Sacadura, S. C. da, *O Aborto criminoso. Suas consequencias,* Lisboa: Imprensa Médica, 1937. For a similar position, see Branco, Luciano da Fonseca Aresta, *O aborto-crime. Esboço médico-social, Tese de Doutoramento apresentada à Faculdade de Medicina do Porto,* Famalicão: Minerva, 1923.

[33] Costa-Sacadura, *O abôrto criminoso (1929)*; Costa-Sacadura, *O Aborto criminoso (1937),* pp. 134–135.

[34] Kuczynski, Robert René, "The International Decline of Fertility", in: Hogben, Lancelot (ed.), *Politcal Arithmetic. A Symposium of Population Studies,* London: George Allen & Unwin, 1938, pp. 47–72, here pp. 52-53 (birth rate); 66-67 (net reproduction rate). The net reproduction rate became a widely accepted index in the 1930s and early 1940s. See Kuczynski, Robert René, *Fertility and reproduction. Methods of measuring the balance of births and deaths,* New York: Falcon Press, 1932, pp. 15–20 and Petra Overath and Ursula Ferdinand: Robert René Kuczynski – A demogapher between Networks and Institutions, Paper presented at the Workshop "Institutions, Infrastructures, Networks and Biographies of Demographic Knowledge in Transnational

If Costa-Sacadura's dubious projections nevertheless fuelled the fears of depopulation, this was due to the belief that the demographic evolution in Portugal would sooner or later follow that of the rest of Europe. Certainly, the universalist concept of a demographic transition, which posited that all societies would eventually experience a decline in their fertility rates as the processes of industrialization and modernization progressed – and therefore move from a pre-industrial equilibrium of high fertility and high mortality to one of both low fertility and low mortality – would only be successfully coined by Frank Notestein and Kingsley Davis in the mid-1940s, but there had been many precursors, even as early as the late nineteenth century, who had linked the decline of fertility to processes of urbanization, modernization and rising living standards.[35]

Fears of population decline were also intimately connected with the pervasiveness of pronatalism in Portuguese Catholic society. Unlike Great Britain or Germany, eugenic thought did not pose much of a threat to pronatalism in Interwar Portugal.[36] Undoubtedly, eugenics, which can be defined as a set of ideas advocating the qualitative intergenerational improvement of the population and hence of society through selective breeding, was shared by many intellectuals in Portugal from the late nineteenth century onwards, particularly by doctors and psychiatrists.[37] The advocacy of eugenic thought culminated under the early *Estado Novo* in the 1930s and early 1940s, when proponents created the Portuguese Society of Eugenic Studies in Coimbra (1937) and used the platform of large national congresses, like those of the 'Portuguese World' in 1940, to present their ideas.[38] Much earlier, there had also been, like in many other countries, a long debate as to whether marriage – and hence legal offspring – should be prohibited for individuals with 'hereditary diseases', a term that was defined in a broad medical and social sense and included, among others, criminals, beggars,

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Perspective over the 20th Century" organized by the DFG Demography Network, Department of History – University of Basel, 12-14 July 2012.

[35] On the emergence and influence of transition theory, see Hodgson, Dennis, "Demography as Social Science and Policy Science", *Population and Development Review* 9,1 (1983), pp. 1–34; Szreter, Simon, "The Idea of Demographic Transition and the Study of Fertility Change. A Critical Intellectual History", *Population and Development Review* 19,4 (1993), pp. 659–701. For precursors, see Hodgson, *Demography,* pp. 4–10 and Szreter, *The Idea of Demographic Transition,* pp. 663–664.

[36] For Britain, see for instance Soloway, *Demography and degeneration*. For Germany, Gisela Bock has argued that Nazi pronatalism was largely a myth and was overshadowed in many respects by the negative eugenics policies involving the compulsory sterilisation of particular socially and racially defined groups of outsiders. See Bock, Gisela, "Antinatalism, maternity and paternity in National Socialist racism", in: Bock, Gisela; Thane, Pat (eds.), *Maternity and Gender Policies. Women and the Rise of the European Welfare States, 1880s-1950s,* London: Routledge, 1991, pp. 233–255.

[37] On eugenic thought in Portugal, see Pereira, Ana Leonor, *Darwin em Portugal (1865-1914),* Lisboa: Livraria Almedina, 2001, pp. 479–528; Pimentel, Irene, "O aperfeiçoamento da raça. A eugenia na primeira metade do século XX", *História* 20,3 (1998), pp. 18–27; Matos, Patrícia Ferraz de, "Aperfeiçoar a 'raça', salvar a nação. Eugenia, teorias nacionalistas e situação colonial em Portugal", *Trabalhos de Antropologia e Etnologia* 50 (2010), pp. 89–111, here pp. 92–96.

[38] Matos, *Aperfeiçoar a 'raça',* pp. 94–95.

alcoholics and the mentally ill. However, these and other measures of negative eugenics – including even more radical ones such as compulsory sterilization – met with much opposition, notably from the Catholic Church and Catholic scientists. It is in part due to the importance of the Catholic Church in Portuguese society and its close alliance with the *Estado Novo* that these measures never became law.[39]

Moreover, the eugenic movement in Portugal was not haunted by the threat of differential fertility between the classes, as was so prominent in British eugenics.[40] The idea that higher social classes should reproduce more and the lower classes less did not gain much prominence in the Portuguese debate. Even such a supporter of negative eugenics as the very influential medical doctor and anthropologist António Mendes Correia, who was in favour of preventing the birth of "human beings condemned from the very germ to physical or moral misery", rejected the idea that upper-class families should have more children. In his opening speech at the National Congress of the Population Sciences in 1940, he stated that "some eagles will be born in humble nests", openly favouring social mobility for the renewal of the nation. He also took a general pronatalist stance by condemning neo-Malthusian practices of birth control. In the opinion of Mendes Correia and many others, qualitative improvement was subordinate to the overarching aim of quantitative increase: "Ever more Portuguese are needed and, if possible, ever better Portuguese".[41]

Following this rationale, the Portuguese government introduced the family allowance *(abono de família)* in 1942 to support families with numerous children. With this pronatalist measure, destined to allow poorer families to have more children, Portugal followed other, mainly Catholic, countries in Europe, and was ahead of Great Britain and the Scandinavian

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[39] Pereira, *Darwin em Portugal,* pp. 487–521; Matos, *Aperfeiçoar a 'raça',* p. 96; Pimentel, *O aperfeiçoamento da raça,* p. 22. This did not mean that official policy was lenient towards these groups. Under the Estado Novo, many people who were considered mentally ill, vagabonds or criminals were, often arbitrarily, incarcerated in the Mitra in Lisbon, see Pimentel, *O aperfeiçoamento da raça,* p. 26 and Bastos, Susana Pereira, *O Estado Novo e os seus vadios. Contribuição para o estudo das identidades marginais e da sua repressão,* Lisboa: Dom Quixote, 1997. Not only Catholics, but also freemasons like Adelaide Cabete condemned negative eugenics, see Cabete, Adelaide, *A Eugénica e a Eugenética. Tese apresentada ao 2.° Congresso Nacional Abolicionista, em 1929,* Lisboa: Artegráfica, 1929.

[40] Pereira, *Darwin em Portugal,* pp. 521–528. For the centrality of class in British eugenics, see Soloway, *Demography and degeneration* and, more recently, Campbell, Chloe, *Race and Empire. Eugenics in Colonial Kenya,* Manchester: Manchester University Press, 2007, pp. 2; 25.

[41] Correia, A. A. Mendes, "Discurso do Presidente do Congresso", in: Comissão Executiva dos Centenários (ed.), *Actas, memórias e comunicações do Congresso Nacional de Ciências da População* (Publicações do Congresso do Mundo Português; 17-18), vol. 17, Lisboa, 1940, pp. ix–xxiv, here pp. xxii-xxiii (also quotes). See also the controversial discussion at the same conference of a paper which suggested that lower birth rates might be beneficial for the Nation, whereby less children would mean better children, see Loureiro, João A. Maia de, "Natalidade, mortalidade e selecção da Raça", in: Comissão Executiva dos Centenários (ed.), *Actas, memórias e comunicações do Congresso Nacional de Ciências da População* (Publicações do Congresso do Mundo Português; 17-18), vol. 17, Lisboa, 1940, pp. 124–139. Correia Mendes had presented his views already in 1927, see Correia, A. A. Mendes, *O problema eugénico em Portugal,* Porto: Tipografia da Enciclopédia Portuguesa, 1928.

countries.[42] Generally, one can conclude that in pre- and Interwar Portugal, hygienist ideas, which considered the environment to be more important than hereditary biology for the quality of the offspring produced, largely prevailed over negative eugenics.[43] In order to eradicate 'social' and 'hereditary' diseases, hygienists advocated social and especially maternal and infant welfare programmes, which would simultaneously contribute to lowering infant mortality rates.[44]

Nevertheless, despite the victory of hygienicist thought and a continuous stream of alarmist reports over the persistence of high infant mortality rates, Portugal would be slow to provide such services to its population at large for reasons I will discuss further on in this chapter. Consequently, while other European countries experienced a sharp decline in infant mortality rates in the first decades of the twentieth century, they remained basically unaltered in Portugal. From an intermediate position between the high levels of mortality in the Slavic and German countries and the lower levels in Anglo-Saxon and Scandinavian countries at the beginning of the century, Portugal's infant mortality became one of the highest in Europe during the Interwar Years, with averages oscillating around 140‰.[45] By then, infant mortality rates were widely considered to indicate national health standards and even the general "material and moral condition of a nation".[46] As the prominent Portuguese paediatrician Carlos Salazar de Sousa deplored, the problem of infant mortality had become a discredit to the country.[47]

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[42] Cova, *Où en est l'histoire*; Pereirinha et al, *Social Protection*.
[43] Pereira, *Darwin em Portugal,* pp. 482–485.
[44] For a well-argued contemporary article opposing eugenic and hygienist ideas, see Cabete, *Eugénica*. For maternal and infant welfare programmes, see the third section of this chapter.
[45] For this development, compare Cid, Sobral, "Mortalité infantile en Portugal. Quelques documents statistiques", in: Sociedade de Geografia de Lisboa (ed.), *XV Congrès International de Médecine. Lisbonne, 19-26 Avril 1906,* vol. 14 (Hygiène et Epidémiologie), Lisboa: Adolpho de Mendonça, 1906, pp. 174–183, here pp. 174–175 with Garrett, António de Almeida, *Como organizar a luta contra a mortalidade infantil. Separata do vol. 1 do III Congresso Nacional de Medicina (Lisboa, 1928),* Lisboa: Imprensa Nacional, 1928, pp. 3–4 and Sousa, Carlos Salazar de, "Necessidades e deficiências da assistência infantil", *Revista Portuguesa de Pediatria e Puericultura* 2,5 (1939), pp. 221–242, here p. 226. See also Rodrigues, Teresa Ferreira (ed.), *História da População Portuguesa. Das longas permanências à conquista da modernidade,* Porto: Edições Afrontamento, 2008, pp. 466–467. For further studies on infant mortality, see Ribeiro, Joaquim U. da Costa, *A mortalidade infantil no Porto, Tese de Doutoramento em Medicina,* Porto: Typ. A Vapor da Real Officina de S. José, 1902 and Garrett, António de Almeida, *Sobre a Mortalidade Infantil (até aos 5 anos) na cidade do Porto e os meios de a evitar,* Porto: Tis. Emp. Guedes, 1909.
[46] Quote from Julia Lathrop, first director of the United States Children's Bureau, in 1921, quoted in Rooke/Schnell, *Uncramping child life,* p. 179. Similarly, Sousa, *Necessidades e deficiências,* p. 225 and van Tol, Deanne, "Mothers, Babies and the Colonial State. The Introduction of Maternal and Infant Welfare Services in Nigeria, 1925-1945", *Spontaneous Generations* 1,1 (2007), pp. 110–131, here p. 110.
[47] Sousa, *Necessidades e deficiências,* p. 224.

The colonial '*mestiço* problem'

With regard to the colonies, however, the issues of sex and procreation were discussed in a somewhat different manner. Clearly, Portuguese attitudes and policies were pronatalist towards the great majority of the population. In the twentieth century, the promotion of the natural reproduction of both the 'white' and 'black' population constituted a goal of Portuguese colonial policy. Anxieties with regard to 'race' were more acute in the colony, however. They crystallised in the debate over the *mestiços*, the children of 'racially mixed' relationships, usually of 'white' European men and 'black' African women. In all of the European empires, *mestiço* children were an unwelcome element in the eyes of many anthropologists and colonial officials, since they were considered to be physically, mentally and morally degenerate and as such undermined the stability of colonial order.[48]

This negative view of *mestiços* was contingent upon historical shifts. Varying degrees of 'racial' mixing or miscegenation had accompanied colonial conquest and occupation in the Portuguese empire since the very beginning in the late fifteenth century. Given the lack of European women in the colonies, it had, throughout the centuries, often been viewed as a necessary condition for the stabilization of colonial rule.[49] This did not mean that miscegenation was embraced by all – stereotypes, prejudices and a certain discomfort vis-à-vis inter-racial sexual relations and the resultant mixed offspring had existed throughout the centuries.[50] Yet, in the late nineteenth and early twentieth centuries, negative attitudes towards 'racial' mixing gained particular urgency among Portuguese intellectuals, politicians and bureaucrats, both at home and in the colonies. Major causes for this shift were the emergence and spread of new, biologically based racial theories as well as the influx of more and

[48] On other European empires, see Grosse, *Kolonialismus,* pp. 146–195; Jeurissen, Lissia, "La question mulâtre. Colonisation et métissage", *Agenda Interculturel du Centre Bruxellois d'Action Interculturelle* 296 (2011); White, Owen, *Children of the French Empire. Miscegenation and Colonial Society in French West Africa, 1895-1960,* Oxford: Clarendon Press, 1999; Saada, Emmannuelle, *Les Enfants de la Colonie. Les métis de l'empire français entre sujétion et citoyenneté,* Paris: La Découverte, 2007 and Stoler, Ann Laura, *Carnal Knowledge and Imperial Power. Race and the Intimate in Colonial Rule,* Berkeley: University of California Press, 2002, esp. chapters 2, 4 and 5.

[49] See, for instance, Ferreira, António Vicente, "Colonização étnica da África Portuguesa", in: Ferreira, António Vicente (ed.), *Estudos Ultramarinos,* vol. IV, Lisboa: Agência Geral das Colónias, 1953-1955, pp. 149–264, here pp. 193–212; Rita, *Contacto das raças,* pp. 16–21; Bastos, Cristiana, "Um luso-tropicalismo às avessas. Colonialismo científico, aclimação e pureza racial em Germano Correia", in: Ribeiro, Margarida Calafate (ed.), *Fantasmas e fantasias imperiais no imaginário português contemporâneo,* Porto: Campo das Letras, 2003, pp. 227–254, here p. 232.

[50] Boxer, Charles, *Race Relations in the Portuguese Colonial Empire, 1415-1825,* Oxford: Clarendon Press, 1963; Xavier, Ângela Barreto, "Dissolver a diferença. Mestiçagem e conversão no império português", in: Cabral, Manuel Villaverde (ed.), *Itinerários. A investigação nos 25 anos do ICS,* Lisboa: Imprensa de Ciências Sociais, 2008, pp. 709–727.

strongly racially prejudiced Europeans in the colonies.[51] Ideologies shifted again in the 1950s, when Portuguese intellectuals and the Portuguese government rhetorically embraced Gilberto Freyre's theory of lusotropicalism, according to which the large number of *mestiços* was the result of a century-old, exceptional Portuguese tendency to miscegenate with native populations and therefore was evidence of the absence of a colour bar in Portuguese colonialism. Framed as an anti-racist, humanitarian and visionary ideology, lusotropicalism served to legitimize Portuguese colonialism in a decolonizing world.[52]

None of these discourses were ever monolithic, however. In the late nineteenth and early twentieth century, some defended miscegenation as a solution to the acclimatization problem in the tropics, but during the Interwar Period, it became increasingly rare to find Portuguese intellectuals who openly supported miscegenation in colonial Africa.[53] One of these rare voices was José Capelo Franco Frazão, the first Count of Penha Garcia. In 1921, during one of the sessions of the International Colonial Institute in which the position of *mestiços* in colonial societies was being discussed, the Count expressed the view that there actually was no *mestiço* problem in the Portuguese colonies. Unlike many other colonies, where racially based legal and social discrimination "[had] create[d] a great imbalance between the aptitudes and social position of the *mestiços*", transforming them into rebels, Portugal had prevented this occurrence by consistently assimilating *mestiços* as Europeans and by giving them the same career possibilities. Parroting liberal assimilationist ideologies of the nineteenth century, this (perhaps deliberately) naive view was strangely out of touch with the realities of colonial rule and the racism that permeated colonial societies.[54]

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[51] Alencastro, Luiz Felipe de, "Mulattos in Brazil and Angola. A Comparative Approach, Seventeenth to Twenty-First Centuries", in: Bethencourt, Francisco; Pearce, Adrian (eds.), *Racism and ethnic relations in the Portuguese speaking world,* Oxford/New York: Oxford University Press, 2012, pp. 71–98.

[52] On the shift towards lusotropicalism (and the role of Portugal's search for international legitimacy), see Castelo, Cláudia, *"O modo português de estar no mundo". O luso-tropicalismo e a ideologia colonial portuguesa (1933-1961),* Porto: Edições Afrontamento, 1998; Bastos, Cristiana, "Tristes Trópicos e Alegres Luso-Tropicalismos. Das notas de viagem em Lévi-Strauss e Gilberto Freyre", *Análise Social* 33,146/147 (1998), pp. 415–432; Péclard, Didier, "Savoir colonial, missions chrétiennes et nationalisme en Angola", *Genèses* 45,4 (2001), pp. 114–133, here pp. 119–122; Ribeiro, Margarida Calafate, *Uma História de Regressos. Império, Guerra Colonial e Pos-colonialismo,* Porto: Edições Afrontamento, 2004, pp. 151–166.

[53] See, for instance, Martins, António Rita, *Elementos de higiene tropical, Com uma carta de E. Brumpt*, 2 vols, Lisboa: Escola Superior Colonial, 1929, p. 31.

[54] "Les métis. Mesures à prendre en vue de leur éducation et de leur instruction", in: *Compte Rendu de la Session tenue à Paris les 17, 18 e 19 mai 1921,* Bruxelles: Institut colonial international, 1921, pp. 64–79, pp. 72-74. Similarly, Garcia, Conde de Penha, "Alguns conceitos fundamentaes da moderna politica colonial portugueza", *Anuário da Escola Superior Colonial* 11 (1930), pp. 125–139, here p. 131. Cristina Nogueira da Silva has shown that even at the height of liberal assimilationist ideologies in the nineteenth century, both colonial legislation and practices were going in a different direction. See Silva, Cristina Nogueira da, "Uma justiça "liberal" para o Ultramar? Direito e organização judiciária nas províncias ultramarinas portuguesas do Século XIX", *Revista do Ministério Público* 27,105 (2006), pp. 165–200 and Silva, Cristina Nogueira da, *Constitucionalismo e Império. A cidadania no Ultramar português,* Lisboa: Almedina, 2009.

Indeed, in the late nineteenth and early twentieth centuries, the combined effects of mounting racial prejudice and the increasing influx of European competitors had contributed to the decline of the so-called 'creole' *(crioula)*, 'Euro-African' or 'Luso-African' elites, analytical terms historians have used in reference to those *mestiços*, 'black' *assimilados* and 'white' settlers born in the colony *(filhos do país)* who had, until then, played a prominent role in Angola's political, economic and social life.[55] The nineteenth century in particular had been "the heyday of the power and prosperity of the Luso-African Creoles in West Africa", as Havik and Newitt have put it.[56] Now, at the turn of the twentieth century, their socio-economic and political influence was gradually restricted and career paths were closed off to them, for instance in the colonial administration, where new laws in the 1920s officially denied *mestiços* and *assimilados* access to the upper echelons.[57] Probably, these trends were strengthened by foreign criticism, made first and foremost by British travellers and colonialists, for whom Portuguese colonial rule lacked modernity because it did not enforce stricter racial boundaries. In the opinion of such foreign observers, the Portuguese colonial enterprise negatively stood out because many officials and leading members of colonial society were "half breeds" characterized by "cultural impurity and racial mixture".[58] In the 1950s, lusotropical ideology would invert this allegedly typical 'weakness', transforming it into the particular strength of Portuguese colonialism – a shift in rhetoric that was not matched by a shift in practice, however.[59]

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[55] On the 'rise and fall' of these elites, see, for instance, Wheeler, Douglas L.; Pélissier, René, *Angola,* London: Pall Mall Press, 1971, pp. 122–126; Wheeler, Douglas L., "Origins of African Nationalism in Angola. Assimilado Protest Writings 1859-1929", in: Chilcote, Ronald H. (ed.), *Protest and resistance in Angola and Brazil. Comparative studies,* Berkeley, Los Angeles, London: University of California Press, 1972, pp. 67–87; Havik, Philip J.; Newitt, Malyn, "Introduction", in: Havik, Philip J.; Newitt, Malyn (eds.), *Creole Societies in the Portuguese Colonial Empire* (Lusophone Studies; 6), Bristol: Bristol University Press, 2007, pp. 5–23, here pp. 15–17; Corrado, Jacopo, "The Fall of a Creole Elite? Angola at the Turn of the Twentieth Century: The Decline of the Euro-African Urban Community", *Luso-Brazilian Review* 47,2 (2010), pp. 100–119; Alencastro, *Mulattos,* pp. 86–88.

[56] Havik/Newitt, *Introduction,* p. 16. For an illuminating case study, see Heintze, Beatrix, "Between Two Worlds. The Bezerras, a Luso-African Family in Nineteenth- Century Western Central Africa", in: Havik, Philip J.; Newitt, Malyn (eds.), *Creole Societies in the Portuguese Colonial Empire* (Lusophone Studies; 6), Bristol: Bristol University Press, 2007, pp. 127–154.

[57] Neto, Maria da Conceição, "Ideologias, Contradições e mistificações da colonização de Angola no século XX", *Lusotopie* (1997), pp. 327–359, here p. 345. See also Rodrigues, Eugénia, *A representação social do branco na imprensa angolana dos anos 30. A revista Angola da Liga Nacional Africana* (Dissertação de Mestrado - Universidade Nova de Lisboa, Faculdade de Ciências Sociais e Humanas), 1994, pp. 54–59.

[58] Newitt, Malyn, "British Travellers Accounts of Portuguese Africa in the Nineteenth Century", *Revista de Estudos Anglo-Portugueses* 11 (2002), pp. 103–129; Williams, Rosa, "Migration and Miscegenation. Maintaining Boundaries of Whiteness in the Narratives of the Angolan State, 1875-1912.", in: Havik, Philip J.; Newitt, Malyn (eds.), *Creole Societies in the Portuguese Colonial Empire* (Lusophone Studies; 6), Bristol: Bristol University Press, 2007, pp. 155–170, quote p. 157.

[59] For the divergence between lusotropical ideology and colonial practices of citizenship and intermarriage in Angola, see Neto, *Ideologias*; Mata, Maria Eugénia, "Interracial Marriage in the Last Portuguese Colonial Empire", *e-Journal of Portuguese History* 5,1 (2007), pp. 1–23 and Neto, Maria da Conceição, *In Town and Out*

In the first half of the twentieth century, opponents of miscegenation advanced several arguments to corroborate their cause. Many were leading doctors and/or physical anthropologists and argued that racial mixing produced children who were physically, mentally and morally degenerate.[60] This view was shared by some of Angola's leading officials, such as José de Oliveira Ferreira Diniz, the influential Director of the Native Affairs Department in the 1910s and early 1920s, and High Commissioner António Vicente Ferreira.[61] While most opposed miscegenation because of the loss of *white* 'racial purity' and 'normality', Ferreira Diniz attacked it from the opposite direction, arguing that racial mixing caused the degeneration of the 'negro race'. The populations living in the hinterland of Luanda, where contact between the 'races' had been most intense, were proof of this, he claimed. They were "of small stature, of rickety constitution and of a sickly laziness, which contrast[ed] with the robustness of the surrounding tribes that [had] not [been] touched by the degenerating effect of the mixing of both races." As Director of Native Affairs, it was his task to prevent the disappearance of the native races.[62]

This biological reasoning was highly unstable, however, as the debates between three of the most prominent Portuguese physical anthropologists at the First National Congress of Colonial Anthropology in Porto in 1934 reveal.[63] António Mendes Correia, one of Portugal's staunchest opponents of racial mixing, admitted that hardly any 'scientific' studies had been conducted on *mestiços* and the inheritance of human traits.[64] In his own paper, for which he had taken the measurements of 25 *mestiços* and questioned colonial experts, he was indecisive about the veracity and significance of the physical, psychological and moral differences that he and others had observed and whether or not he ought to attribute these differences to biological (inherited) or social (environmental) causes.[65] His Goan colleague Alberto Germano da Silva Correia went a step further in his paper: he rejected the idea of a biologically determined inferiority of *mestiços*. He based his rejection partly on the

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of Town. A Social History of Huambo (Angola) 1902-1961 (Ph.D. Dissertation - University of London, School of Oriental and African Studies (SOAS)), 2012, pp. 279–287.

[60] See Ruah, Judah Bento, "Mestiços. Mulatos de Moçambique", *Anuário da Escola Superior Colonial* (1931-1932), pp. 399–411; Rita, *Contacto das raças,* p. 17 and further references in the footnotes below.

[61] Ferreira, *Colonização étnica,* pp. 204–207.

[62] Diniz, *Negócios indígenas 1913,* p. 102. In his ethnographic compendium, Diniz referred to these populations that suffered from the degenerating effects of racial mixing as 'Ngolas'. See Diniz, *Populações indígenas,* p. 4.

[63] Some elements of these debates can also be found in Matos, *Aperfeiçoar a 'raça',* p. 97.

[64] Correia, A. A. Mendes, "Os mestiços nas colónias portuguesas", *Trabalhos do 1.° Congresso Nacional de Antropologia Colonial, Porto, Setembro de 1934,* vol. 1, Porto: Edições da 1.a Exposição Colonial Portuguesa, 1934, pp. 331–348, here p. 333. Ten years later, Alexandre Sarmento still denounced the lack of scientific studies on this matter, see Sarmento, Alexandre, "Estudo da população de Angola", *Ocidente. Revista Portuguesa de Cultura* 19,60 (1943), pp. 419–424.

[65] Correia, *Os mestiços,* pp. 346–349.

anthropometric studies he had conducted on a small group of adult *mestiços*, termed *Eurafricanos*, during his stay at the Institute of Scientific Research *(Instituto de Investigações Ciêntíficas)* in Luanda from 1922 to 1924.[66] His measurements had shown that there was hardly any significant difference between the *Eurafricanos* and the so-called *Lusodescendentes*, third-generation settlers of 'pure Portuguese race', which he had studied on the same occasion.[67] For Germano Correia, this inconclusiveness matched the scepticism of several other anthropologists and contradicted "*a priori* doctrines, derived from incomplete or biased observations that considered each mestiço, just by the fact of being one, a hybrid, and hence an imperfect and anthropologically inferior being."[68] Clearly, he did not deny that degeneration was observed more often with *mestiços*, but he claimed, in accordance with other authors, that it was the consequence of their social situation. They often lived in poverty between two worlds characterized by different norms and were often despised and rejected by both sides, and hence "it [was] astonishing that they were not totally degenerate".[69]

This was also more or less the conclusion reached by Eusébio Tamagnini, professor at the University of Coimbra. Arguing on the basis of genetics, Tamagnini was convinced that "the *mestiços* of different human races are physiologically efficient machines". While miscegenation sometimes led to disharmonious physical traits, it also led to greater vigour. As racial mixing reduced the risk of homozygosity, *mestiços* "showed in general less defects than each of their parents".[70] When he nevertheless opposed racial mixing in the Portuguese colonies, this was partly because he believed in racial hierarchies and wanted to preserve national characteristics, but mostly it was because he feared the social consequences. "The *mestiços*", he stated, "do not adapt to either one of the systems and they are rejected by both. This fact puts them in an unfortunate social position. The consequences of this social isolation, of this intermediate position, are so important that they can only deeply upset, at all times, their state of mind. Systematically rejected by everyone, the *mestiço* wanders around

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[66] In various articles in which she addresses Germano Correia's racial theories, Cristiana Bastos has neglected or downplayed this side of his work, often qualifying him as a staunch supporter of racial purity and an opponent of racial mixing (i.e. a scientific racist). See, for instance, Bastos, *Luso-tropicalismo*, pp. 243-244; Bastos, Cristiana, "Migrants, Settlers and Colonists. The Biopolitics of Displaced Bodies", *International Migration* 46,5 (2008), pp. 27–54.

[67] See Correia, Alberto Carlos Germano da Silva, "Os Luso-Descendentes de Angola. Contribuição para o seu estudo antropológico", *III Congresso Colonial Nacional de 8 a 15 de Maio de 1930. Actas das Sessões e Teses,* Lisboa: Tip. e Pap. Carmona, 1934, pp. [1-57].

[68] Quote: Correia, Alberto Carlos Germano da Silva, "Os Eurafricanos de Angola", *Trabalhos do 1.° Congresso Nacional de Antropologia Colonial, Porto, Setembro de 1934,* vol. 1, Porto: Edições da 1.a Exposição Colonial Portuguesa, 1934, pp. 300–330, here p. 300.

[69] Correia, *Os Eurafricanos,* pp. 317-324, quote p. 322. Similarly Rita, *Contacto das raças,* pp. 20–21.

[70] Tamagnini, Eusébio, "Os problemas da mestiçagem", *Trabalhos do 1.° Congresso Nacional de Antropologia Colonial, Porto, Setembro de 1934,* vol. 1, Porto: Edições da 1.a Exposição Colonial Portuguesa, 1934, pp. 39–63, here pp. 53-55 (here also quotes).

like a pariah without any possible hope of salvation."[71] Consequently, miscegenation, Tamagnini concluded, was a risk for society.

The views exposed by Germano Correia and Tamagnini are exemplary of the direction in which the debate among doctors and anthropologists in Portugal was heading in the Interwar Period: the *mestiço* was redefined and reclassified. He was no longer a biological degenerate but rather a social risk and liability.[72] Notwithstanding, all agreed that the '*mestiço* problem' continued to exist and needed to be solved.

Before discussing how the colonial government actually addressed this problem, it is important to note that the official number of *mestiços* in Angola was never as high as the discourses on Portuguese special proclivity for it might have suggested. From 3,112 in 1900, the number rose to 28,035 in the census of 1940 and to 53,392 in 1960 – or from 0.06 to 0.75 and then to 1.10% of the population respectively.[73] However, two restrictions apply here. First, numbers obviously depended on changing (self-)definitions and ideologies.[74] The controversial discussion over the number of *mestiços* in the 1940 census demonstrates this very well. Alberto de Lemos, who had led the census operation as head of the statistical department in Angola, assumed that many had declared themselves as *mestiços*, but that they should actually be considered 'white', since racial mixing had occurred generations earlier, effectively leaving little somatic or cultural traces. They had only done so, he argued, because the census instructions had been explicit on this issue and because the anonymity of the data had been promised. Conversely, many of those who had been categorized as 'civilized blacks' *(pretos civilizados)* were, biologically speaking, *mestiços* according to Lemos.[75] Former High Commissioner Vicente Ferreira, by contrast, expressed the view that the real number of *mestiços* was still much higher since many had, depending on their somatic features, falsely declared themselves to be either 'white' or 'black'.[76] Second, compared to other African colonies, with the notable exception of South Africa, the official numbers of 1940 were high.[77] While this should not be seen as proof of an exceptional Portuguese tendency towards

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[71] Tamagnini, *Os problemas da mestiçagem,* pp. 62–63.

[72] See, for instance, Matos, *Aperfeiçoar a 'raça',* pp. 98–99, who analyses the debates at the Congresses of the Portuguese World in 1940. There, the idea of the the inability to foresee the health implications of miscegenation and hence the risks that may have been associated with it can also be found in Mendes Correia's work.

[73] Bender, Gerald J., *Angola under the Portuguese. The Myth and the Reality,* Berkeley, Los Angeles: University of California Press, 1978, pp. 20; 31-35. See also Alencastro, *Mulattos,* pp. 72; 94.

[74] For this argument, see also Marques, Walter, *Problemas de desenvolvimento económico de Angola*, 2 vols, Luanda, 1964-1965, vol. 1, p. 42 and Neto, *Ideologias,* pp. 353–354.

[75] Lemos, Alberto, "Introdução ao primeiro censo geral da população de Angola", in: Colónia de Angola - Direcção dos Serviços de Economia - Repartição de Estatística Geral (ed.), *Censo Geral da População, 1940,* vol. 1, Luanda: Imprensa Nacional, 1941-1947, pp. 1–76, pp. 63-64.

[76] Ferreira, *Colonização étnica,* pp. 196-197, note 2.

[77] Saada mentions a few thousand for AOF and AEF in the 1930s, see Saada, *Enfants,* p. 53. For the Belgian Congo, surveys and estimates in the 1930s go from 1,300 to 5,000, see Exposition Internationale et Universelle

racial mixing, it nevertheless suggests that the *mestiço* question had a certain magnitude in Angola.[78]

The colonial administration in Angola adopted a two-pronged approach to the *'mestiço* problem': it tried, to varying degrees and intensity, to prevent more *mestiços* from being born, while trying to find an adequate solution for the existing ones.

As to the 'preventive' approach, legal and administrative initiatives to prevent children of mixed parentage from being born were rare. At times there were calls for the prohibition of interracial sexual relations, but it seems that only *indirect* measures were effectively adopted. Inspired by what he perceived as Germany's radical, but clear-cut attitude vis-à-vis mixed marriages and their offspring, Ferreira Diniz wanted to "forbid, or at least make more difficult, the legitimate or illegitimate relations between individuals of both races" and to confer the legal status of 'natives' on all *mestiços* born thereafter.[79] Indeed, in the German colonies of Southwest-Africa (1905), East Africa (1906) and Samoa (1912), mixed marriages had been legally prohibited by either the local governments or the German Colonial Office.[80] Diniz would be less successful: his demand for a similar ban – and the ensuing indigenization of illegitimate *mestiço* children – would not be met. In the census of 1940, a large majority of the *mestiços* (23,244 of 28,035), about half of which were children under the age of 15, were still categorized as 'civilized', and hence not as 'natives'.[81]

In the early 1920s, High Commissioner Norton de Matos chose a more indirect approach. Through family subsidies and rural colonization programmes, he promoted the immigration of Portuguese families instead of single male individuals, thus trying to eliminate

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de Bruxelles (ed.), *Congrès international pour l'Étude des Problèmes résultant du Mélange des Races,* Bruxelles, 1935, pp. 43; 51 and Jeurissen, Lissia, "Les ambitions du colonialisme belge pour la "race mulâtre" (1918-1940)", *Belgisch Tijdschrift voor Nieuwste Geschiedenis* 32,3/4 (2002), pp. 497–535, here pp. 501–502.

[78] Bender has argued that the number and percentage of *mestiços* in Angola was not exceptional for African colonies when compared to the total number of whites in the colony and given the imbalance in the male-female ratio present in the white population. See Bender, *Angola under the Portuguese,* pp. 45–54. Alberto de Lemos has made a similar argument by comparing the numbers of whites and *mestiços* in various colonies in the mid-1940s. See Lemos, Alberto de, *Altas questões da administração colonial portuguesa,* Lisboa, 1947, pp. 17–18.

[79] Diniz, *Negócios indígenas 1913,* pp. 28-29; 102.

[80] This topic has received much historiographical attention in recent years, see Wildenthal, Lora, "Race, gender and citizenship in the German colonial empire", in: Cooper, Frederick; Stoler, Ann Laura (eds.), *Tensions of Empire. Colonial Cultures in a Bourgeois World,* Berkeley/Los Angeles: University of California Press, 1997, pp. 263–283; Grosse, *Kolonialismus,* pp. 150–177; Kundrus, Birthe, *Moderne Imperialisten. Das Kaiserreich im Spiegel seiner Kolonien,* Köln: Böhlau, 2003, pp. 219–280; Sippel, Harald, "Rechtspolitische Ansätze zur Vermeidung einer Mischlingsbevölkerung in Deutsch-Südwestafrika", in: Becker, Frank (ed.), *Rassenmischehen - Mischlinge - Rassentrennung. Zur Politik der Rasse im deutschen Kolonialreich*, Stuttgart: Steiner, 2004, pp. 138–164.

[81] Colónia de Angola - Direcção dos Serviços de Economia - Repartição de Estatística Geral (ed.), *Censo Geral da População, 1940*, 12 vols, Luanda: Imprensa Nacional, 1941-1947, Vol. I, pp. 78, 99 and 119; Vol. IV, p. 3; Vol. V, p. 5.

what many viewed as the main cause of miscegenation.[82] He also began to implement stronger spatial segregation by establishing native quarters *(bairros indígenas)* and purely white rural settlements.[83] Norton de Matos believed miscegenation to be detrimental to the dignity and prestige of the Portuguese in the colonies and, above all, it did not fit with his grandiose colonization plans for Angola, for which the unaltered "colonial genius" of the Portuguese was needed. Portuguese and Africans were to live in complete segregation until the latter had closed the civilization gap, and thereby had also acquired the same Portuguese mentality, a process that very well might take centuries. Only then would miscegenation be allowed. In Norton de Matos' vision, it would even be inevitable and beneficial at that stage, since "a new race would emerge with greater vitality and strength, that was more adapted to the living conditions of the big African continent and capable of enhancing human civilization enormously."[84]

But although the demographic disequilibrium between 'white' men and women became gradually less salient, it did not put an end to concubinage and racial mixing.[85] In his writings of the late 1930s, colonial administrator José Ribeiro da Cruz claimed that the problem was still extensive in the interior of the colony. In the province of Malange, he only knew of one "European merchant" who was married to a white woman. All the others, he complained, "lived in concubinage with black or mulatto women." To solve the problem, Ribeiro da Cruz recommended that all single state officials, and even long-standing colonists, should be obliged to go to the metropole to marry a Portuguese woman. Concubinage between white men and black or mulatto women, then, should be prohibited.[86] Such a radical solution was not adopted, but it shows the virulence of anti-miscegenation ideas and at the same time the sheer impossibility of preventing racial mixing.

Meanwhile, the colonial administration still had to deal with the existing *mestiço* population – an issue that divided colonialists. Some sought to recognize the *mestiços* as a separate group in its own right. Others, on the other hand, wanted to assimilate them into the

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[82] Matos, José Mendes Ribeiro Norton de, *A província de Angola,* Porto: Edição de Maranus, 1926, pp. 41–43. See also Ferreira, *Colonização étnica,* pp. 195-196 note 3.

[83] Matos, *A província de Angola,* pp. 239-241 and 29-38.

[84] *Ibid.,* pp. 231-233, here also quotes. For a more extensive discussion of his colonization plans, see *Ibid.,* pp. 23–67.

[85] Ferreira, *Colonização étnica,* pp. 196–197. This assumption is corroborated by statistical data. While the colony counted 2,827 white 'women' to 6,033 'white' men in 1900, the gap had narrowed to 17,389 women to 26,694 men in 1940. Compare Lemos, *Introdução ao primeiro censo,* pp. 26 and 78. One must bear in mind, however, that even for the 'white' population, statistical data were not very trustworthy, see Chapter 2.

[86] José Ribeiro da Cruz, *Relatório do Chefe dos Serviços, interino, da Repartição Central dos Negócios Indígenas, ano de 1941*, [1942], in: AHU, MU, ISAU 1725, pp. 139-140. Ribeiro da Cruz quoted one of his own reports from 1938.

colonial dichotomy by either ‘Europeanizing’ or ‘Africanizing’ them.[87] Alberto de Lemos and Vicente Ferreira’s diverging interpretations of the *mestiço* numbers in the 1940 census were informed by their different stances towards this practical side of the ‘*mestiço* problem’. Vicente Ferreira favoured the complete segregation between the ‘races’ as well as the special treatment for *mestiços*. Convinced that they were, if not physically degenerate, at least mentally unstable and that they posed, along with ‘detribalized’ Africans, a threat to colonial order, he had urged the state to “quarter these erratic elements in duly selected and prepared places, with a different type of administration.”[88] Alberto de Lemos, on the other hand, was against segregation and believed that *mestiços* should be assimilated as much as possible into the ruling class of white Europeans.[89]

The latter would become the dominant position. In colonial Angola, being *mestiço* was and remained a biological and social condition (and perhaps even one of identity) as well as a statistical category, but it did not entail a specific legal statute, as *mestiços* were either considered Portuguese or ‘native’. Although it is true that Vicente Ferreira’s idea to turn *mestiços* and *destribalizados* into a third group – between the dichotomies of ‘white’ and ‘black’, European and African, citizen and native – was repeatedly discussed by Portuguese colonial experts, for instance by the *Conselho do Império Colonial* in the early 1940s, this solution, was ultimately not adopted, just like in the French Empire, where a similar discussion had taken place.[90]

Finally, few favoured the third option, the ‘Africanization’ of *mestiços*, either because they found it ‘inhuman’ or because they believed that this reclassification would lead to the creation of a caste of unruly subjects. The rejection of this option was amply reflected in the international debate regarding the so-called ‘abandoned *mestiços*’, children who had been abandoned by their ‘white’ fathers and had been left to grow up with their African mothers in native villages. This question lay at the discursive and emotional core of the colonial *mestiço* problem in the first half of the twentieth century: it was intensively discussed in French,

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[87] Similar positions can be found with reference to the Belgian Congo, see Jeurissen, *Ambitions,* pp. 505–517 and also Jeurissen, *La question mulâtre*.

[88] Ferreira, António Vicente, "Alguns aspectos da política indígena de Angola (1934)", in: Ferreira, António Vicente (ed.), *Estudos Ultramarinos,* vol. III, Lisboa: Agência Geral das Colónias, 1953-1955, pp. 35–50, here p. 48.

[89] Lemos, *Introdução ao primeiro censo,* pp. 70–71.

[90] See Soares, Amadeu Castilho, *Política de bem-estar rural em Angola. Ensaio* (Estudos de ciências políticas e sociais; 49), Lisboa: Junta de Investigações do Ultramar, 1961, pp. 221–228. On the legal position of *mestiços*, see Caetano, Marcello, *Direito público colonial português. Segundo as lições do Professor Doutor Marcelo Caetano, coligidas por Mário Neves,* Lisboa, 1934, pp. 188–189. For the French Empire, see Saada, *Enfants,* pp. 132–133.

Belgian and Dutch colonial circles, and also at the International Colonial Institute.[91] While the issue seems to have been discussed with some delay and much less prominently in the Portuguese case, it seems nevertheless safe to say that very similar anxieties existed. Around 1940, most Portuguese commentators agreed upon the necessity to remove these *mestiço* children from their African environment and to give them special assistance. Living a tribal life with their mothers was not only considered detrimental to their individual development, but also a moral stain on Portuguese colonialism and its civilizing mission as well as a potential source of future unrest.[92] In his analysis of the data in the 1940 census, Alexandre Sarmento, a medical doctor, physical anthropologist and demographer based in Angola, thus commented that there were officially almost 3,000 such "mestiço children who live[d] mixed and integrated in the mass of the native population, in the backward and primitive conditions of the native villages *(sanzalas)*" and that it was imperative to remove them from this environment "where their physical development and moral formation can only occur in an imperfect and, for society, even dangerous manner."[93] This was also the opinion expressed by Alberto de Lemos, who urged the colonial government to collect these children in homes *(asilos)*, noting that it was common practice in the Belgian Congo and South Africa to send these children to mission boarding schools.[94]

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[91] See Jeurissen, *Ambitions*; Saada, *Enfants*; Stoler, *Carnal Knowledge*. For the discussion of the *mestiço* question during various sessions of the International Colonial Institute before and after World War I, see Moresco, M. E., "De la condition des métis et de l'attitude des gouvernements à leur égard", in: Institut Colonial International (ed.), *Compte Rendu de la session tenue à Brunswick, les 20, 21 et 22 avril 1911,* vol. 2, Bruxelles: Institut colonial international, 1911, pp. 447–466; "Discussion de la question 'Des métis et de l'attitude des gouvernement à leur égard'", in: *Compte Rendu de la session tenue à Brunswick, les 20, 21 et 22 avril 1911,* vol. 1, Bruxelles: Institut colonial international, 1911, pp. 299–324; Sorela, "Contribution à l'étude du problème des métis", in: Institut Colonial International (ed.), *Compte Rendu de la [.] Session tenue à Bruxelles, les 24, 25 et 26 mai 1920,* Bruxelles: Institut colonial international, 1920, pp. 285–300; "Les métis. Mesures à prendre en vue de leur éducation et de leur instruction", in: Institut Colonial International (ed.), *Compte Rendu de la Session tenue à Paris les 17, 18 e 19 mai 1921,* Bruxelles: Institut colonial international, 1921, pp. 64–79. Interestingly, the problem of the reafricanization of mestiço children was already addressed by Angolan governors in the late eighteenth century. Here, their "incorporation into their mothers' kinship system" was seen as problematic, because it prevented the growth of the European(ized) population. Governor Sousa Coutinho argued that if they were well-educated, the mestiços could prove to be valuable colonial agents that would be less expensive and better-suited than Europeans to colonize Angola.

[92] The problem of 'abandoned' *mestiço* children was addressed at the Second National Colonial Congress in 1924 by Mariano Machado. The conference participants voted in favour of the 'special protection' Machado wanted to grant them. See Machado, Mariano, "Missóes colonisadoras, missões laicas e religiosas. Conclusões", *II Congresso Colonial Nacional de 6 a 10 de Maio de 1924. Teses e Actas das Sessões,* Lisboa, 1924, pp. [1-5]; "Actas das sessões", in: *II Congresso Colonial Nacional de 6 a 10 de Maio de 1924. Teses e Actas das Sessões,* Lisboa, 1924, pp. 1–294, p. 238 and "Votos do congresso", in: *II Congresso Colonial Nacional de 6 a 10 de Maio de 1924. Teses e Actas das Sessões,* Lisboa, 1924, p. 19. Concerns regarding abandoned *mestiços* and the idea of special assistance can also be found in Cruz, *Relatório (1941)*, p. 139; Rita, *Contacto das raças,* pp. 20–21 and Sarmento, Alexandre, "População infantil de Angola", *A criança Portuguesa* 6 (1946-1947), pp. 229–240, here pp. 233–234.

[93] Sarmento, *População infantil de Angola*, pp. 233-234, quotes p. 234. Due to underreporting strategies, the numbers were probably much higher.

[94] Lemos, *Introdução ao primeiro censo,* p. 71. Lemos used the number of 4,791 'uncivilized' *mestiços*, which included children and adults.

Although more research is necessary on this point, it seems that religious and charitable institutions did indeed take on this task. The Sisters of Saint Joseph of Cluny, for instance, a French order with a dozen mission posts in Angola by the early 1940s, ran a boarding school exclusively for *mestiças* in Nova-Sintra (now Catabola).[95] And around the mid-twentieth century, the majority (118 of 135) of the 'poor girls' who were hosted in the *Asilo D. Pedro V.* in Luanda were *mestiças*. They were "doubtlessly those who because of various factors [found] themselves in the worst moral and material conditions and [were] most in need of support," one author emphasized, a remark which possibly implies a reference to the common association between *mestiças* and prostitutes.[96] This was most likely simply the continuance of a special policy towards *mestiço* children that missionary societies in Angola had already started to pursue much earlier.[97]

While 'abandoned' *mestiço* children were considered to pose the most acute problem, it became widely accepted that all *mestiço* children should receive special attention and education. By 1944, even Mendes Correia argued that it was necessary to give the *mestiços* in the Portuguese colonies an "affectionate, human and fraternal treatment" as well as more career options in order to improve their situation and to gain their support for the colonial project. If it was impossible to prevent miscegenation altogether, it was a humanitarian and political imperative to assist them and turn them into supporters of the colonial enterprise.[98]

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[95] Ornelas, Rev. Madre Catarina de Jesus Cristo de, "As missionárias de S. José de Cluny", *Portugal em África* 2.Série, 1 (1944), pp. 273–284, here p. 284.

[96] "O asilo D. Pedro V. Esboço histórico, 1854-1954", *Arquivos de Angola* (1954), pp. 133–143, here pp. 139-140, quote p. 140. For a critique of the colonial imaginary of *mestiças* as prostitutes, see Archer, Maria, "A mulher portuguesa no mundo. O problema da valorização da mulher mestiça", *Angola. Revista de Doutrina e Estudo* 6,Maio-Junho (1938), pp. 6–7. It is probable that the *Asilo* had focussed on *mestiças* much earlier, as a newspaper reference suggests. See *Liga de Protecção da Infância de Angola. Uma obra que se impõe, [Entrevista com Doutora D. Berta de Morais Esteves]*, in: A Província de Angola, 19.08.1930, p. 1.

[97] Jelmer Vos has described how the (French) Fathers of the Holy Ghost were concerned about the status and behaviour of mulatto children and housed them in a special orphanage in Landana in the 1870s, see Vos, Jelmer, "Child Slaves and Freemen at the Spiritan Mission in Soyo, 1880-1885", *Journal of Family History* 35,1 (2010), pp. 71–90, here p. 77.

[98] Correia, A. A. Mendes, "O mestiçamento nas colónias portuguesas", *África Médica. Revista Mensal de Higiene e Medicina Tropical* 10,12 (1944), pp. 221–224, quote p. 243. Similarly, Correia, *Os Eurafricanos,* p. 303; Rita, *Contacto das raças,* pp. 20–21.

2. Medical demography and the spectre of infant mortality

From enumerating men to measuring reproduction

Quantitative knowledge on birth and infant mortality rates in Angola was greatly enhanced from the late 1920s onwards, when doctors began to collect and analyse demographic data on the African population in a far more systematic manner than before. The rise of 'medical demography', as I will call the demographic endeavours of colonial doctors, was inextricably linked to the establishment of the AMI health scheme and the underlying ideals of social (collective and preventive) medicine.[99] Accurate demographic data were considered a crucial tool in the conception of and to monitor such African healthcare programmes. The survey of the population, as João Camoesas worded it, was "the fundamental basis of all socio-medical action".[100] Conversely, the extension of healthcare to rural African populations would offer new opportunities for demographic studies.

The engagement of doctors with demography was not a colonial specificity. Before demography was institutionalized in Europe and North America as a discipline in its own right around the Second World War, i.e. when proper research institutes, journals and professional career paths were established, hygienists were at the forefront of demographic research.[101] Internationally, the series of International Congresses on Hygiene and Demography (1878-1912) had epitomized the close and often instrumental connection that had existed between the two fields since the late nineteenth century.[102] This connection continued into the Interwar Period, as the Health Organization of the League of Nations (LNHO) collected demographic data from all over the world and published monographs on

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[99] See Chapter 2.

[100] Camoesas, João, "Sobre a organização da Assistência Médica Indígena", *Boletim da Assistência Médica aos Indígenas e da Luta contra a Moléstia do Sono* 3,2 (1929), pp. 140–155, here p. 143. See also Santos, Francisco Ferreira dos, "Assistência médica aos Indígenas e processos práticos da sua hospitalisação", *Revista Médica de Angola* 4,2 (1923), pp. 51–71, here pp. 52-54; 70.

[101] On the slow autonomization of demography, see Introduction.

[102] The alliance between demography and hygiene had been pushed by the medical doctor, physical anthropologist and early demographer Louis-Adolphe Bertillon. Under his influence the International Congresses on Hygiene, held since 1852, incorporated demography as part of its activities and was renamed accordingly in 1878. See Rosental, Paul-André, "Wissenschaftlicher Internationalismus und Verbreitung der Demographie zwischen den Weltkriegen", in: Krassnitzer, Patrick; Overath, Petra (eds.), *Bevölkerungsfragen. Prozesse des Wissenstransfers in Deutschland und Frankreich (1870 - 1939),* Köln: Böhlau, 2007, pp. 255–291, here p. 257; Overath, Petra, "Bevölkerungforschung transnational. Eine Skizze zu Interaktionen zwischen Wissenschaft und Politik am Beispiel der 'International Union for the Scientific Study of Population'", in: Overath, Petra (ed.), *Die vergangene Zukunft Europas. Bevölkerungsforschung und -prognosen im 20. und 21. Jahrhundert,* Köln - Weimar - Wien: Böhlau, 2011, pp. 57–83, here pp. 66–68; Rasmussen, Anne, "L'hygiène en congrès (1852-1912). Circulation et configurations internationales", in: Bourdelais, Patrice (ed.), *Les hygiénistes. Enjeux, modèles et pratiques (XVIII-XX siècles),* Paris: Belin, 2001, pp. 213–239, here pp. 234–235.

the vital statistics of a series of European countries, including Portugal.[103] In Portugal, two of the country's most recognized hygienists, Ricardo Jorge and António Almeida Garrett, were simultaneously the country's leading experts in demographic analyses.[104] Moreover, in the 1910s and 1920s, it was the Central Institute of Hygiene *(Instituto Central de Higiene)* in Lisbon under the direction of Ricardo Jorge that was in charge of publishing and analysing the country's official demographic data.[105]

Yet the demographic work of colonial doctors differed from that of their colleagues in Europe in at least one essential regard: whereas studies by doctors in Europe could rely on pre-existing data from censuses or civil registries, colonial doctors still had to collect their own data before they could analyse them. Indeed, the first scientifically organized colony-wide census in Angola only took place in 1940, and there was no obligatory civil registry for the African population before 1942.[106] For colonial doctors, counting people in the very literal sense was at the heart of their job. In the 'colonial situation', doctors were turned into 'field demographers', as opposed to the 'armchair demographers' up in Europe.[107]

This does not mean that there were no demographic data on the African population at all: local administrators produced annual population statistics, which were then collated in colony-wide 'census' maps by the Native Affairs Department.[108] But colonial doctors neither trusted these data nor considered them useful for their purposes. It is even safe to say that medical demography emerged partly as a reaction to the perceived shortcomings of administrative census taking.

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[103] Borowy, Iris, *Coming to Terms with World Health. The League of Nations Health Organisation, 1921-1946,* Frankfurt am Main: Lang, 2009, pp. 177–178.

[104] Baptista, Maria Isabel Rodrigues, "A demografia em Portugal. Um percurso bibliográfico", *Análise Social* 42,183 (2007), pp. 539–579, here p. 540. On the life and work of Ricardo Jorge, see the previous chapter. On Almeida Garrett (1884-1961), see "António de Almeida Garrett", in: Garrett, António de Almeida, *Sobre a mortalidade infantil (até aos 5 anos) na Cidade do Porto e os meios de a evitar. Edição fac-simile,* edited by Hercília Guimarães und Amélia Ricon Ferraz, Porto: Universidade do Porto 2008 [1909], pp. 9–14 and Costa, Rosalina, "O poder da estatística e a estatística do poder. Apontamentos sobre o contributo de António de Almeida Garrett para os estudos de população em Portugal", *Revista de Estudos Demográficos* 44 (2008), pp. 81–94.

[105] Sousa, Fernando Alberto Pereira de, *A História da Estatística em Portugal,* Lisboa: INE, 1995, pp. 161–163; Alves, Jorge Fernandes, "Ricardo Jorge e a Saúde Pública em Portugal", *Arquivos de Medicina* 22,2/3 (2008), pp. 85–90, here p. 90. In 1929, the production and analysis of all official statistical data was centralized in the *Direcção-Geral de Estatística* in the Ministry of the Interior and in 1935 in the newly established National Institute for Statistics *(Instituto National de Estatística - INE)*, see also Valério, Nuno; Bastien, Carlos, *O INE. Desafios do passado, desafios do futuro,* Lisboa: INE, 2010, p. 22.

[106] See Chapter 2 and below.

[107] I use these terms in analogy to the distinction between armchair and field anthropologists, which is commonly made in the historiography of anthropology. Whereas armchair anthropologists used to analyse and theoritisize the information gathered by others (notably missionaries, colonial officials and explorers), field anthropologists would travel and collect their data themselves. While armchair anthropology had been quite common in the nineteenth century, fieldwork became a core condition of social anthropology in the 1920s. On this shift, see Goody, Jack, *The Epansive Moment. Anthropology in Britain and Africa, 1918-1970,* Cambridge: Cambridge University Press, 1995.

[108] See Chapter 2.

Doctors in Angola and in other colonies complained that administrative censuses were erroneous and of little scientific value, not only because of various methodological and practical problems, but also and mainly because of the very rationale that underpinned them: i.e. the aim to measure the healthy adult male population for the sake of tax collection, labour recruitment and military conscription.[109] While many adult men tried to hide from the administrator to avoid registration and its consequences, administrators often deliberately overestimated the age of male adolescents so that they could declare them as adults of a recruitable and tax-paying age. According to doctors, the focus on adult males also led to the undercounting or underestimation of the numbers of women and children. They accused administrators of not ensuring that all women and children were actually counted and of just deducing the number of women and children by making a mathematical calculation based on the number of adult men, which they deemed to be generally too low.[110] On the basis of these criticisms, which are very similar to those formulated by Afrianist historical demographers decades later, doctors legitimized their own censuses, explaining why they came up with the different numbers.[111] This was, for instance, the case of Venâncio da Silva, who had found that there were less adult men, but 30% to 50% more women and children during the medical census he had carried out in two *postos civis* in the Congo Zone in 1928, in comparison with that of the administrator.[112]

At the same time, doctors also criticized administrative censuses for only providing a static view of the population that said little to nothing about population dynamics, the question doctors were most concerned with.[113] As hygienists, they wanted to quantify and better understand the growth or decline of populations through the calculation of death, birth and migration rates. These and other indices were not only supposed to reveal the numerical evolution of the populations under evaluation, but, together with morbidity statistics, which

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[109] For the following, see Camoesas, *Organização AMI,* pp. 143–144; Silva, Francisco Venâncio, *Colónia de Angola - Serviço permanente de Prevenção e Combate à Peste Bubónica no Sul de Angola. Relatorio 1933* (Colecção de relatórios, estudos e documentos coloniais; 37), Lisboa: Agência Geral das Colónias, 1936, pp. 88-89; 92. For a similar and very elaborate argument with regard to the Belgian Congo, see Schwetz, J., "Contribution à l'étude de la démographie congolaise", *Congo. Revue générale de la colonie belge* 4,1 (1923), pp. 297–340.

[110] Camoesas, *Organização AMI,* p. 144. On the common use of this technique in colonial 'censuses', see also Kuczynski, Robert René, *Colonial Population,* Oxford: Oxford University Press, 1937, p. viii.

[111] Compare with the analysis made of administrative censuses in Central Angola in Heywood, Linda; Thornton, John, "Demography, Production, and Labor. Central Angola, 1890-1950", in: Cordell, Dennis D.; Gregory, Joel W. (eds.), *African Population and Capitalism. Historical Perspectives,* 2nd ed., Boulder; London: Westview Press, 1994 [1987], pp. 241–254, here pp. 243-244; 250-251. See also the (somewhat different) critique in Fetter, Bruce, "Decoding and Interpreting African Census Data. Vital Evidence from an Unsavory Witness", *Cahiers d'Études Africaines* 27,1/2 (1987), pp. 83–105, here p. 84.

[112] See "Assistência Médica aos Indígenas - Relatório do Chefe da Zona do Congo", *Boletim da Assistência Médica aos Indígenas e da Luta contra a Moléstia do Sono* 3,3 (1929), pp. 295–301, here pp. 298–299.

[113] For this critique and an overview of birth and death registration in colonial spaces, see also Kuczynski, *Colonial Population,* pp. ix; 28-36.

indicated the incidence of certain diseases, they would also indicate problems of health and reproduction and reveal the impact of ongoing health programmes.

Doctors in Angola proved to be very interested in indices that were related to the reproductive side of the demographic equation: in addition to birth and infant mortality rates, they also calculated fertility rates (of women), sex ratios and age groupings.[114] This was not specific to Angola, but was a general trend in Central Africa in the late 1920s and 1930s. [115] It reflects the shift in the analysis of the depopulation problem, at least in medical discourse. Gradually, anxieties over low birth rates and high infant mortality rates began to overtake the fears of lethal epidemic and endemic diseases, insofar as these last were increasingly perceived to be under control or controllable.[116]

Reproductive concerns were also reflected in the methods the doctors employed. AMI doctors basically used two different methods to measure the African population and their reproductive behaviour: a registration system and oral interviews.

In the newly established AMI sectors of northern Angola, where the health services pursued the utopian vision of complete and continuous medical control, the aim was nothing less than to register the entire population and its movements: births, deaths and in- and outbound migration. Therefore, the doctor and nurses in charge of a sector made use of the system of *concentrações* (concentrations), which had been so important in the fight against sleeping sickness.[117] At these concentrations, i.e. places where at fixed moments in time – usually every two weeks or once a month – all people from the surrounding villages were required to appear, these were not only examined, treated and if necessary sent to local infirmaries, they were also registered. Registration was compulsory, nominative and double. The system of double registration meant that the person was registered on a card *(ficha sanitária)*, which was to be kept by each individual, and also in the registry books, which were kept by the medical authorities of the sector. Although this 'medical registry' would provide the raw material for many a demographic study, its aim was not merely, and perhaps not even primarily, demographic. Along with demographic data, the *fichas* and books also

[114] See, for instance, Waldemar Gomes Teixeira, *Relatório da Zona Sanitária do Cuanza para 1930*, Junho de 1931, in: AHU, MU AGC 2336; Amaral, Anthero Antunes de, *Relatório da missão médica de reconhecimento nosográfico de Catete, 1930-1931* (Colecção de relatórios, estudos e documentos coloniais; 27), Lisboa: Agência Geral das Colónias, 1935.
[115] See, for instance, "Essai d'étude démographique du secteur Bas-Congo", in: Fonds Reine Élisabeth pour l'Assistance Médicale aux Indigènes du Congo Belge (FORÉAMI) (ed.), *Rapport Annuel sur l'Exercice 1931,* Bruxelles: Hayez, 1932, pp. 109–131.
[116] This shift is discussed below in this chapter.
[117] See Chapter 2.

recorded information on diseases and treatments. Demography and hygiene clearly went hand in hand.[118]

After his arrival in Angola in 1928, João Camoesas became one of the most fervent supporters of this registration system, which had been started in the Cuanza Zone in 1927 and would gradually be extended to all zones and sectors in the following years. In order to further enhance its potential, he recommended that additional medical data (on other diseases) as well as basic physiological information, ranging from height and weight to the much en vogue Pignet index – an index that evaluated physical robustness by relating thorax circumference to height and weight – be registered. To facilitate the identification of individuals, he also wanted to introduce metal bracelets similar to those worn by soldiers during the First World War. If well organized, he claimed, this medical registry would offer tangible advantages in the administrative realm, facilitating and rationalizing tax collection and labour recruitment, while simultaneously offering a huge amount of scientific data with which the vitality of the population could be studied.[119]

Camoesas' ideas did not entirely go unheeded. In 1930, the head of the Cuanza Zone, Waldemar Teixeira, adopted Camoesas' model of register cards with minor changes with regard to the area around Cazengo. Accordingly, he measured more than 5,000 people from both sexes and all ages and calculated their Pignet index.[120] For Waldemar Teixeira, this was an experiment, however, and it is rather unlikely that this time consuming procedure was extended to all AMI sectors. Nevertheless, Camoesas' recommendations show to what extent hygienists in the Interwar Period dreamt of a 'legible' population for the sake of medical and administrative governance.

With regard to those who had died or left the region, doctors were forced to rely on what other villagers (or local administrators) reported. Particular attention was paid to the registration of births. In order to keep track of newborns, doctors not only registered the births that were reported to them, but also took note of ostensibly pregnant women during the concentrations. They wrote down the probable moment of childbirth and exhorted expectant mothers to bring their babies to them once they had been born.[121]

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[118] For a detailed description of this system, see for instance *Assistência Médica aos Indígenas (1929)*, pp. 296–297.

[119] Camoesas, *Organização AMI*. For more biographic information on Camoesas, see Chapter 2.

[120] Teixeira, *Relatório Cuanza 1930*, pp. 27-32. For a further analysis of these data and the use of the Pignet index in general, see Chapter 4.

[121] Teixeira, *Relatório Cuanza 1930*, pp. 8 and 15; Ornelas, Augusto; Mesquita, Bruno Pereira de, *Relatório da missão médica de assistência aos indígenas do Cuanza, 1929* (Colecção de relatórios, estudos e documentos coloniais; 24), Lisboa: Agência Geral das Colónias, 1935, p. 24; Gama, Eduardo Diniz da, "Um ano de chefia no sector Ambaca-Encoje", *Boletim da Assistência Médica aos Indígenas e da Luta contra a Moléstia do Sono* 3,7-12 (1929), pp. 536–541, here p. 541; Mora, António Damas, "A mortalidade infantil de brancos e indígenas nas

In order to get a better grasp of the long-term biological reproduction levels of African populations, doctors also resorted to another method: oral interviews. During the concentrations, they questioned women – all of them or a sample group – in and beyond childbearing age about their reproductive life. Doctors asked how many children they had born and tried to determine the number of abortions, stillbirths and children that were still alive. With this information, they calculated total and age-specific fertility rates, mapped the incidence of abortions and stillbirths, and sometimes even determined infertility rates. Indications of the number of children still alive served to determine the 'survival index' *(índice de sobrevivência)* and hence to give an idea – however imprecise since it was often not asked at what age the children had died – of 'infant' mortality rates. Such oral interviews were conducted in the AMI sectors, but also during mobile medical missions *(missões volantes* and *missões de reconhecimento*) in regions that were not yet under continuous medical control. In the absence of a functioning registration system, the interviews were the only means with which to obtain an approximate idea of fertility and infant mortality levels in these areas. That interview-based fertility studies became a common feature of medical demography in the late 1920s demonstrates the particular importance the health services in Angola attached to these issues.[122]

Of course, both methods – the registration system and the retrospective interviews – were not perfect and, in their reports, some doctors openly addressed the problems involved. The most basic was that the accuracy of their data was largely contingent upon the collaboration of the African population. Certainly, some doctors expressed their confidence in the registration system. Diniz da Gama, for instance, remarked that in the medical sector under his control very few persons failed to attend the concentrations and that expectant mothers would even report their pregnancy to the AMI personnel right from the outset. These cases, he added, were duly registered and "all pregnant women thus become responsible towards us for the foetus and, in the case of an abortion, they come and tell us. On this point,

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Colónias de Angola e Moçambique, suas causas principais e remédios possíveis. Métodos para a organização de estatística da mortalidade infantil", in: Comissão Executiva dos Centenários (ed.), *Memórias e comunicações apresentada ao Congresso Colonial (IX Congresso)* (Publicações do Congresso do Mundo Português; 14-16), vol. 14, Lisboa, 1940, pp. 557–625, here p. 576.

[122] For fertility studies in the Cuanza Zone, see for instance, Teixeira, *Relatório Cuanza 1930*, pp. 15, 20-21, 24-26 and Amaral, Antero Antunes do, "Natalidade e mortalidade indígenas", *Boletim Sanitário de Angola* 2 (1939 [printed 1941]), pp. 171–185, here p. 172. For such studies in mobile missions, see, for instance, Alfredo de Rezende, Missão Volante da Lunda, summarized in: "Assistência Médica aos Indígenas", *Boletim da Assistência Médica aos Indígenas e da Luta contra a Moléstia do Sono* 3,3 (1929), pp. 294–319, here pp. 310–311; Amaral, *Relatório Catete 1930-1931* and João Araújo de Freitas and Luis Pinto de Fonseca, *Brigada de Estradas da Província de Angola – Relatório dos médicos referente ao reconhecimento de Galangue*, Nova Lisboa, 31.12.1930, p. 8-12, in: AHU, MU, DGAPC 407.

some even say jokingly that the census of the [medical] assistance [services] is so complete that the blacks *[pretos]* are even registered still in the belly of the mother."[123] Others, however, were far more sceptical and expressed their frustration over the reporting strategies of their African 'patients'. Jacinto de Sousa, for example, complained that it was nearly impossible to get even an approximate idea of the birth rates in the region he was prospecting, due to the fact that he "had bumped plenty of times into the flagrant lies of the natives, the fruit of old and ingrained habits of mistrust".[124]

It must be recognized that Jacinto de Sousa's complaints referred to his mobile mission in the Dande region, an area that was not yet run as an AMI sector at the time. In fact, reports from such AMI sectors or zones often made reference to the reluctance among Angolans to declare births, as they had no interest in doing so. Deaths, on the other hand, were announced with greater ease "because of the benefits associated with such a declaration".[125] The registration system was obviously not perfect, and, in spite of Diniz da Gama's assertions, pregnant women might have been – together with young adult males – among those who avoided convocations most in order to escape the registration of their future children.

If doctors were to obtain good data, the cultivation of trust was of paramount importance. In a general manner, doctors' reports often noted that registration initially met with much resistance and that they had to struggle to alleviate the fears of Africans that the data would be used for the purposes of taxation, labour recruitment or conscription.[126] The success of the operation hinged on the persuasive power of the doctors, but also on the collaboration of intermediaries, such as African nurses and local chiefs, as well as missionaries and local administrators. Local administrators were obliged to assure that those who had been summoned effectively appeared at the concentrations, but frequent conflicts between administrators and doctors often thwarted efficient collaboration.[127] In those situations in which doctors could not rely on local alliances to dissipate mistrust and in which they had neither the time nor the means to persuade the population or to punish no-shows, all

[123] Gama, *Um ano de chefia,* p. 541.
[124] Sousa, Jacinto de, *Relatório da missão médica volante de assistência aos indígenas do Dande, 1928* (Colecção de relatórios, estudos e documentos coloniais; 23), Lisboa: Agência Geral das Colónias, s.d., p. 16.
[125] Teixeira, *Relatório Cuanza 1930,* p. 15; Director of the Health Services of the Province in Luanda, quoted in Raúl de Lima, *Relatório do Governo da Província de Luanda para 1938, 30.04.1939*, p. 68, in: AHU, MU, DGAC 543 (here quote); Mora, *A mortalidade infantil,* pp. 575–576.
[126] For a telling example, see Silva, Francisco Venâncio da, "Relatório do Chefe da Missão Volante do Distrito de Malange referente aos meses de Setembro a Novembro de 1927", *Revista Médica de Angola* 6 (1928), pp. 219–243, here p. 221.
[127] See, for instance, Gama, *Um ano de chefia*.

too often the concentrations remained empty.[128] Ultimately, because of the simultaneity of registration and medical treatment, the quality of the demographic data also depended much on the attractiveness of Western biomedicine.

Retrospective interviews with women allowed for even fewer possibilities to effectively control the numbers. Here, intelligence was fully dependent upon the informants, upon the memories of the African women, but also their goodwill in not under- or over-reporting their childbearing practices.[129] A woman's motivations to retroactively reshape her fertility could have been manifold, ranging from mistrust towards colonial intrusions to the unwillingness to confess childlessness in front of other women, given the high prestige that was assigned to motherhood and the grave dishonour associated with childlessness.[130]

Inevitably, the contingencies of medical demography created a great tension. On the one hand, doctors, or at least most of them, were aware of the deficient nature of their data. On the other hand, they knew that it was nearly impossible to overcome the biases in the production of such and that there were no better data available. In other words, they had no alternative but to analyse and base their conclusions upon them, unless they wished to discard altogether the very possibility of studying population dynamics in rural Angola.

This partly explains why doctors and early demographers continued to use both medical registries and oral interviews with women for demographic studies until well after the first censuses of 1940 and 1950. Nuno Alves Morgado, the leading colonial demographer of the Centre of Demographic Studies *(Centro de Estudos Demográficos)* in Lisbon, thus made an extensive analysis of the data gathered by the *Inspecção dos Serviços da Assistência Médica aos Indígenas* (ISAMI) in northern Angola in the 1950s.[131] Moreover, colonial doctors like Alexandre Sarmento and Fernando Figueira Henriques still conducted interview-based fertility studies in the 1950s and early 1960s in specific areas or among specific ethnic groups.[132] Indeed, the advantage of this method was that it was very flexible: it could be

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[128] João Araújo de Freitas and Luis Pinto de Fonseca, *Brigada de Estradas da Provincia de Angola – Relatorio dos Medicos referente ao reconhecimento de Galangue*, Nova Lisboa, 31.12.1930, in: AHU, MU, DGAPC 407; João Araújo de Freitas, *Relatório das Brigadas de Estudo – Sub-Brigada Sul*, Cuengué, 31.10.1931, p. 2; 8, in: AHU, MU, DGOPC 737.

[129] Teixeira, *Relatório Cuanza 1930*, p. 24; Sousa, *Relatório missão Dande 1928,* p. 16.

[130] For women's sense of shame in confessing the dishonour of being childless, see Cazanove, "Essai de démographie des colonies françaises", *Bulletin de l'Office International d'Hygiène Publique* 22,8 (supplément) (1930), here p. 36. On the colonial assumption of generalized pronatalism in African societies and the dishonour of infertility, see below.

[131] Morgado, Nuno Alves, *Aspectos da evolução demográfica da população da antiga província do Congo (1949-1956)* (Junta de Investigações do Ultramar - Estudos de Ciências Políticas e Sociais; 24), Lisboa: C.E.P.S., 1959.

[132] Sarmento, Alexandre; Henriques, Fernando Figueira, "Alguns aspectos demográficos dos bochimanes do Sul de Angola", *O Médico* 149 (1954); Sarmento, Alexandre; Henriques, Fernando Figueira, "Contribuição para o estudo da demografia dos Cuanhamas", *Jornal do Médico* 26,626 (1955), pp. 253–257; Ministério da Ultramar -

applied virtually everywhere and could easily be narrowed to specific ethnic groups. But the longevity of both methods also points to the continuous problems with data collection that were experienced by the civil authorities. In many areas, the civil registry of births and deaths, which became compulsory for the *indigenous* population from 1942 on, did not function well.[133] In 1950, the birth and death rates recorded by the *Inspecção dos Serviços da Assistência Médica aos Indígenas* in northern Angola were still almost twice as high as those recorded by the civil authorities.[134]

It must be noted that neither fertility rate studies nor the idea of a medical population registry were inventions of Portuguese doctors in Angola. Haunted by the same fears of falling birth rates and extreme infant mortality, doctors in other African colonies had already introduced these novel forms of demographic inquiries. Interview-based small-scale fertility studies had already been conducted in some German colonies just before the First World War and were carried out in Belgian and French colonies from the early 1920s onwards.[135] The idea of a medical population registry had been explored by the Swiss doctor Jacques Schwetz during his anti-sleeping sickness mission in the Belgian Congo.[136]

There is much to suggest that inter-imperial learning and local initiatives were more crucial for the introduction and use of the aforementioned methods of medical demography in Angola than the colony's connections to its metropolis. Firstly, Portuguese doctors had generally received little to no training in demography before going to the colonies: during the first decades of the twentieth century, demography was not included in the curriculum of

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Junta de Investigações do Ultramar (ed.), *Contribuição para o estudo da fertilidade da mulher indígena no Ultramar português* (Estudos, ensaios e documentos; 38), Lisboa: Junta de Investigações do Ultramar, 1957; Sarmento, Alexandre; Henriques, Fernando Figueira, "Contribuição para o estudo da fertilidade da mulher nativa da tribu Ganda", *Revista do Centro de Estudos Demográficos* 13 (1962), pp. 69–85.

[133] Cruz, José Ribeiro, *Disposições regulamentares sôbre indemnizações, pensões e compensações por acidentes de trabalho; cadernata de identificação; registo civil dos indígenas; tribunais privativos; a concessão de alvarás de assimilação,* Luanda, 1942; Morgado, Nuno Alves, "A demografia do Ultramar português. Estudo descritivo e crítico da posição actual no que se refere a documentação estatística e estudos relativos à demografia ultramarina", *Revista do Centro de Estudos Demográficos* 9 (1954-55), pp. 71–283, here pp. 113–123.

[134] Morgado, *Aspectos,* pp. 17–23.

[135] For the German colonies, see Peiper, "Über Säuglingssterblichkeit und Säuglingsernährung im Bezirk Kiwa (Deutsch-Ostafrika)", *Archiv für Schiffs- und Tropenhygiene* 14,8 (1910), pp. 233–259 and especially the very elaborate and thoughtful study by Ernst Rodenwaldt: Rodenwaldt, Ernst, "Ein Beitrag zu der Frage des Bevölkerungsrückgangs in den afrikanischen Schutzgebieten", *Mitteilungen aus den deutschen Schutzgebieten* 28,3 (1915), pp. 145–160. On this study, see also Kuczynski, Robert René, *The Cameroons and Togoland. A demographic study,* London: Oxford University Press, 1939, pp. 383–388. On Rodenwaldt's career and later implications with the nazi regime, see Eckart, Wolfgang U., "Generalarzt Ernst Rodenwaldt", in: Ueberschär, Gerd R. (ed.), *Hitlers militärische Elite. 68 Lebensläufe,* 2nd revised ed., Darmstadt: WBG, 2011, pp. 210–222. For the Belgian colonies, see for instance Schwetz, *Contribution*; Schwetz, J., "Deuxième contribution à l'étude de la démographie congolaise", *Congo. Revue générale de la colonie belge* 5,1 (1924), pp. 333–365; Mouchet, R., "La natalité et la mortalité infantile dans la Province Orientale", *Annales de la Société Belge de Médecine Tropicale* 6 (1926), pp. 165–174 and, for the French colonies Cazanove, *Essai de démographie*.

[136] See Schwetz, *Contribution*, esp. pp. 299-300.

Portugal's medical faculties nor in that of the School of Tropical Medicine.[137] Secondly, references to inter-imperial exchanges explicitly appear in the sources. During the LNHO West African study tour, Damas Mora had attended a pioneering lecture in techniques and practices of medical demography in French Togo, and studies from other colonies, like Schwetz' articles or a long article by Cazanove on demographic inquiries in the French Empire, were cited as examples and role models by doctors in Angola.[138] Finally, the case of the *Brigadas de Estudos* ('study teams') in an exemplary manner demonstrates how, still in the early 1930s, fertility studies were the product of concerns and initiatives in the colony and were neither designed, nor commissioned, nor coordinated by the Health Department of the Colonial Ministry. The *Brigadas* had been established in 1930 by the Minister of Colonies (Salazar) in order to study the construction and improvement of ports, railways and roads in Angola as a means to stimulate the economic valorization of the colony. Alongside engineers, agronomists and geologists, each of the study teams also included at least one doctor, whose assignment it was to monitor the health of the European team members and their African workers and to carry out medical prospections in future construction areas.[139] Yet against the initial and very detailed instructions released by the colonial health department in Lisbon, at least two of these doctors, João Araújo de Freitas and Pinto de Fonseca, repeatedly inserted in their medical reports fertility studies for which they had interviewed many hundreds of Angolan women.[140] The head of the Department for Health Personnel in the Colonial

[137] Yet some basic notions of demography were possibly taught in the courses of public hygiene and epidemiology at the medical schools and the EMT respectively. Personal communication by Rita Garnel, 2 September 2013. See also Garnel, Maria Rita Lino, "Da Régia Escola de Cirurgia à Faculdade de Medicina de Lisboa. O Ensino Médico, 1825-1950", in: Matos, Sérgio Campos; Ó, Jorge Ramos do (eds.), *A Universidade de Lisboa, séculos XIX-XX,* vol. 2, Lisboa, 2013, pp. 538–650.

[138] For explicit references, see Ornelas/Mesquita, *Relatório Cuanza 1929,* pp. 23–24; Teixeira, *Relatório Cuanza 1930,* p. 14. For the lecture in Togo, see Dr. Mercier, *Conférence sur la démographie et les statistiques démographiques au Togo, faite en présence de la mission des médecins échangistes à Atakpame*, 20.04.1926, in: LONA, R 955, 12B/54511/41908. In his comprehensive overview of the French empire, Cazanove praised Togo as the most advanced French territory in terms of demographic studies, see Cazanove, *Essai de démographie,* p. 22.

[139] Ministério das Colónias, *Decreto 18.268 que cria cinco brigadas técnicas destinadas ao estudo de obras que directamente interessem ao fomento de Angola*, 30.04.1930, in: *Diário do Governo, Série I,* 30.04.1930, pp. 788–789; Ministro das Colónias, *As brigadas de estudos para Angola*, in: A Província de Angola, 01.05.1930, p. 2. For the doctors' names, see *As brigadas de estudo*, in: A Província de Angola, 25.06.1930, p. 2. While there was general agreement among Portuguese colonialists in both the metropolis and the colony on the necessity of these infrastructure works, some, like Cunha Leal and Saldanha, criticized that the Colonial Ministry already disposed of sufficient information to start the works immediately. See, for instance, Couceiro, Henrique de Paiva, *Projecto de fomento geral d'Angola,* Lisboa, 1931, pp. 18–24 and for critique Saldanha, E. A., *Colónias, Missões e Acto Colonial,* Vila Nova de Famalição: Minerva, 1930; Cunha Leal, Francisco Pinto da, *As minhas memórias. Coisas de tempos idos*, 3 vols, Lisboa: Edição do Autor, 1966-1968, pp. 346–347.

[140] João Araújo de Freitas and Luis Pinto de Fonseca, *Brigada de Estradas da Província de Angola – Relatório dos médicos referente ao reconhecimento de Galangue*, Nova Lisboa, 31.12.1930, p. 8-12, in: AHU, MU, DGAPC 407; João Araújo de Freitas, *Relatório das Brigadas de Estudo – Sub-Brigada Sul*, Cuengué, 31.10.1931, p. 5-11 and João Araújo de Freitas, *Brigada de Estradas de Angola, Sub-Brigada Sul, Relatorio dos Serviços de Saude referente aos mezes de Janeiro e Fevereiro de 1932*, Cuengué, 29.02.1932, p. 2-5 both in:

Ministry, Assunção Velho, who had been a state doctor in Angola himself, noted the deviance from the instructions, but was nevertheless full of praise for their "intense dedication to scientific work", which was much needed with respect to the "medical assistance to the African populations".[141] The fact that both young doctors had previously been employed in AMI sectors suggests that they had drawn their inspiration for these studies from their medical work there. [142]

The impact of medical demography: From low fertility to high infant mortality

Although they were well aware of the contingencies and deficiencies of the demographic data they had gathered, doctors did not refrain from interpreting and using them. The birth and death rates registered in the Cuanza Zone are an illuminating example. Waldemar Teixeira, head of the Cuanza Zone in 1930-1931 and author of a thoughtful demographic study, thus attributed the increase of the registered birth rate from 8.4‰ in 1927 to 40.81‰ in 1930 mainly to the progress in medical occupation during these years; this was also apparent in the increase in the death rate from 11.4‰ to 29.58‰. Nevertheless, Teixeira and many others also used these data to 'prove' that population decline, still visible in the negative growth rates of 1927, had slowed in 1928 and had actually reversed to become a question of population growth in 1929, a trend that was further consolidated in 1930. This reversal from population decline to population growth, they argued, was the result of the AMI health programme in the Cuanza Zone.[143] Of course, such over-generalizations were not exceptional. In his seminal 1937 essay on colonial populations, René Kuczynski criticized the "appalling" extent to which colonial officials were "tempted to draw far-reaching conclusions from the scanty population data at their disposal".[144] There was a clear rationale to their claims: by giving credence and publicity to these data and their interpretation in both internal reports and

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AHU, MU, DGOPC 737. Compare with the instructions in Ministério das Colónias, Instruções para a elaboraçã dos relatórios dos Servios de Saúde das Brigadas, [May 1930], in: AHU, MU, DGAPC 407.

[141] Tenente-Coronel Médico Assunção Velho, Parecer, 09.03.1931, written on the first page of João Araújo de Freitas and Luis Pinto de Fonseca, *Brigada de Estradas da Província de Angola – Relatório dos médicos referente ao reconhecimento de Galangue*, Nova Lisboa, 31.12.1930, in: AHU, MU, DGAPC 407. Assunção Velho had been engaged in anti-sleeping sickness missions in Angola in the 1910s, see Velho, Luís Baptista de Assunção, "A Tripanossomose humana em Angola (Relatórios etc.)", *Revista Médica de Angola* 2 (1921), pp. 7–196.

[142] For biographical data on both doctors, see AHU, MU, DGAPC 34.

[143] Teixeira, *Relatório Cuanza 1930,* pp. 14-15; for the numbers and rates, see pp. 18-19. A year before, his predecessor Augusto Ornelas had already analysed the data from 1927 to 1929 in similar terms, see Ornelas/Mesquita, *Relatório Cuanza 1929*, pp. 22-23. See also Gama, *Um ano de chefia,* p. 540; Mora, António Damas, *A luta contra a moléstia do sono em Angola (1921-1934)* (Relatórios da Direcção dos Serviços de Saúde e Higiene de Angola; 2), Luanda, 1934, pp. 216; 221.

[144] Kuczynski, *Colonial Population,* pp. xii–xiii.

press articles, doctors aimed to legitimize the health investments and the particular methods of the AMI programme to the general government of the colony and the wider public.[145]

Medical demography also reshaped the debate on fertility and infant mortality in Interwar Angola. Up to that point, both low fertility and high infant mortality had frequently been mentioned as major causes of population decline. Now, on the basis of the birth and fertility rates calculated in medical sectors or during mobile missions, many a doctor concluded that, in most parts of the colony, fertility was high, even much higher than in the metropolis, and therefore could not be in itself a cause of depopulation.[146] According, for instance, to Antero Antunes do Amaral, who had personally registered birth rates between 44‰ and 58‰ and a total fertility rate of seven pregnancies per woman in the different sectors of the Cuanza Zone where he worked during the 1930s, the matter was clear: "There is in fact no natality problem to resolve", he stated emphatically.[147]

In the *mémoire* he presented at the Colonial Congress in 1940, António Damas Mora basically argued along the same lines, but he presented a more complex view. Inquiries had shown, he wrote, that women above the age of fifty had, on average, born five to six children during their reproductive life, "with the exception", however, "of regions where the native suffers from pronounced and permanent undernutrition".[148] One of the examples for this were the so-called 'Bushmen' in South Angola. Due to the "permanent state of undernutrition" and "extreme misery" in which they lived, the 'Bushmen' suffered from exceptionally low fertility rates and were on the brink of extinction, Damas Mora stated.[149] This observation reflected the concern that Damas Mora had voiced throughout the interwar years over malnutrition and its adverse effects on the health and reproductive life of populations.[150] To this material explanation for regional and/or ethnic differences in fertility, Damas Mora also added evolutionary and psychological factors. "Low fertility", he wrote, "can also mean the senescence or ageing of a race". Maybe, he concluded, the decline of the Bushmen and Australian aborigines was the result of their "collective old age *(velhice colectiva)*" and they would disappear just as the Tasmanians had in the nineteenth century. The natives of the

[145] See, for instance, António Damas Mora, *Assistência Médica aos Indígenas, em Angola*, in: A Província de Angola, 06.08.1934-08.08.1934.
[146] For the comparison with mainland Portugal, see Mora, *A mortalidade infantil,* p. 595; Sarmento, Alexandre, *Aspectos da natalidade e mortalidade infantil em Angola. Separata do Jornal do Médico,* Porto: Costa Carregal, 1944, p. 2.
[147] Amaral, *Natalidade e mortalidade,* pp. 172 (here also quote).
[148] Mora, *A mortalidade infantil,* pp. 573–574.
[149] *Ibid.,* pp. 595–596.
[150] See Chapter 4.

"Bantu lineage", the overwhelming majority in Angola, by contrast, had kept the "psychology of the primitive peoples concerning the advantage of having many children".[151]

With this last remark, Damas Mora probably wanted to place the Bantu reproductive behaviour in contrast to the decline of fertility in Europe, but he may also have been referring to the theory of deliberate racial suicide, which W.H.R. Rivers had advanced two decades earlier to explain the population decline in Melanesia. Rivers had posited that Melanesians, with the exception of those who had become Christians, refused to have children because they had lost interest in life due to the destruction of their traditional customs and the new hardships brought about by colonial rule. To avoid procreation, they made wide use of contraceptive and abortive practices.[152] Echoing much older anxieties over the use of abortifacients by African slave women in the eighteenth- and nineteenth-century Atlantic World, this psychological explanation of population decline became an influential theory in the Interwar Period.[153] Nancy Rose Hunt has shown that, due to the "'global circulation' of such 'ethnographic commonplaces of colonial intelligence'", tropes of "racial suicide, dying races, empty villages and self-aborting women" widely circulated in (Belgian and French) Central Africa as well.[154] In Angola too, low birth rates were sometimes attributed to the same psychological resistance. In his reports on his inspection of the Dande region in 1928, Jacinto de Sousa thus related a rumour according to which African parents sometimes destroyed male foetuses "to prevent that there would be *serviçais* for the Europeans".[155] But Jacinto de Sousa himself was sceptical and did not know whether to believe this rumour. In Angola, most doctors appear to have assumed, like Damas Mora, that neo-Malthusian practices of birth control were rare, because of the high value the African populations attached to motherhood (and parenthood in general). "When we ponder hygiene and demography," Augusto Ornelas stated, "we recognize immediately [...] that the births of black children are always wanted, that Malthusian practices are not adopted, that criminal abortions do not exist and, finally, that

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[151] Mora, *A mortalidade infantil,* pp. 595–596.

[152] Rivers, W. H. R., "The Pyschological Factor", in: Rivers, W. H. R. (ed.), *Essays on the Depopulation of Melanesia,* Cambridge: Cambridge University Press, 1922, pp. 84–113.

[153] See Schiebinger, Londa, "Feminist History of Colonial Science", *Hypatia* 19,1 (2004), pp. 233–254 and Paugh, Katherine, *Rationalizing Reproduction. Race, disease, and fertility in the British Caribbean and the Atlantic world during the age of abolition, 1763--1833* (Ph.D. Dissertation - University of Pennsylvania), 2008.

[154] Hunt, Nancy Rose, "Colonial Medical Anthropology and the Making of the Central African Infertility Belt", in: Tilley, Helen; Gordon, Robert J. (eds.), *Ordering Africa. Anthropology, European imperialism and the politics of knowledge,* Manchester: Manchester University Press, 2007, pp. 252–281, here pp. 252-254, quotes p. 254.

[155] Jacinto da Sousa, *Relatório da Missão Médica Volante de Assistência aos Indígenas do Dande 1928*, s.d., p. XIV, in: AHU, MU, AGC 2336. Interestingly, the censor crossed out this passage and the version that was printed in the mid-1930s did indeed appear without this remark, compare Sousa, *Relatório missão Dande 1928,* p. 17.

births are very numerous."[156] As proof for the innate pronatalism of Africans, doctors and other colonial officials referred to the social advantages of having many children and the consequences of childlessness in African societies. Childlessness was not only believed to be a curse and a dishonour for African women, but it was also a commonly accepted ground upon which their husbands could obtain a divorce, as well as compensation from the woman's family.[157]

Doctors did not deny that there were cases of miscarriages and childless women, but they generally perceived them to be the consequence of illnesses, most notably sleeping sickness, helminthiasis (parasitic worm diseases) and venereal diseases like syphilis and gonorrhoea. Yaws or pian, a widespread skin disease with syphilis-like symptoms, was frequently attributed as the cause as well.[158] Concern over venereal diseases had been voiced much earlier, but it considerably intensified with the geographical extension of African healthcare in the 1920s. Reports stressed the high incidence of gonorrhoea and syphilis in various regions, especially in the eastern district of Moxico, where an ephemeral special

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[156] Ornelas, Augusto, "A obra de protecção á criança negra", *Boletim da Assistência Médica aos Indígenas e da Luta contra a Moléstia do Sono* 3,7-12 (1929), pp. 523–526, here pp. 525 (quote). See also Amaral, *Natalidade e mortalidade,* p. 172; Mora, *A mortalidade infantil,* pp. 587; 588.

[157] Magalhães, António Leite de, *Relatório do Governador do Distrito do Cuanza-Sul. Geografia histórica, física, política e económica do distrito (referido a 30 de Junho de 1922),* Lisboa: Centro Tipografico Colonial, 1924, pp. 66–67; Direcção dos Serviços e Negócios Indígenas [Ivo Benjamin de Cerqueira], *Organisação social indigena. Seu estado actual - usos e costumes*, 1930, in: AHU, MU, AGC 2336, p. XVII; Archer, Maria, *Ninho de Bárbaros* (Cadernos Coloniais; 15), Lisboa: Editorial Cosmos, 1937, pp. 29–30; Mora, *A mortalidade infantil,* p. 588. See also Silva, João de Mattos e, *Contribuição para o estudo da região de Cabinda. Memoria para o Congresso Colonial Nacional,* Lisboa: Typographia Universal, 1904, pp. 179-180; 185; 254. Silva had been a government doctor in Cabinda in the late nineteenth century for almost nine years.

[158] See, for instance, Sousa, *Relatório missão Dande 1928,* p. 16; Mora, António Damas, "O estado actual da Assistência Médica aos Indígenas na colónia de Angola e outras colónias estrangeiras do grupo da Africa inter-tropical", *III Congresso Colonial Nacional de 8 a 15 de Maio de 1930. Actas das Sessões e Teses,* Lisboa: Tip. e Pap. Carmona, 1934, here p. 44; Mora, *A mortalidade infantil,* p. 594. A similar view for Mozambique can be found in Ribeiro, Aires Pinto, *Apontamentos para o estudo da vitalidade das populações cafreais de Angoche. Assistência médica ao indígena durante o ano de 1932,* Lourenço Marques: Imprensa Nacional, 1933, p. 6. For the causal link between venereal diseases and infant mortality, including stillbirths, see Neves, José da Silva, "A lucta antivenérea nas colonias", *Revista Médica de Angola* 4,3 (1923), pp. 167–177, here p. 170; António de Almeida, *Relatório do Distrito de Moxico para 1931*, Febr. 1932, pp. 21-22, in: AHU, MU, GM 600 and Junqueira, Manuel, *As Missões Católicas e a Assistência Social aos nossos irmãos africanos. Separata de 'Coimbra Médica', vol. X, n° 6 - Junho 1943,* Coimbra: Livraria Académica, 1943, pp. 15–16. On the presumed causal relation between yaws and miscarriages, see Silva, Francisco Venâncio da, "O pian", *Boletim da Assistência Médica aos Indígenas e da Luta contra a Moléstia do Sono* 3,1 (1929), pp. 1–16, here p. 1. According to medical reports, yaws was very common in the Congo region, but relatively easy to treat, see Santos, Joaquim Pires dos, "Relatório do Chefe do Sector Sanitário do Congo-Oeste (São Salvador) referentes aos meses de Junho a Dezembro de 1927", *Revista Médica de Angola* 6 (1928), pp. 147–217, here pp. 181–207; Silva, Avelino Manuel da, *Serviço de Assistência aos Indígenas no distrito do Congo, 1930. Relatório elaborado pelo chefe da zona sanitária do Congo, Dr. Avelino Manuel da Silva* (Colecção de relatórios, estudos e documentos coloniais; 9), Lisboa: Agência Geral das Colónias, [193-], pp. 21–26. On the difficulty of distinguishing yaws from syphilis, see Silva, *O pian,* pp. 2–3 and Summers, *Intimate colonialism,* pp. 787–788. According to Headrick, yaws and syphilis were both caused by treponematoses and possibly went back to the same disease, which had then developed into different forms according to climate: yaws in tropical areas, endemic syphilis in torrid climates and syphilis in temperate climates, see Headrick, Rita, *Colonialism, Health and Illness in French Equatorial Africa, 1885-1935,* Atlanta: African Studies Association Press, 1994, pp. 37–38.

service to fight the diseases was set up in 1927.[159] Doctors were unanimous in their blame of Europeans (and later of African soldiers) for the introduction of these diseases, often linking them to the 'pacification' campaigns, but many of them also blamed the rapid spread of STDs on the "great liberty of sexual relations" among Africans or, as one doctor put it, their "animality".[160] In the first decades of the twentieth century, the belief that venereal diseases were on the rise, and had at times even reached epidemic proportions, triggered depopulation scares throughout most of colonial Africa, insofar as they were held responsible for the high rates of abortions, stillbirths, infertile women and infant mortality.[161]

What is striking about the Angolan case, however, is that, after the initial shock of the 1920s, the colonial health services do not seem to have attached much importance to venereal diseases. By the early 1940s, they had even disappeared from the list of the colony's most important endemic diseases.[162] One possible explanation for this is that in eastern Angola –

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[159] For Moxico, see "Distrito do Mochico - Relatório dos Serviços de Saúde referente a 1927", *Boletim da Assistência Médica aos Indígenas e da Luta contra a Moléstia do Sono* 2,12 (1928), pp. 339–342, here pp. 340–341; Almeida, *Relatório do Distrito de Moxico para 1931*, pp. 21-22 and 49. See also Mora, António Damas, "A Assistência Médica aos Indígenas e a luta contra a propagação da moléstia do sono, em 1927. Relatório apresentado à Comissão de Assistência aos Indígenas, na sua sessão, extraordinária, de 21 do corrente mês", *Boletim Mensal da Luta contra a Propagaçõ da Moléstia do Sono e da Assistência Médica ao Indígena* 1 (1927), pp. 1–13; Mora, António Damas, "Les services de l'assistance médicale indigène en Angola, pendant 1927", *Revista Médica de Angola* 6 (1928), pp. 9–17, here p. 14; Mora, António Damas, "Dos Serviços de Assistência aos Indígenas durante o primeiro semestre de 1928. Relatório do vogal Director dos Serviços de Saúde e Higiene", *Boletim da Assistência Médica aos Indígenas e da Luta contra a Moléstia do Sono* 2,1-8 (1928), pp. 23–35, here pp. 30–32; Neves, José da Silva; Sousa, Jacinto de, "Assistência Médica aos Indígenas. Relatório apresentado a Sua Ex.a o Ministro das Colónias quando da sua visita a Angola", *Boletim da Assistência Médica aos Indígenas e da Luta contra a Moléstia do Sono* 3,4-6 (1929), pp. 433–442, here pp. 438–439. For other regions, see Gama, Eduardo Armando Denís da, "Missão Volante de Assistência aos Indígenas do Planalto de Benguela. Relatório dos trabalhos efectuados pelo chefe da Missão Volante da asistência aos indígenas do planalto de Benguela, durante o trimestre Maio-Julho de 1928", *Boletim da Assistência Médica aos Indígenas e da Luta contra a Moléstia do Sono* 2,1-8 (1928), pp. 59–66, here p. 66; Silva, *Relatório Missão Volante (1927),* p. 237; "Distrito do Bié - Relatório dos Serviços de Saúde referente a 1927", *Boletim da Assistência Médica aos Indígenas e da Luta contra a Moléstia do Sono* 2,12 (1928), pp. 337–338.

[160] *Distrito de Mochico - Relatório 1927*, p. 340 (first quote); Pinto, Bernardo Ricardo Gomes, "Sector Sanitário Ambris-Dande. Posto Sanitário de Nambuangongo", *Boletim da Assistência Médica aos Indígenas e da Luta contra a Moléstia do Sono* 2,1-8 (1928), pp. 37–58, here p. 45 (second quote). See also Neves, *A lucta antivenérea*; Neves/Sousa, *Assistência Médica aos Indígenas,* p. 438 and Silva, *Serviço de Assistência Congo 1930,* p. 30.

[161] See, for instance, Summers, *Intimate colonialism*; Vaughan, Megan, "Syphilis in colonial East and Central Africa. The social construction of an epidemic", in: Ranger, Terence (ed.), *Epidemics and ideas. Essays on the historical perception of pestilence*, Cambridge: Cambridge University Press, 1992, pp. 269–302; Callahan, Bryan Thomas, *Syphilis and Civilization. A social and cultural history of sexually transmitted disease in colonial Zambia and Zimbabwe, 1890-1960* (Ph.D. Dissertation – John Hopkins University), 2002; Hunt, Nancy Rose, "Fertility's Fires and Empty Wombs in Recent Africanist Writing", *Africa. Journal of the International African Institute* 75,3 (2005), pp. 421–435; Hunt, *Colonial Medical Anthropology*; Hunt, Nancy Rose, "Rewriting the Soul in a Flemish Congo", *Past and Present* 198 (2008), pp. 185–215; Walther, Daniel J., "Sex, Public Health and Colonial Control. The Campaign Against Venereal Diseases in Germany's Overseas Possessions, 1884-1914", *Social History of Medicine* 26,2 (2013), pp. 182–203; Headrick, *Colonialism, Health and Illness,* pp. 36-41; 161-162.

[162] The Boletim Sanitário de Angola, published from 1940 onwards, hardly dedicated any attention to venereal diseases. Symptomatic of this 'silence' are also Lavrador Ribeiro's summaries of the colony's most important diseases, see Ribeiro, Lavrador, "Notas sobre aspectos nosográficos das endemias de Angola", *Boletim Sanitário*

the region with probably the highest incidence of syphilis and gonorrhoea – the sanitary occupation continued to be quite deficient, and therefore the health services may not have grasped the complete extent of the problem.[163] Another reason is that doctors like Damas Mora believed that syphilis was "less damaging to black than to white people" and that it caused less miscarriages in the tropics than in temperate climates.[164]

Leading doctors, one can conclude, stuck to the idea that fertility rates were high by denying the existence of birth control practices and by downplaying the impact of venereal diseases. Due to the reassuring birth and total fertility rates in most of the colony, they did apparently not believe that illness-induced sterility could pose a serious and growing threat to the population's natural ability to reproduce. Infertility, many believed, was a medical and mostly temporary condition that could be resolved by treating the disease that caused it. An anecdote related by Damas Mora perfectly illustrates this attitude: "The Consul of England told me a few days ago that the AMI service was engaging in an unfair competition with the Lady of Muxima. In former times, the native women of the Cuanza-Norte region went in crowds to the Lady, bringing her offerings so that she would bestow children upon them. Nowadays, the native woman who does not get pregnant sends her husband for an injection of atoxyl. This is faster, and, it seems, more efficient."[165] This statement must be read against the backdrop of the alleged recovery of the birth rates in the Cuanza Zone between 1927 and 1930.

This conclusion was inextricably linked to another. While dismissing the notion of low fertility, medical demography simultaneously consolidated the idea that the Angolan population suffered from appalling infant mortality rates and that this was *a*, if not *the* main cause for the stagnation or even decline of the population. "The percentage of children who die in infancy", one AMI doctor summarized it, was so enormous that "although African women were usually extremely prolific, the population [was] either stable or decreasing

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de Angola 5,2 (1942), pp. 45–66 and Ribeiro, Lavrador, "Notas sobre aspectos nosográficos das endemias de Angola (II)", *Boletim Sanitário de Angola* 6 (1943), pp. 177–198.

[163] On the persistence of venereal diseases in eastern Angola and the difficulties of measuring their incidence, see Frederico Leopoldino Rebêlo in António de Almeida, *Relatório do Governo da Província do Bié para 1938*, pp. 117 and 121, in: AHU, MU, DGAC 543. Lavrador Ribeiro also refers to this kind of problem, Ribeiro, *Notas (I),* p. 46.

[164] Mora, *A mortalidade infantil,* p. 607.

[165] António Damas Mora, *Um belo gesto das senhoras de Luanda*, in: A Província de Angola, 01.08.1930, p. 1. For another reference to Muxima as a place where African women prayed to have children, see Mora, *A mortalidade infantil,* p. 588. Today, Muxima is the most important place of Catholic worship and pilgrimage in Angola, see for instance http://www.franciscanos.org.br/?p=44111 [last accessed 02.09.2013] and Matias, Abel, *Angola. Paz só com Muxima,* Santo Tirso: Ed. Ora & Labora, 1993, pp. 136–137. For colonial times, see Rego, A. da Silva, "Correspondência da Senhora de Muxima", *Actas do Colóquio sobre a Presença de Portugal no Mundo,* Lisboa: Acadamia Portuguesa de História, 1982, pp. 193–250; Alvarães, Artur, *Senhora da Muxima. Memórias de revisão,* Cucujães: Esc. Tip. das Missões, 1995.

instead of increasing".[166] Damas Mora was one of the most tenacious, and as director of the health services also influential, supporters of this view. "There is, these days, no epidemic scourge that produces victims in a similar or even approximate proportion", he already stressed in 1930. [167] This was a position he would repeat many times over the next decade. In his voluminous report on the fight against sleeping sickness in Angola, which he wrote upon his departure in 1934, Damas Mora even concluded that, thanks to years of colonial intervention, sleeping sickness had become a "banal disease" and that the colonial health services should now concentrate all its efforts on the most urgent problem of infant mortality.[168] Clearly, infant mortality had already been accused of being terribly high previously, but statistical 'proof' now seemed to turn this assumption into an objective and irrefutable truth, as medical reports in the late 1920s and 1930s recorded infant mortality rates of 50% and more, sometimes even of 70% to 80%.[169]

Below, I will discuss the issue of infant mortality further. Undeniably, it is beyond reasonable doubt that infant mortality rates in Angola were very high at the time, as they were in many other African colonies – doctors certainly did not invent the problem. I will demonstrate, however, that the perception of infant mortality as a tremendous medical and demographic problem was nevertheless more fabricated than it seems. It was, in fact, the product not only of a global increase in the amount of attention paid to infant welfare in the twentieth century, but also of local processes of production, circulation and use of statistical evidence. I will go on to conclude that, for various reasons, the infant mortality rates that were constantly cited in medical and other reports were both ambiguous and inflated.

The central problem was one of definition. Doctors often did not indicate how the alarming infant mortality rates of 50% and higher in their reports had been calculated and, most importantly, what age group was being considered. While the common definition of 'infant mortality' referred to "the number of deaths of infants between 0 and 1 year per thousand live births in the same year"[170], infant mortality rates in Angola appear to have

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[166] Gomes, Manuel Gonzaga, "Reconhecimentos sanitários nas margens dos grandes rios", *Boletim da Assistência Médica aos Indígenas e da Luta contra a Moléstia do Sono* 3,4-6 (1929), pp. 443–456, here p. 450. Similarly, see, for instance, Silva, *Serviço de Assistência Congo 1930,* pp. 9–10 and Amaral, *Natalidade e mortalidade,* p. 174.

[167] António Damas Mora, *Um belo gesto das senhoras de Luanda*, in: A Província de Angola, 01.08.1930, p. 1.

[168] Mora, *Luta contra a moléstia do sono,* p. 233. See also Mora, *A mortalidade infantil,* p. 559.

[169] João Araújo de Freitas and Luis Pinto de Fonseca, *Brigada de Estradas da Província de Angola – Relatório dos médicos referente ao reconhecimento de Galangue*, Nova Lisboa, 31.12.1930, p. 8-12, in: AHU, MU, DGAPC 407; Amaral, *Natalidade e mortalidade*, pp. 173-174.

[170] Thiroux, A., "La natalité et la mortalité infantiles dans les colonies françaises", *Revue Philantropique* 51,408 (15.08.1931), pp. 561–569, here pp. 561 (here quote). The same definition can be found in Blacklock, Mary,

included all deceased children up to the age of fifteen and sometimes even miscarriages and stillbirths.[171] This is a crucial point, since such a broad definition necessarily led to higher mortality rates. A partial explanation for this broad definition might be that infant mortality rates were often calculated by simply inverting the total survival index determined in fertility enquiries (100% minus survival index), without discerning at what age the children had died.[172] Yet, in other colonies, survival indexes were often subdivided into more precise age groups, and there is no compelling reason as to why Angolan doctors could not have done the same.[173] There are strong indications that the use of broadly defined infant mortality rates was not due to a lack of more detailed data. In the medical sectors of the Cuanza Zone, for instance, doctors collected precise data for the 0-1 age group. These data, however, which indicated that about 20% to 30% of all newborns died in their first year of life, were seldom published and still less often cited.[174] The figures that circulated more publicly referred instead to the much higher mortality rate, which included all children up to the age of 15 years.

The key question, in other words, must be why doctors – and sometimes other colonial actors as well – preferred to use these inflated rates. Interestingly, this also happened in other colonies, as complaints from French, British and Belgian doctors about exaggerated infant mortality rates reveal.[175] In his commentary on the international conference on the African Child in Geneva, Lord Lugard grasped the quintessence of the problem when he stated: “the infant mortality recorded in some regions of Africa [...] is so appalling that one wonders whether the term has been loosely interpreted to include deaths of infants of over one year of age.” “In quoting statistics,” he added, “terms must be strictly defined.”[176] While inattentiveness and, in some cases, perhaps also the lack of methodological knowledge may

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Still-birth and Infant Mortality from the pathological point of view - West Africa (Reports to the International Conference on African Children; 1), Geneva: Save the Children International Union, 1931, p. 3.

[171] See, for instance, João Araújo de Freitas and Luis Pinto de Fonseca, *Brigada de Estradas da Província de Angola – Relatório dos médicos referente ao reconhecimento de Galangue*, Nova Lisboa, 31.12.1930, p. 9, in: AHU, MU, DGAPC 407.

[172] For examples, see Alfredo Rezende, *Missão Volante da Lunda*, summarized in *Assistência Médica aos Indígenas,* pp. 310-311, here p. 311; António Damas Mora, *Um belo gesto das senhoras de Luanda*, in: A Província de Angola, 01.08.1930, p. 1.

[173] See, for instance, Rodenwaldt, *Ein Beitrag zu der Frage des Bevölkerungsrückgangs*; Mouchet, *Natalité* and Martial; Beaudiment, R., "Essai de démographie des colonies françaises", *Bulletin de l'Office International d'Hygiène Publique* 30, supplément au n. 2 (1938).

[174] Such data for 1926 and 1930, which covers the entire Cuanza Zone, can be found in the unpublished report Teixeira, *Relatório Cuanza 1930*, p. 21. An article by Antero Antunes de Amaral, published in 1941, suggests that mortality figures for this age group continued to be registered in the Cuanza Zone, or at least in some sectors, throughout the 1930s, see Amaral, *Natalidade e mortalidade,* p. 174. See also de Amaral, *Relatório Catete 1930-1931,* pp. 37-38; 49-50.

[175] Thiroux, *La natalité,* p. 569; Blacklock, *Still-birth and Infant Mortality,* pp. 7–8. See also footnote 177.

[176] Lugard in Sharp, *The African Child,* p. vi.

have accounted for the absence of a transparent definition, the use of inflated infant mortality rates was far from innocent.

There were at least three rationales underlying the use of inflated infant mortality rates. To begin, it was not completely devoid of all medical sense. It reflected a common assumption among colonial doctors that, in contrast to most of Europe, death rates in tropical Africa continued to be very high among children after their first year of life. This argument was presented in a very clear fashion during the international conference on the African child in Geneva in 1931 by Jérôme Rodhain, the former head of the health services in the Belgian Congo (1920-1925) and at the time current Director of the School of Tropical Medicine in Brussels. In his thoughtful report on infant mortality in Central Africa, Rodhain maintained that infant mortality in the strict sense of the term (0-1 year) did not reach the appalling rates of 50% or 80% that colonial reports so often recorded and that, in some areas, rates did not even surpass those in Europe. If *total* infant mortality rates (0-15 years) of more than 40% were common, he stated, this was largely due to high mortality during the phases of 'second infancy' and 'adolescence'. According to Rodhain, mortality in these age groups was considerably higher than in Europe and constituted a distinctive pattern of Central African demography. By way of explanation, he pointed to the acute vulnerability of African children to all sorts of deadly diseases, once they had been weaned and 'abandoned' by their mothers.[177]

Whether this was indeed a Central African specificity is questionable. In his much-cited article on infant mortality in Portugal from 1928, Almeida Garrett advanced exactly the same diagnosis and explanation of high 'post-infantile' (after one year) mortality.[178] But, apart from this, the idea of high 'post-infantile' mortality had many supporters among medical and other demographers in Interwar Belgian Congo and it was also acknowledged among Angolan doctors.[179] The data gathered from demographic surveys and registries in French

[177] Rodhain, Jerôme, *La mortinatalité et la mortalité infantile au point de vue pathologique - Afrique Centrale* (Reports to the International Conference on African Children; 4), Genève: UISE, 1931, pp. 9; 15-16, in: AEG, UISE, 92.4.10. Rodhain was not present in Geneva, but his report had been distributed among the particpants and was summarized for discussion by Postiaux, the official representative of the Belgian government. For Rodhain's career, see Dubois, A., "Jérôme Rodhain (25 janvier 1876 - 26 septembre 1956)", *Bulletin des Séances de l'Académie Royale des Sciences Coloniales, Nouvelle Série* 3 (1957), pp. 159–190. In 1933, the School was transferred to Antwerp and renamed Institute for Tropical Medicine Prince Leopold. Rodhain remained director until his retirement in 1947.

[178] Garrett, *Como organizar a luta,* p. 6.

[179] Mouchet, *Natalité,* pp. 170; 173; Ryckmans, Pierre, "Démographie Congolaise", *Africa. Journal of the International African Institute* 6,3 (1933), pp. 241–258, here p. 257. For Venâncio da Silva's reception of Ryckmans, see Silva, *Serviço Permanente,* p. 101.

Africa in the 1930s largely confirmed the idea of high post-infantile mortality as well.[180] In Damas Mora's opinion, mortality rates of children between 1 and 15 years equalled more or less those of infants in their first year of life, thus leading to total rates of 50% to 60%.[181]

Nevertheless, there is a paradox here. While high 'post-infantile' mortality was a good reason to include older children in the study of mortality rates and causes, it also called for more detailed age-specific data and, hence, cannot explain the lack thereof. In his 1940 *mémoire*, Damas Mora rightly pointed out that such data would have been – and would still be – very useful for designing age-specific health interventions. He added that such mortality rates had even been collected for 0-1, 1-5, 5-10 and 10-15 age groups in the Cuanza Zone, but had not been published.[182]

Arguably, economic rationale and demographic traditions underpinned the circulation and use of comprehensive infant mortality rates (0-15 years) as well. They quantified what the Belgian doctor Mouchet characterized in a telling manner as "waste" *(déchet)*.[183] By this term, he meant those who did not attain productive and reproductive age, or "maturity" in Lord Lugard's words, and hence did not become useful for colonial society as workers and parents.[184] Thereby, it was hardly coincidental that the broad definition of infant mortality mirrored the age distribution in administrative enumerations, where the age of 15 marked the transition from child- to adulthood. Overall, it was in the use of large age groups that the continuity between medical and administrative demography was most palpable: both used to divide the population into children (0-15 years), adults (15-60 years) and elders (over 60 years).[185] These age groups corresponded with specific legal regimes, wherein male adulthood was marked by labour and tax obligations.[186]

Political motives, however, were probably the key factor. The circulation of higher percentages served the agendas of those who favoured stronger medical interventionism in the processes of childbirth and infant healthcare. Proponents were in need of alarming figures to underscore the urgency of the situation and to bolster their demands for investments.[187] It fits into this picture that, while most medical reports indicated how they had calculated 'infant

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[180] Ulmer, Henri, "Quelques données démographiques sur les colonies françaises", *Congrès International de la Population, Paris 1937*, vol. 6 (Démographie de la France d'Outremer), Paris: Hermann et Cie, 1938, pp. 111–127, here pp. 120-127, especially the table p. 126. See also Martial/Beaudiment, *Essai de démographie*.
[181] Mora, *A mortalidade infantil,* pp. 615–616.
[182] Mora, *A mortalidade infantil,* p. 615.
[183] Mouchet, *Natalité,* pp. 166; 170; 171.
[184] Lord Lugard in Sharp, *The African Child,* p. vi. For the full quote, see the introduction of this chapter.
[185] Mora, *Luta contra a moléstia do sono,* pp. 216–217; Teixeira, *Relatório Cuanza 1930,* pp. 17; 23.
[186] See Ministério das Colónias, *Trabalho dos indígenas nas colónias portuguesas. Regulamento geral, aprovado pelo decreto n. °951, de 14 de outubro de 1914,* Lisboa: Imprensa Nacional, 1914, art. 5§2.
[187] Carol Summers has made a similar argument for the spread of exaggerated statistical data on syphilis and its effects on miscarriages, stillbirths and infant deaths in Uganda. See Summers, *Intimate colonialism,* p. 790.

mortality' and what age group was considered (usually 0-15), these 'details' mostly disappeared when the figures were cited by other colonial officials and started to circulate among the wider public. Here, infant mortality rates not only appeared in the highest percentages, but also in absolute terms: 70% to 80% according to the Governor of the Luanda province in 1935, about 70% according to the Native Affairs Director Manuel Pereira Figueira or 60% and more in Galvão's seminal report of 1947.[188] The report by Governor-General Morna (1942-1943) is exemplary for both the vagueness and the political potential of such statements: "We do not exaggerate", he wrote, "if we say that in Angola more than 50% of the children which are born die – there are even regions, like Quissama, where this hecatomb reaches the astonishing and embarrassing figure of 73%".[189] Following the presentation of these data, Morna presented his programme for maternal and infant healthcare.[190]

Statistical evidence produced by medical demographers, one can conclude, was used selectively to construct and support a narrative according to which natality was satisfactory, but infant mortality constituted a serious threat to the future of the colony. This, indeed, became the master narrative in Angola, and it was endorsed by doctors, administrators and missionaries alike.[191] To be sure, this narrative was never entirely able to suppress anxieties over low or declining fertility, which resonated in remarks and debates about infertility, undernutrition, material hardships, birth spacing, polygamy and labour migration.[192] Yet these competing stories never became dominant narratives themselves, in part because birth and fertility rates in Angola compared very favourably with those in Europe and were confirmed by the census of 1940.[193]

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[188] Júlio Garcês de Lencastre, *Relatório do Governador da Província de Luanda, 1934-1935*, p. 36, in: AHU, MU, ISAU 2246; Manuel Pereira Figueira, Relatorio *do Curador Geral dos Indígenas da Colonia de Angola para 1937*, 15.05.1938, p. 11, in: AHU, MU, ISAU 2243; Henrique Galvão, *Exposição do Deputado Henrique Galvão à Comissão de Colónias da Assembleia Nacional, em Janeiro de 1947*, 22.01.1947, p. 24, in: Arquivo Histórico Parlamentar (henceforth, AHP) Reb. 3378, Secção XXVIII, Caixa 48, n. 10, fols. 57-114. On Galvão's report, see Chapter 5.

[189] Morna, Alvaro de Freitas, *Angola. Um ano no Governo Geral (1942-1943), 1. Volume,* Lisboa: Livraria Popular de Francisco Franco, 1944, pp. 174–175.

[190] *Ibid.,* pp. 175–181. On this, see further in this chapter.

[191] See, for instance, Francisco dos Santos Serra Frazão, *Relatorio da Curadoria Geral dos Indigenas, referente aos anos de 1939 e 1940, apresentado pelo chefe do expediente da repartiçao central, no impedimento do respectivo Chefe e Curador Geral*, 25.06.1941, pp. 4-5, in: AHU, MU, ISAU 1725; Junqueira, *As Missões Católicas,* pp. 12–13.

[192] Jacinto de Sousa, for instance, had called for a "real crusade" against birth spacing and polygamy in order to stimulate the birth rates, see "O capital humano", *Boletim da Assistência Médica aos Indígenas e da Luta contra a Moléstia do Sono* 3,2 (1929), pp. 160–162. On material hardship, see Junqueira, *As Missões Católicas,* pp. 12–13. On polygamy and labour migration, see further in this chapter.

[193] See, for instance, Sarmento, Alexandre, "População indígena de Angola (Sondagens e perspectivas demográficas)", *Boletim da Sociedade de Geografia de Lisboa* 66 (1948), pp. 635–649.

This does not mean that there was no wish for still more children. Time and again, colonial officials would formulate ideas about how to raise the birth rates. One such proposal was to restrict or prohibit polygamy. But while such a measure was backed by Ferreira Diniz and some doctors, for both moral and demographic reasons, there was substantial disagreement as to whether polygamy really had a negative impact on the birth rates. Some even argued that it increased the number of births per woman.[194] Nevertheless, when the Angolan government prohibited the contraction of new polygamous marriages in the colony's cities and suburbs in 1948 as a first step to outlaw polygamy altogether, its negative effects on the birth rates were, in addition to Christian family values, one of the reasons invoked in favour of the action.[195]

In Chapter 4, I will look at another of these proposals, which consisted in promoting the stabilization of families at industrial and agricultural sites. The pronatalist reasoning underlying such policies was accurately summarized by Alexandre Sarmento in 1946. Referring to "the natality of the black race", he stated: "This demographic phenomenon is not in crisis. Many black children are born, but this does not mean that we should not put every possible effort into further developing what we could call a pronatalist policy *(política de natalidade)*. The more children that are born, the better. Because it is through this that the native population, Angola's number one resource, will increase."[196]

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[194] Compare Diniz, José de Oliveira Ferreira, *Negócios Indígenas. Relatório do ano 1915,* Lisboa: Tipografia Universal, 1918, p. 42; Diniz, *Populações indígenas,* pp. 510–511; and João Araújo de Freitas, *Relatório das Brigadas de Estudo – Sub-Brigada Sul, Cuengué*, 31.10.1931, p. 2; 8, in: AHU, MU, DGOPC 737 with Frazão, *Relatório (1939-1940),* pp. 4–5 and Morna, *Angola,* pp. 173–174. Frazão stresses that it had often been argued that polygamy increased the number of births per woman.

[195] The anti-polygamy decree was the object of an extensive debate in the Portuguese Parliament in 1949. See for instance Galvão, Henrique, *Por Angola. Quatro anos de actividade parlamentar,* Lisboa: Edição do Autor, 1949, pp. 215–219 and the defence of the Colonial Ministry: Assembleia Nacional, *Diário das Sessões*, n. 182, 26.03.1949, p. 378-381. This defence shows clearly that the anti-polygamy decree in Angola was inspired by debates and a similar decree in the Belgian Congo. For an acute analysis of the debate in the Belgian Congo, see Hunt, *Noise*.

[196] Sarmento, *População infantil de Angola,* p. 236.

3. Reducing Infant Mortality: Medicalizing Childbirth and Reforming Motherhood

As medical demographers confirmed and reinforced fears regarding high infant mortality in Angola, the colonial government as well as several missionary societies started to develop maternal and infant welfare programmes in order to turn the tide. After the First World War, such programmes appeared in virtually all African colonies. Their rapid spread is testimony to how ideas and schemes travelled within and between colonial empires. These programmes of pre-natal consultations and medicalized childbirth, the instilment of new habits of infant feeding and hygiene, health weeks and baby shows as well as the training of African midwives, all shared one common denominator in that they were all based on the same diagnosis whereby high infant mortality was primarily caused by the backwardness of African mothers. Consequently, all of these programmes pursued the same goal: reforming motherhood.[197]

In the eyes of most doctors, administrators and missionaries, African women were utterly incompetent as mothers. "The education of the mothers is of the greatest importance", the Portuguese doctor Augusto Ornelas stated, "because their atavistic ignorance, more than the lack of material resources of all kinds, is the main factor that compromises the offspring of the people. The prejudices, the ignorance and the lack of knowledge about the basic laws of maternal and infant hygiene must be combated with the local resources that we have at our disposal."[198] According to this interpretation, African women had to be taught how to feed their babies correctly and how to protect them against diseases and the dangers of everyday life. Therefore, it was imperative to extinguish 'backward' and 'harmful' customs and to replace them with Western concepts of hygiene and childrearing. More than direct medical intervention in childbirth, the dissemination of Western paediatric knowledge among Angolan women was considered to be the key to reducing infant mortality.

Some observers offered additional explanations as well. In addition to blaming "the vileness and incredible ignorance" of African women, Damas Mora also accused the chronic undernutrition that reigned in large parts of the colony for the high infant mortality rates. "Underfed parents don't manage to conceive robust children [...]. Underfed mothers can

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[197] See, for instance, Allman, *Making Mothers*; van Tol, *Mothers*; Summers, *Intimate colonialism*; Turrittin, Jane, "Colonial Midwives and Modernizing Childbirth in French West Africa", in: Allman, Jean Marie; Geiger, Susan; Musisi, Nakanyike (eds.), *Women in African Colonial Histories,* Bloomington: Indiana University Press, 2002, pp. 71–91; Hunt, *Le Bébé en brousse*. According to Hunt, "maternal and infant health care as a movement dedicated to saving the lives of mothers and babies was a global phenomenon by the interwar period", see Hunt, *Colonial Lexicon,* pp. 239-240, quote p. 239.

[198] Ornelas, *A obra de protecção,* p. 523.

hardly raise normal children."[199] As long as both causes were not tackled and at least partially removed, all efforts would be useless, he insisted. The identification of ignorance and misery as the main causes for high infant mortality rendered Damas Mora's analysis congruent with that of Almeida Garrett with regard to Portugal: it fit within a broader discourse on the social determinants of health that grew stronger in the Interwar Period. Yet, while people like Damas Mora openly addressed the socio-economic causes of infant mortality, state efforts to improve the nutritional status and to raise the standard of living of the African populations were too weak before the Second World War to make a real difference.[200] In the Interwar Period, the main approach used to tackle the problem of infant mortality was to focus more directly on maternal and infant welfare services. In this section, I will show how, with varying degrees of success, the colonial government, private initiatives and missionary societies in Angola engaged with this endeavour.

Colonial maternities and Angolan midwives

One of the preferred solutions to the problem of infant mortality in colonial Africa consisted in establishing specialized maternal and infant welfare clinics.[201] During and after the LNHO study tour in West Africa, Damas Mora and Augusto Ornelas were full of praise for the maternities in the French and British colonies.[202] In 1928, the *Comissão de Assistência Indígena* (CAI) decided to follow the international trend and to construct three 'native' maternities *(maternidades indígenas)* for African women in Angola: a model maternity in Luanda and two more modest structures in Dalatando and São Salvador, the respective capitals of the Cuanza and Congo sanitary zones in northern Angola.[203] The arrival of Filomeno da Câmara, however, thwarted these projects. Shortly thereafter, they were denounced as being too expensive and grandiose, "a fool's endeavour". Hence, construction of the model maternity in Luanda was brought to a halt, and the one in São Salvador was not even begun. Before 1930, the only maternity to open its doors was the one in Dalatando.[204]

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[199] Mora, *A mortalidade infantil,* p. 608.
[200] Compare with Garrett, *Como organizar a luta,* p. 7. On the social determinants of health and social medicine, see Chapter 2 and 4.
[201] Mora, *Estado actual,* pp. 45–46. See also, for instance, van Tol, *Mothers,* pp. 112–113.
[202] Damas Mora, *Rapport au sujet des services sanitaires de Dakar*, 06.06.1926, p. 14 and João Augusto Ornelas, *Speech at the Final Conference in Freetown*, 18.05.1926, both in: LONA, R. 955, 12B/58594/41908.
[203] Mora, *Estado actual,* p. 46; Neves/Sousa, *Assistência Médica aos Indígenas,* p. 440.
[204] *Assistência Indígena. Falando com o ilustre Director dos Serviços de Saúde, sr. dr. António Damas Mora*, in: A Província de Angola, 28.06.1930, pp. 1–2 (here also quote); Mora, *Estado actual,* p. 46. The inauguration took place during the First Jornada Médica de Dalatando in Octobre 1929, see *1.a Jornada Médica de Dalatando*, in:

Despite these difficulties, Ornelas, Damas Mora and others did not give up their idea of creating a larger network of "two to three dozen" maternities throughout the colony.[205] In accordance with the general ideas of social medicine, they saw maternities as 'preventive' rather than as 'curative' instruments. As such, their primary goal was not to hospitalize pregnant women or to provide them with individual assistance before, during and after childbirth, but to offer medical and moral education. In state maternities, African mothers were to be taught the 'art of motherhood', i.e. the basic principles of infant welfare *(puericultura)*. The plan also foresaw that some would be trained as midwives *(parteiras)*.[206] Doctors envisioned that these certified midwives would hold a key role in the dissemination of Western notions of maternal and infant hygiene. As assistant native nurse-midwives *(enfermeiras-parteiras auxiliares indígenas)* they would be sent back to their region of origin, where they would not only assist in the deliveries, but also teach other women the skills they had learned. This would be a process that would take many years to accomplish, but eventually, each village would have its own midwife, its own "great agent of hygienic transformation", Damas Mora hoped.[207]

Of course, this maternity scheme did not exclude individual consultations and, if necessary, hospitalizations, but the direct supervision of childbirth was not to be the rule. As such, it clearly departed from João Camoesas' far-reaching recommendation to accommodate and nurse all expectant mothers in maternities for 40 days before and after childbirth.[208] Perhaps more than the ideology of preventive and collective medicine – which, one should not forget, had in part been embraced also because of insufficient resources – budgetary constraints and the reluctance of African women explain why such an all-encompassing scheme was not implemented. During their first experiences with the maternity in Dalatando, doctors had noticed that the vast majority of African women preferred to give birth in their own huts and that it would be very hard to convince them to come to the centre.[209] While many viewed this resistance as a sign of backwardness that was to be overcome, others were

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A Província de Angola, 29.10.1929, p. 2. On the crisis of the African healthcare scheme under Filomêno da Câmara, see Chapter 2.

[205] *Assistência Indígena. Falando com o ilustre Director dos Serviços de Saúde, sr. dr. António Damas Mora*, in: A Província de Angola, 28.06.1930, pp. 1–2; Ornelas, *A obra de protecção*.

[206] Neves/Sousa, *Assistência Médica aos Indígenas,* p. 440; Ornelas, *A obra de protecção*; *Assistência Indígena. Falando com o ilustre Director dos Serviços de Saúde, sr. dr. António Damas Mora*, in: A Província de Angola, 28.06.1930, pp. 1–2.

[207] *Liga para protecção da Infância de Angola*, in: A Província de Angola, 05.08.1930, p. 2; Mora, *Estado actual,* p. 44 (here quote). See also Mora, *A mortalidade infantil,* pp. 622–623.

[208] Camoesas, *Organização AMI,* p. 146.

[209] Teixeira, *Relatório Cuanza 1930*, p. 73; Mora, *A mortalidade infantil,* p. 622. See also *Liga de Protecção da Infância de Angola. Uma obra que se impõe, [Entrevista com Doutora D. Berta de Morais Esteves]*, in: A Província de Angola, 19.08.1930, p. 1.

more accommodating. Rather than forcing them into maternities and thus exposing them to the psychological stress of being away from home and separated from their families, Manuel Fonseca, the director of the health services, acknowledged in 1944 it would be better to let mothers give birth at home, under the supervision of a trained native midwife.[210] In part, this defence of home births was also informed by the common ethnographic and medical belief that African women gave birth easily and that infections and other complications, for which hospital care would be needed, were rare.[211] Moreover, it is of note to remember that, at the eve of the Second World War, even the majority of women in North-western Europe or North-America still gave birth at home.[212]

Manuel Fonseca's justification of home births also echoed the ideological position embraced by the *Estado Novo* in mainland Portugal. The *Estado Novo*, within the scope of a re-education programme aimed at the retransformation of women into housewives, actively campaigned for home births through its female organizations such as the *Obra das Mães pela Educação Nacional* and the *Mocidade Portuguesa Feminina*.[213] In the opinion of the regime, maternities violated the integrity and dignity of the Family, the central pillar of Portuguese society. Women should instead give birth at home, within the intimacy of their families. Certainly, this discourse was contested by some leading doctors, like Costa-Sacadura, and it was in part due to their continuous zeal that the first modern state maternities were opened in Lisbon (1931 and 1932) and Porto (1938) under the *Estado Novo*, thus filling the gap in the medical services of the country that had formed because of the inertia that prevailed during the First Republic.[214] But over the coming decades the government would do little to expand

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[210] Manuel Ferreira Peixoto Fonseca (Director dos Serviços de Saúde e Higiene), *Algumas considerações sobre a actuação dos serviços de saúde en Angola*, 17.10.1944, p. 5, in: AHU, MU, DGSA RSH 004, Cx. 5.

[211] *Ibid.*; Mora, *A mortalidade infantil,* p. 607. This had been a common ethnographic belief already in the nineteenth century, see Price, F. G. H., "A Description of the Quissama Tribe", *The Journal of the Anthropological Institute of Great Britain and Ireland* 1 (1872), pp. 185–193, here pp. 188–189 and Monteiro, Joachim John, *Angola and the River Congo*, 2 vols, London: Macmillan, 1875, vol. I, pp. 272-274. The same idea is also present in the descriptions of the birth practices in Diniz, *Populações indígenas.*

[212] In England, 75% of the births were still home confinements in 1937, see Lewis, Jane, *The Politics of Motherhood. Child and Maternal Welfare in England, 1900–1939,* London: Groom Helm, 1980, p. 120. See also Marks, Lara, "Mothers, babies and hospitals. 'The London' and the provision of maternity care in East London, 1870-1939", in: Fildes, Valerie; Marks, Lara; Marland, Hilary (eds.), *Women and Children First. International Maternal and Infant Welfare, 1870-1945,* London: Routledge, 1992, pp. 48–73, here p. 60. In the United States, hospital births accounted for 36.9% of all births in 1935, a percentage which rapidly increased to 90% in 1951. See Devitt, Neal, "The Transition from Home to Hospital Birth in the United States, 1930-1960", *Birth and the Family Journal* 4,2 (1977), pp. 47–58.

[213] On childbirth and family policies during this period, see Pimentel, Irene Flunser, *História das Organizações Femininas do Estado Novo,* Lisboa: Temas & Debates, 2001, pp. 54-73; 134-140; 148-154; Costa, Sara, "Inaugurada a Alfredo da Costa", in: Paço, António Simões do (ed.), *Os Anos de Salazar. Vol. I: 1926-1932, A ascensão de Salazar:* Centro Editor PDA, 2008, pp. 136–147.

[214] See Costa-Sacadura, S. C. da, *As maternidades e a familia. Conferência pronunciada em 26 de Maio de 1939 na Associação dos Médicos Católicos, Separata da 'Acção Médica', Fasc. XIII, Julho de 1939,* Lisboa: Imprensa Lucas & C.a, 1939. In Coimbra, a maternity clinic already existed in the University Hospital. See Garnel, Maria

the number of maternities or to make maternity births affordable for the population on the whole. By 1950, only 8% of the births in Portugal occurred in hospitals or maternities, far less than in Western Europe or North America, and, according to a study in 1944, a large majority of the home births were not even attended by certified midwives, but only by so-called *curiosas* (folk midwives).[215]

On the surface, this ideological connection might help to explain why the administrative authorities in Angola did not give much priority, and hence financial support, to the establishment of state maternities in Angola and why, as a consequence, there were only nine state-run maternities in the colony by 1950.[216] Similarly, one could link the much stronger medicalization of childbirth in the neighbouring Belgian Congo to favourable ideologies and concurrent processes in its European metropole.[217] Yet, however important it is to connect maternal and infant healthcare schemes between metropolis and colony and analyse them jointly, one might nevertheless question the role ideology played in this story. To ascribe the dearth of maternities in Angola to the ideological exaltation of the family and of home births in Portugal is probably a stretch of the imagination, especially since maternities within the colonial context were primarily defined as preventive and educative centres and less as birth clinics. Moreover, in Portugal and even more so in Angola, the official defence of home births might have been a device to rationalize the current state of affairs and mask the state's reluctance and financial incapacity to invest in public health.

If anything, Portuguese colonial policy towards maternal and infant healthcare was marked by stark contradictions and tensions between discourse and practice. On the one hand, many doctors as well as leading colonial officials favoured the multiplication of state maternities and native midwife training programmes as a necessary measure to reduce infant mortality. Longstanding and influential provincial governors like António de Almeida and Manuel da Cruz Alvura, the Director of Native Affairs Manuel Pereira Figueira, and Governor-Generals like António Lopes Mateus (1935-1939) and Álvaro de Freitas Morna (1942-1943) all voiced their support.[218] In contrast to these convictions, on the other hand,

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Rita Lino, *Prevenir, cuidar e tratar. O Ministério e a saúde dos povos (1834-1957), Unpublished Manuscript (2013)*, p. 127.

[215] Pimentel, *História das Organizações Femininas,* p. 70. For Western Europe and North America, see the literature in footnote 212.

[216] See loose document in AHU, MU, DGAPC 308. According to another source, there were 12 state maternities in Angola in 1951, see Nunes, Silva, "Aspectos da assistência médica às crianças em Angola e Moçambique", *Anais do Instituto de Medicina Tropical* 10,4,1 (1953), pp. 2595–2608 p. 2600.

[217] On maternity childbirths in the Belgian Congo, see Hunt, *Colonial Lexicon,* pp. 3-4; 272-276. On the link between maternal and infant welfare programmes in Belgium and its colony, see Hunt, *Le Bébé en brousse,* pp. 405–406.

[218] At the first Conference of Province Governors in May 1935, the new Governor-General António Lopes Mateus declared his full support for maternal and infant healthcare programmes, and was seconded by all

stood a practical imbroglio. Doctors and province governors had to struggle very hard to establish even a single maternity. Mostly, the problem was money – money that did not arrive, or only very slowly, from Luanda.[219] The story of the *maternidade indígena* in Luanda is even more disturbing. Interrupted in 1929 by High Commissioner Filomeno da Câmara, the construction of the maternity was only resumed after much discussion in the late 1930s.[220] Once finished, however, the government decided to use the building to accommodate the troops that had arrived from Portugal in 1941. It was not until the arrival of the next Governor-General, Álvaro de Freitas Morna, a year later that the maternity was finally dedicated to its original function.[221]

Freitas Morna proved to be a great supporter of maternal and infant welfare programmes during his short term as Governor-General (1942-1943). In collaboration with the health services, he conceived an ambitious project to gradually equip each of the 66 *delegações de saúde* in the colony with a standardized maternity. Each year, ten new maternities would be constructed, each of which would be run by the local health officer in tandem with a qualified Portuguese midwife. The principles of the project did not differ from what the health services had outlined in the late 1920s. Aside from treating complicated cases of pregnancy and childbirth, the European staff would mainly be responsible for training Angolan women as midwives, who would then spread Western concepts of childbirth and child-rearing to their villages.[222] Freitas Morna even personally defended his project before Salazar. Although the gradual establishment of these maternities and the annual training of 20 midwives in each was going to cost an estimated 3.7 million Angolares a year, he maintained that this would be "blessed money, since it will save thousands of lives and Your Excellency can be sure that after ten years we will have increased the population of Angola – its greatest

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province governors except the one from Huila, who considered assistance to Europeans to be more important. See António Lopes Mateus, *Relatório e Propostas do Conselho de Governadores de Angola (7 a 11 de Maio de 1935)*, 11.05.1935, pp. 33-35, in: AHU, MU, ISAU 1730. See also António Lopes Mateus, *Nota sobre a actividade oficial e particular em Angola, durante o primeiro ano do seu actual governo, fornecida aos jornais de Luanda*, 10.02.1936, in: AHU, MU, GM 2747, p. 17. For Manuel Pereira Figueira, see his 'Relatórios do Curador Geral dos Indígenas da Colonia de Angola' for the years 1936 to 1938 in AHU, MU, ISAU 2243. See also António de Almeida, *Relatório do Governo da Província de Bié para 1935-1936*, 31.12.1936, p. 82, in: AHU, MU, ISAU 1727 and further reports by the province governors cited in footnote 219.

[219] See, for instance, António de Almeida, *Relatório do Governo da Província do Bié para 1938*, 31.12.1938, Vol. I, p. 85, in: AHU, MU, DGAC 543; Manuel da Cruz Alvura, *Relatório do Governo da Província de Malanje para 1941 e 1942*, 31.12.1942, pp. 31-35, in: AHU, MU, ISAU 1663.2.

[220] Mora, *A mortalidade infantil,* p. 622; Manuel Pereira Figueira, *Relatorio do Curador Geral dos Indígenas da Colonia de Angola para 1937*, 15.05.1938, p. 11, in: AHU, MU, ISAU 2243.

[221] Levy, Izaac, "Plano de assistência à Criança indígena e à Mulher grávida", in: Direcção dos Serviços de Saúde e Higiene da Colónia de Angola (ed.), *Boletim Sanitário, ano de 1943,* Luanda: Imprensa Nacional, 1946, pp. 169–175, here p. 171; Morna, *Angola,* p. 176.

[222] Morna, *Angola,* pp. 179–181.

value – by roughly 1,000,000 souls."[223] Salazar's reaction is not known, but after Freitas Morna was relieved from office, following a conflict with the Minister of Colonies Vieira Machado, his project was not carried out.

Given their pivotal function as educational centres, the dearth of maternities contributed much to the colonial state's failure to train the native midwives, which it considered so essential in spreading modern maternal and infant welfare ideas. Unlike Uganda, Nigeria, French West Africa or the Belgian Congo – colonies which had launched more or less successfully midwifery training programmes in the Interwar Period – the colonial health services in Angola seem to have trained very few midwives, if any at all, before the 1940s.[224] According to Antero Antunes do Amaral, this was primarily the result of institutional shortcomings. The quality of the nursing schools in Angola was poor, he stated, and there was no special midwifery school.[225]

Others, like Damas Mora, however, preferred to blame the mental and moral backwardness of African women. From early on, he had argued that it was extremely difficult to find suitable candidates who were willing to start and complete midwifery training. Many dropped out of the course "out of laziness, thoughtlessness or pride", he had complained in his report to the League of Nations. Nevertheless, he had expressed his confidence that, with "patience and perseverance", health authorities would eventually achieve their aims.[226] By 1940, this optimism had been replaced with overt and deeply racist frustration: "In Angola", he lamented, "the attempts to transform native girls into good nurses have always failed until today. In four centuries of rule we have not managed to extract the diamond of intelligence and the spirit of sacrifice from the 'gang' of superstitions and the sexual obsession of native women. Native girls are full of self-love and distrust, and at the first indulgent remark, they disappear and do not come back. Maybe, the *mestiças* will one day provide the health services with good midwives and good nurses. But even more than European women, they look down

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[223] Governor-General Álvaro Morna to Oliveira Salazar, 22.03.1943, pp. 11-13 (quote p. 13), in: ANTT, AOS-CO-UL-8G, Pasta 6. Similarly, Morna, *Angola,* p. 181.

[224] Compare with Summers, *Intimate colonialism*; Turrittin, *Colonial Midwives*; Barthélémy, Pascale, "Sages-femmes africaines diplômées en AOF des années 1920 aux années 1960. Une redéfinition des rapports sociaux de sexe en contexte colonial", in: Hugon, Anne (ed.), *Histoire des Femmes en Situation Coloniale. Afrique et Asie, XXe siècle,* Paris: Karthala, 2004, pp. 119–144.

[225] Amaral, *Natalidade e mortalidade,* p. 182.

[226] Mora, *Estado actual,* p. 44.

on the native population."[227] "Angola and Mozambique," he concluded, still "need tens or hundreds of years to make enough progress on the arduous road of social hygiene."[228]

One of the solutions devised to address this issue of recruitment was to enrol older 'traditional' midwives *(matronas)* into the midwifery courses, until more, younger and better-educated women were found. Although doctors reckoned that these *'matronas'* would only be capable of rudimentary training and that their resistance against learning new principles would have to be overcome by material benefits, there were various advantages. Educating and incorporating them into the machinery of the health services would not only reduce their 'harmful' influence, but also enhance Western biomedical techniques and concepts of hygiene with the prestige they brought to it. This strategy, which was used as a temporary measure in other colonies as well, acknowledged that the successful introduction of novel practices would hinge upon the prestige of those who performed them, and that young girls, especially when they were still childless, would have a very difficult time of doing so.[229]

Civilizing Women – Urban Philanthropy and Dispensaries

The failure of its maternity and midwife training schemes in the 1930s does not mean that the Portuguese colonial state did not intervene in maternal and infant welfare at all prior to the Second World War. During the regularly established concentrations, AMI doctors and nurses sought to transmit Western notions of infant feeding and hygiene, and they were sometimes called to assist in difficult childbirths.[230] Yet, due to the lack of specialized institutions and personnel, their influence in rural areas was necessarily restricted. Before the 1940s, state intervention in this sphere would prove to be more effective in supporting *private* initiatives in *urban* areas. Once again, Angola would follow the example provided by other colonies. In the 1920s, high-ranking French, Belgian and British colonial women had founded philanthropic associations aimed at educating African mothers and improving the health of their children. The existence of such associations was well known to the medical establishment in Angola, since Madame Nogue and Madame Vassal, the wives of leading

[227] Mora, *A mortalidade infantil,* p. 623. Similarly, Faria, José da Mota, "Esboço de um projecto de assistência às grávidas indígenas da Colónia de Moçambique", in: Medical Association of South Africa; Serviços de Saúde da Colónia de Moçambique (eds.), *Primeiro Congresso Médico de Lourenço Marques, 8 a 14 Setembro de 1938,* vol. 3, Lourenço Marques: Imprensa Nacional de Moçambique, 1939-1941, pp. 269–276, here p. 271.

[228] Mora, *A mortalidade infantil,* p. 623.

[229] Ornelas, João Augusto, "A Assistência maternal e os meios de luta contra a mortalidade infantil em Moçambique", *Moçambique - Documentário trimestral* 27 (1941), pp. 33–48, here pp. 45–46; Levy, *Plano de assistência,* p. 174. Ornelas related that a doctor from the French Congo had recommended this scheme to him. On the efforts to educate 'traditional' midwives in the British Empire, see Bell, Heather, *Frontiers of Medicine in the Anglo-Egyptian Sudan, 1899-1940,* Oxford: Clarendon Press, 1999, pp. 198-228, esp. pp. 198; 205-212.

[230] Silva, *Serviço de Assistência Congo 1930,* pp. 5–6; Ornelas/Mesquita, *Relatório Cuanza 1929,* p. 628.

French doctors, had presented the goals and activities of their respective associations in the AOF and AEF at the Congress of Tropical Medicine in Luanda in 1923.[231] However, no similar initiatives emerged in Angola during the 1920s. When, in his view, this situation had reached embarrassing levels for the prestige of Portuguese colonialism, it was yet again António Damas Mora who publicly called upon the colony's female elite to fill this gap. "When", he asked in an interview with the *Província de Angola* in June 1930, "will the ladies of Angola finally decide to participate with heart and soul in the blessed crusade of saving the black race"?[232]

The appeal of Damas Mora, who had long been in favour of more private initiatives in the health sector, did not go unnoticed or unanswered.[233] Only one month later, women from Luanda's 'high society' started meeting and publicly debating the issue. Most were wives of high-ranking colonial officials, but among them figured also at least two female doctors, Berta de Morais Esteves and Adelaide Cabete.[234] A year later, in August 1931, the statute of the League for the Protection of the Children of Angola *(Liga de Protecção à Infância de Angola)* was officially approved.[235]

Although little is known about her exact engagement in the *Liga*, the participation of the female gynaecologist Adelaide Cabete is noteworthy. Cabete, who came to Angola as a political exile in 1929, had been one of the first female doctors as well as a leading feminist in early twentieth century Portugal. Most known in historiography for her active involvement in Portugal's principal feminist associations, the *Liga Republicana das Mulheres Portuguesas* (1909-1919) and the *Conselho National de Mulheres Portuguesas* (CNMP) (1914-1947), she was also an important proponent of new, hygienic concepts of childbirth and childrearing in

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[231] See presentations of Madame Vassal and Madame Nogue: Vassal, Gabrielle, "Natalité et protection de l'enfance", *Revista Médica de Angola* 4,2 (1923), pp. 45–49 and Primeiro Congresso de Medicina Tropical da África Ocidental, "Acta da 2.a sessão (Compte-rendu de la 2ième séance). Saint-Paul de Loanda, le 17 Juillet 1923", *Revista Médica de Angola* 4,2 (1923), pp. 7–43, here pp. 8–9. For the Belgian Congo, see Hunt, *Le Bébé en brousse*, esp. pp. 402-406.

[232] *Assistência Indígena. Falando com o ilustre Director dos Serviços de Saúde, sr. dr. António Damas Mora*, in: A Província de Angola, 28.06.1930, pp. 1–2. According to his own statements, Damas Mora had been ashamed to confess the lack of such philanthropic associations in Angola to a representative of the Save the Children International Union during his stay in Geneva in 1929. See *Liga para protecção da Infância de Angola*, in: A Província de Angola, 05.08.1930, p. 2. See also Mora, *Estado actual,* pp. 45–46; Mora, *A mortalidade infantil,* p. 619.

[233] See António Damas Mora, *A assistencia pública e a iniciativa particular*, in: Jornal do Comércio (Luanda), 30.04.1921, p. 1.

[234] António Damas Mora, *Um belo gesto das senhoras de Luanda*, in: A Província de Angola, 01.08.1930, p. 1; *Liga para protecção da infância de Angola*, in: A Província de Angola, 02.08.1930, p. 2; *Liga para protecção da Infância de Angola*, in: A Província de Angola, 05.08.1930, p. 2. For an interview with Morais Esteves, see *Liga de Protecção da Infância de Angola. Uma obra que se impõe, [Entrevista com Doutora D. Berta de Morais Esteves]*, in: A Província de Angola, 19.08.1930, p. 1.

[235] Repartição do Gabinete do Govêrno Geral de Angola, *Estatutos da Liga de Protecção à Infância de Angola*, 22.08.1931, in: *Boletim Oficial da Colónia de Angola, Série II*, 29.08.1931, pp. 581–583.

Portugal.[236] As well as her interventions in public debates, she taught 'Hygiene and Infant Welfare' *(Higiene e Puericultura)* for more than fifteen years at the *Instituto Feminino de Educação e Trabalho*, a republican reform school for girls in Odivelas near Lisbon.[237] In Luanda, Cabete opened a doctor's office and wrote educative pieces on motherhood and hygiene for several local newspapers.[238]

The *Liga de Protecção à Infância de Angola* was a private association, funded mainly through membership fees, donations and profits from sponsored cultural and sporting events. In addition, it received some modest subsidies from the Native Affairs Department.[239] The *Liga* was an explicitly gendered association: although men could become members *(sócios)*, only women could be elected to the directing bodies, which were to be presided by the wife of the Governor-General. There were a few exceptions to this rule, however, which reveal the vivid interest some state departments took in the issue as well as their pervasive paternalism: the treasurer of the League was the Director of the Native Affairs Department, and on the technical council sat three government doctors (initially Damas Mora, Ornelas and Levy). These positions which exerted medical and fiscal control over the activities of the League were all filled by men.[240]

The League's first and most important project, for which it had done a lot of fundraising, consisted in the establishment of the *Gota de Leite para crianças pobres* ("Drop of Milk for poor children") in Luanda in August 1931. Modelled after similar institutions in both Europe and other African colonies, the *Gota de Leite* provided a wide range of services

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[236] On her participation and role in the feminist movement, see Esteves, João, "Conselho Nacional das Mulheres Portuguesas (1914-1947)", *Faces de Eva* 15 (2006), pp. 113–135 and also Cova, Anne, "O associativismo das mulheres. Uma abordagem comparativa: França e Portugal (1900-1918)", in: Serrão, José Vicente; Pinheiro, Magda Avelar de; Ferreira, Maria de Fátima Sá e Melo (eds.), *Desenvolvimento Económico e Mudança Social,* Lisboa: Imprensa de Ciências Sociais, 2009, pp. 333–348. Cabete had co-founded both associations and presided the CNMP from 1914 until her death in 1935. For a general (but still rudimentary and largely uncritical) biography, see Lousada, Isabel, *Adelaide Cabete (1867-1935)* (Fio de Ariana; 6), Lisboa: Presidência do Conselho de Ministros, 2010. See also Esteves, João, "Adelaide Cabete", in: Nóvoa, António (ed.), *Dicionário de Educadores Portugueses. 900 biografias de homens e mulheres que se dedicaram ao ensino e à educação nos séculos XIX e XX,* Porto: Edições Asa, 2003, pp. 203–206. The journey that brought her to Angola, her country of exile, has formed the background of a theatre piece by one of Portugal's leading novelists, see Jorge, Lídia, *A Maçon,* Lisboa: Dom Quixote, 1997. See also Esteves, João, *A Liga Republicana das Mulheres Portuguesas. Uma organização política e feminista, 1909-1919,* Lisboa, 1991.

[237] On the reform school in Odivelas, see Pintassilgo, Joaquim, "Reflexões históricas em torno do (eventual) sucesso da Educação Nova. O exemplo do Instituto Feminino de Educação e Trabalho (1911-1942)", *História da Educação* 11,23 (2007), pp. 35–65.

[238] Lousada, *Adelaide Cabete (2010),* pp. 30-31; 52-53; 62.

[239] Repartição do Gabinete do Govêrno Geral de Angola, *Estatutos da Liga de Protecção à Infância de Angola*, art. 43; Manuel Vicente d'Almeida Neves (Director dos Serviços e Curador Geral), *Relatorio da Direcção dos Serviços e Negocios Indigenas e Curadoria Geral*, 10.04.1933, in: AHU, MU, DGCO 595, table 17. For an example of fundraising, see *Iniciativa benemerita. A festa em beneficio da Gota de Leite para crianças pobres*, in: A Província de Angola, 25.05.1931, p. 2.

[240] Repartição do Gabinete do Govêrno Geral de Angola, *Estatutos da Liga de Protecção à Infância de Angola*, art. 10, 22 and 54.

to infants and their mothers. Not only did it supply milk and other nutritional supplements, it also offered medical examinations and vaccinations of infants, and supervised their physical development through regular weighing and measuring appointments. In addition, the *Gota* distributed baby clothes *(obra das enxovais)*, soap and, at times, also toys and money. These presents were of dual purpose: directly beneficial to infant health, they were also meant to act as incentives for mothers to overcome their reluctance and to submit their minds and the bodies of their newborns to regular supervision.[241]

Such *Gouttes de Lait* had first emerged in France in the last decades of the nineteenth century. They then spread to other European countries at the turn of the century, becoming one of the hallmarks of the infant welfare movement.[242] As these associations consolidated and became more well established, an international network also took shape in the years before the First World War, when representatives of 'gouttes de lait' from different countries met at several international congresses to exchange their experiences.[243] In Portugal, the first *lactário* – as they were usually called – was opened in 1903, by the newly founded *Associação Protectora da Primeira Infância*. It was soon followed by others, but compared to France or Belgium, the expansion of this kind of maternal and infant welfare institution remained modest.[244] As the name suggests, the initial and primary task of these institutions had been to supply milk to infants whose mothers were not able to breastfeed them, either due to disease, malnutrition or incompatible work schedules. Yet by the time this kind of institution was recreated in the colonies, *lactários* in the metropoles had evolved into integrated centres for maternal and infant healthcare, or rather so-called *dispensários de puericultura* (maternal and infant welfare dispensaries), and the differences between the institutions had blurred.[245]

The *Gota de Leite* – later referred to as the dispensary – in Luanda was supervised by Isaac Levy, an experienced paediatrician, who had arrived from Lisbon in 1928 and who was

[241] On the work of the Gota de Leite, see, for instance *Protecção à Infância. A 'Gôta de Leite' é inaugurado em 15 de Agosto*, in: A Província de Angola, 08.08.1931, p. 2; Repartição do Gabinete do Govêrno Geral de Angola, *Estatutos da Liga de Protecção à Infância de Angola*, art. 25-29; *A 'Arvore de Natal' da Gota de Leite*, in: A Província de Angola, 18.12.1931, p. 1; Mora, *A mortalidade infantil,* p. 621.

[242] Hunt, *Le Bébé en brousse,* pp. 402–406. For the transfer of "gouttes de lait" to Great Britain, see Ferguson, A. H.; Weaver, L. T.; Nicolson, M., "The Glasgow Corporation Milk Depot 1904-1910 and its Role in Infant Welfare", *Social History of Medicine* 19,3 (2006), pp. 443–460.

[243] Ferguson, *Glasgow Corporation,* pp. 451-2; 456.

[244] See, for instance, Caldeira, Maria de Fátima, *Assistência Infantil em Lisboa na 1. República,* Casal de Cambra: Caleidocópio, 2004, pp. 36–79; Garrett, *Como organizar a luta,* pp. 12–13. Caldeira blames the financial crisis in Portugal from the mid-1910s to the mid-1920s for the slow expansion of these private and municipal initiatives.

[245] See, for instance, Garrett, *Como organizar a luta,* p. 9.

placed in charge of the paediatric ward in the Central Hospital of Luanda.[246] Most of the daily work, however, was carried out by women: two female nurses from the same hospital and a group of voluntary *zeladoras* ('overseers'). The task of these European *zeladoras* was to distribute the milk, to weigh and measure the children and, above all, to instil novel principles of infant hygiene in Angolan mothers. To reach more women, they were also supposed to make home visits.[247] Because they had not received any medical training, however, they were not to supervise childbirths, but in many other respects, their role resembled that which had been delineated for the qualified European or African nurse-midwives. In 1933, the *Gota* received the support of two 'visiting nurse-midwives' who had received three years of training in maternal and infant welfare in Lisbon.[248]

The number of supervised children increased rapidly, from nearly hundred by the end of 1931 to more than 1,000 annually from 1933 onwards.[249] With the encouragement of João Ornelas, other *dispensários de puericultura* were founded in Benguela (1935) and Nova Lisboa (1936), and in the early 1940s, in a few more towns.[250] Under the direction of female doctors like Augusta da Silva Ferreira (Benguela) and Hortência de Visitação Nunes (Nova Lisboa), these *dispensários* provided the same range of services as the prototype in Luanda.[251] By this point, the movement had begun to receive more active support from the colonial government. On the initiative of Manuel Figueira Pereira, the new director of the Native Affairs Department (and simultaneously of the Civil Administration), the *Liga* had been replaced in 1935 by the *Instituição de Assistência às Crianças Indígenas* (IACI). The IACI was still a private organism under female direction, but since it had been recognised to be of

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[246] On Isaac Levy, see Manuel Ferreira Peixoto Fonseca, *Isaac Salomão Levy – Extracto da Folha de Serviço*, 25.05.1945, in: AHU, MU, DGAPC 34, Maço 2, Processo A-9 (Alterações), p. 30. Being Jewish, Isaac Levy was probably in contact with the sefardic community in Angola, see Freudenthal, Aida, "Judeus em Angola - séculos XIX-XX", *Cadernos de Estudos Sefarditas* 4 (2004), pp. 243–268.

[247] *A 'Arvore de Natal' da Gota de Leite*, in: A Província de Angola, 18.12.1931, p. 1; Isaac Levy, *Questões de Puericultura. Curso de Férias no Liceu Central de Salvador Correia*, in: A Província de Angola, 19.05.1931, p. 2 and 20.05.1931, p. 2; *Protecção à Infância. A 'Gôta de Leite' é inaugurado em 15 de Agosto*, in: A Província de Angola, 08.08.1931, p. 2; Mora, *A mortalidade infantil,* p. 621.

[248] António Damas Mora, *Higiene social e visitadoras de higiéne*, in: A Província de Angola, 27.06.1933, pp. 1–2.

[249] *A 'Arvore de Natal' da Gota de Leite*, in: A Província de Angola, 18.12.1931, p. 1; Direcção dos Serviços de Saúde e Higiene da Colónia de Angola (ed.), *Boletim Sanitário de Angola, referente ao Biénio 1937-1938,* Luanda: Imprensa Nacional, 1940, p. 69.

[250] Mora, *A mortalidade infantil,* p. 620. By 1943, there were 6 'official' *dispensários de puericultura* and three private ones in Angola, see Direcção dos Serviços de Saúde e Higiene da Colónia de Angola (ed.), *Boletim Sanitário, ano de 1943,* Luanda: Imprensa Nacional, 1946, p. 10.

[251] See, for instance, *Assistência Infantil - Nova Lisboa vai ter também o seu dispensário de puericultura*, in: O Intransigente, 08.07.1936, p. 5; Hortênsia Nunes, *O dispensário de Nova Lisboa*, in: O Intransigente, 21.09.1936; Armando Madeira, *Da assistência médica ao indígena e à criança*, in: O Intransigente, 21.09.1936.

‘public utility’, it enjoyed more financial and practical state support. It also had a more explicit and comprehensive agenda.[252]

According to Damas Mora, these dispensaries had a very positive effect on infant mortality rates. He stated that mortality rates among the supervised children were almost insignificant, from 1% to 3% in Luanda and even less than 1% in Benguela, and thus much lower than the appalling rates that persisted among the rest of the children.[253] Although there might have been a positive impact, comparisons suggest that these figures were exceedingly optimistic. With regard to the city of Porto, for instance, several studies in the 1930s and 1940s revealed significantly lower mortality rates among children who were inscribed in infant dispensaries than among those who were not, but those rates still ranged between 6% and 10%.[254] Damas Mora was more realistic about the scope of the impact that the dispensaries had. Although he probably exaggerated the number of supervised children as well – he mentioned 4,000 for the year 1937 – he admitted that this was only a drop in the ocean compared to the total number of children born each year in Angola.[255] The utility of the dispensaries was incontestable, he added, but because of their reliance on European women, their operating range was limited to the population living in and next to European centres.[256]

Even in these few towns, many African women did not use the dispensaries, or only did so sporadically. In Benguela, for instance, only 89 newborns, or 8.3% of all those born in 1940 were registered at the dispensary. Here, the reluctance of African women eventually reshaped the policy of the dispensary. In order to attract a greater audience, from 1941 onwards, it no longer provided ‘preventive’ services only, but also offered curative treatments to ill children on a systematic basis.[257] In hindsight, the director stated that this strategic move from the ‘healthy’ back to the ‘ill’ had been necessary and successful, with the number of

[252] See *Estatutos da Instituição de Assistência às Crianças Indígenas (I.A.C.I.). Aprovados por Portaria n.° 1:862, de 23 de Novembro de 1935, do Govêrno Geral de Angola,* Luanda: Imprensa Nacional, 1936 and for an earlier proposal: Manuel Pereira Figueira, Proposta sobre ‘Instituição de Assistência Infantil Indígena’, in: Reunião extraordinária do Conselho de Governadores de Angola, Relatório e Propostas, 07.05.1935-11.05.1935, in: AHU, MU, ISAU 1730.

[253] Mora, *A mortalidade infantil,* pp. 605-606; 620.

[254] Silva, António Bártolo da, "Sobre as possibilidades de redução da mortalidade na primeira infância", *Boletim de Assistência Social* 9 (1943).

[255] Mora, *A mortalidade infantil,* p. 621. The numbers Damas Mora gave for Benguela are more than ten times higher than those given some years later by José Passos, the Director of the *Dispensário de Puericultura de Benguela*. For 1937, for instance, Damas Mora mentioned 1,272 pupils, while Passos refers to 61 registered children only. See Passos, José, "Contribuição para o estudo da assistência à criança em Angola. Breves notas sobre a actividade e acção social do dispensário de puericultura de Benguela, de 1935 a 1946", *Anais do Instituto de Medicina Tropical* 5 (1948), pp. 401–405, here p. 402. Passos’ number corresponds more or less with the monthly statistics published in the local journal *O Intransigente*.

[256] Mora, *A mortalidade infantil,* p. 621.

[257] Passos, *Contribuição,* pp. 404–405. Allman has described a similar process for the Kumasi child welfare centre on the Gold Coast, see Allman, *Making Mothers,* pp. 30–34.

registrations soaring to 833 or 77.7% in 1946.[258] When the historiography for other colonies is taken into consideration, one must assume that many of these registered children did not use the full range of services the dispensary offered. It is likely that women were eclectic in their choices and that their attitudes oscillated between the extreme poles of "full participation" and "complete avoidance".[259]

What appears to have distinguished the *lactários* and dispensaries in Luanda, Benguela or Nova Lisboa from many other similar institutions in colonial Africa, however, was that they did not only receive African children, but also children of European and mixed descent. Of the 833 children registered with the *Dispensário de Puericultura de Benguela* in 1946, for example, 66 were listed as 'white', 154 as '*mestiço*' and 613 as 'black'.[260] In the British, French and Belgian colonies in sub-Saharan Africa, by contrast, infant welfare institutions were directed towards African children only or mechanisms of racial segregation were erected when European children were treated as well, as occurred in the industrialized centres of Katanga. At least, this is what historiography has suggested, yet it might well be that, by focusing too much on the 'racial' stance in these hegemonic projects of remaking motherhood, historians have thus far, with the exception of Nancy Rose Hunt, overlooked the presence of European children of the lower classes in these infant welfare programmes.[261]

In Angola, members and supporters of the *Liga* had, from early on, voiced the necessity of caring for poor European children too. "In Luanda", doctor Berta de Morais Esteves stated in an interview, "we do not only have to assist native people. Because they are closer to our heart and more visible to us, it is still more upsetting to see these poor, innocent white children who have been swept far way from a favourable climate by the crimes of their parents."[262] This was a clear reference to the children of the *degredados*, convicted criminals who had been deported – often with their families – from Portugal to Angola. Due to the use of Luanda as an "imperial prison" until 1932, with the arrival of up to a few hundred convicts every year, these *degredados* constituted a large percentage of the European population in

[258] Passos, *Contribuição,* p. 402.
[259] Allman, *Making Mothers,* pp. 31-34, quote p. 31. See also Hugon, Anne, "La redéfinition de la maternité en Gold Coast, des années 1920 aux années 1950. Projet colonial et réalités locales", in: Hugon, Anne (ed.), *Histoire des Femmes en Situation Coloniale. Afrique et Asie, XXe siècle,* Paris: Karthala, 2004, pp. 145–172.
[260] Passos, *Contribuição,* p. 402. For Luanda, see further in the text. For Nova Lisboa, see *Dispensário de Puericultura de Nova Lisboa, Mês de Fevereiro de 1937*, in: O Intransigente, 23.03.1937, p. 5 and Sarmento, Alexandre, *O Dispensário de Puericultura de Nova Lisboa. (Separata de 'O Médico', n. 24 (1951)),* Lisboa, 1951, p. 4.
[261] See Hunt, *Le Bébé en brousse,* pp. 415–416; Allman, *Making Mothers*; Hugon, *Redéfinition*; van Tol, *Mothers*. For French West and Equatorial Africa, see the presentations of Madame Vassal and Madame Nogue at the conference in Luanda in 1923: Vassal, *Natalité* and Primeiro Congresso de Medicina Tropical da África Ocidental, pp. 8–9.
[262] *Liga de Protecção da Infância de Angola. Uma obra que se impõe, [Entrevista com Doutora D. Berta de Morais Esteves]*, in: A Província de Angola, 19.08.1930, p. 1.

Luanda. They were generally decried as debauched individuals who lived in physical and moral misery. Their massive presence, which had been a thorn in the side of local governments for many decades, suggests that the problem of 'poor whites' and their offspring was particularly pressing in Luanda, thus explaining at least in part Angola's exceptionalism.[263] Moreover, the economic crisis of the early 1930s impoverished many other Portuguese families in Angola, thus leading to the intensification of public pressure on the local government to provide more health services for 'white' Europeans.[264]

Interestingly, the statutes of the *Liga* and later the IACI did not mention 'white' children. They either fell silent on the question of race or they explicitly focused on 'native' children. This suggests that the inclusion of 'white' children into the urban infant welfare schemes was more a result of their misery and the subsequent social pressure to alleviate it than from a premeditated official policy of racial equality. [265] This did not prevent commentators from praising the absence of racial boundaries. In a description of the dozens of mothers waiting in front of the *Gota de Leite* in Luanda to be received by doctor Levy, one journalist exalted: "Looking at them there together, there was one feature which made these women, who were clearly distinct by the colour of their skin, equal: they were linked to each other by the feeling of motherhood."[266]

The same cannot be said of another infant welfare initiative, the so-called *Colónias Marítimas Infantis*, holiday camps at the seaside for older children. Mirroring European examples, such holiday camps were regularly organized by municipalities and private persons in Angola from the mid-1930s onwards. Only white and *mestiço* children were brought on such excursions.[267]

Medical Missionaries and Maternal and Infant Healthcare

Damas Mora's anthropological negativism about the aptitudes of African girls was belied by the success of Protestant mission maternities and midwife training schemes in Interwar

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[263] Coates, Timothy, "Preliminary Considerations on European Forced Labor in Angola, 1880-1930. Individual Redemption and the "Effective Occupation" of the Colony", *Portuguese Literary and Cultural Studies* 15/16 (2010), pp. 79–106, quote p. 80; Bender, *Angola under the Portuguese,* pp. 59-94, esp. pp. 86-93.

[264] On this pressure, see also Chapter 2.

[265] Repartição do Gabinete do Govêrno Geral de Angola, *Estatutos da Liga de Protecção à Infância de Angola*; *Estatutos I.A.C.I.*

[266] *Protecção à criança. A Liga de Protecção à Infância vai criar junto à 'Gota de Leite' uma creche para crianças dos 2 aos 7 anos*, in: A Província de Angola, 26.06.1933, pp. 1–2. See also *A festa da 'Arvore do Natal' na 'Gota de Leite'*, in: A Província de Angola, 23.12.1931, p. 2; *Iniciativa benemérita. A gota de leite para crianças pobres*, in: A Província de Angola, 02.05.1931, p. 2.

[267] Passos, José, "Colónia Marítima Infantil de Benguela de 1947", *Anais do Instituto de Medicina Tropical* 4 (1948), pp. 445–457. These 'colonies de vacance' had emerged in Europe in the late nineteenth century and, in countries like France, had become a widespread practice for lower and middle class children. See Downs, *Childhood*.

Angola. Generally speaking, Protestant missions in colonial Africa began to invest in maternal and infant healthcare after 1918.[268] For the Baptist Missionary Society (BMS) in Northern Angola, for example, the medical work of which had thus far primarily focused on combating sleeping sickness, this became an increasingly important field of work.[269] The number of births in the maternity ward of São Salvador rose rapidly, from 73 in 1925 to more than 200 annually in the 1930s.[270] From the early 1930s onwards, the two other BMS mission stations in the Portuguese Congo, in Kibokolo (or Quibocolo) and Bembe, engaged with maternity work as well. With around 200 births annually, numbers in Bembe even equalled those of the central BMS hospital of São Salvador, about 100km further north.[271] From a comparative perspective, these were substantial numbers: they largely surpassed, for example, those of the important BMS hospital of Yakusu in the Belgian Congo, where, according to the study by Nancy Rose Hunt, far less than 100 births a year took place until the 1940s.[272] Hunt has argued that the significance of hospital childbearing at Yakusu "never lay in numbers, but in the fuss" created by the deliveries and others aspects such as midwife training.[273]

Indeed, the medicalization of childbirth extended far beyond maternity confinement itself. The mission stations also offered pre-natal and post-natal consultations, courses in infant welfare and consultations in which the infants were examined, measured and weighed, just like in the state dispensaries. Mothers could also bring their sick children to the maternity clinic. Mission statistics suggest that, by the 1930s, these services reached a few thousand expectant mothers and infants annually and thus far more than those mothers who chose to deliver in the mission hospital.[274] In addition, the BMS hospital in São Salvador, the only

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[268] Jennings, Michael, "'A Matter of Vital Importance'. The Place of the Medical Mission in Maternal and Child Healthcare in Tanganyika, 1919-1939", in: Hardiman, David (ed.), *Healing Bodies, Saving Souls. Medical Missions in Asia and Africa,* Amsterdam: Rodopi, 2006, pp. 227–250. See also Vaughan, Megan, *Curing their Ills. Colonial Power and African Illness,* Cambridge: Polity Press, 1991, pp. 66–70.

[269] *Medicine and the gospel in Congoland (printed)*, [1929], in: BMSA, Box 12 – Africa: Angola [IV 23]. For BMS work on sleeping sickness, see Chapter 1. Other Protestant mission societies present in Angola developed maternal and infant health programmes as well, but they cannot be discussed here. On the Protestant mission maternity in Chissamba, for instance, see Óscar Ruas, *Relatório da visita a algumas Missões Protestantes e instituições de assistência indígena do Estado*, 23.12.1936, p. 12 in: AHU, MU, ISAU 1665.

[270] *Mapa do movimento de doentes durante o ano 1925*, in: BMSA, A 124; *Annual Reports of the BMS station in São Salvador to the Portuguese Government, 1926-1945*, in: BMSA, Box 12.

[271] In the first two and a half years (Sept. 1932 – January 1935), no less than 657 children were born at the mission dispensary. In 1936, there were 245 and in 1938 188 births. See A.A. Lambourne: "Defence" handed to the Administration office at Uige, 14.01.1935, p. 5 in: BMSA, A 94; Miguel Antonio de Freitas Barros, *Relatorio anual do Encarregado do Governo da Provincia de Luanda referente ao ano economico de 1935-1936*, p. 16, in: AHU, MU, ISAU 1727; Raúl de Lima, *Relatório do Governo da Província de Luanda para 1938*, 30.04.1939, pp. 57-59, in: AHU, MU, DGAC 543.

[272] Hunt, *Colonial Lexicon,* pp. 255–256.

[273] *Ibid.,* p. 256.

[274] Annual Reports of the BMS station in São Salvador to the Portuguese Government, 1926-1945, in: BMSA, Box 12 – Africa: Angola [IV 23]. See also Dr. Jack Saxton, *Report of San Salvador Hospital for 1939*, in: BMSA, A 92 and the descriptions in Raúl de Lima, *Relatório do Governo da Província de Luanda para 1938*, 30.04.1939, pp. 57-59, in: AHU, MU, DGAC 543

hospital with the permanent presence of a European doctor, gained fame for its obstetrical operations and other treatments against infertility, miscarriages and early infant deaths, thus also attracting women from far away.[275] Adams, a doctor sent by the BMS in Britain to evaluate the medical work of the mission field stations in Angola and the Belgian Congo, asserted that the immense popularity of the hospital stemmed from its 'powder babies'. In order to reduce the number of stillbirths, expectant mothers received a course of 'grey powder', Adams stated.[276] 'Grey powder', a mixture of mercury and chalk powder, was a popular medicine against syphilis at the time. One can assume that this treatment was administered to prevent the transmission of syphilis from mother to child, widely considered to be an important cause of miscarriage, stillbirth and neo-natal mortality.[277]

The Baptist Missionaries in Angola were also far more successful in training African nurses and midwives than its secular competitors. Under the supervision of the two European nurse-midwives, a training programme was commenced at the hospital in São Salvador in 1924.[278] Soon, the African midwives were the ones who were called on for normal deliveries, and the European personnel were brought in only in difficult cases.[279] Once married, most of the nurses left the station, but they often went on to practice midwifery in their village.[280] Education in midwifery was not confined to future nurses; in addition to their regular education, girls enrolled in the station schools were also taught the basic principles of nursing, midwifery and infant hygiene.[281] From a broader perspective, one must nevertheless question the efficiency of mission education in changing local customs of childrearing among the female population at large. The BMS sources I was able to consult are particularly silent on

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[275] On the far reaching presence of the hospital in São Salvador, see Hancock, *San Salvador Station Report 1940*, 10.01.1941, in: BMSA, A 124 and Saxton, Jack, "A medical missionary's experience in San Salvador, Portuguese Congo", *Edinburgh Medical Missionary Society - Quarterly Paper* (Febr. 1938), pp. 200–203.

[276] Adam, T. B., *Africa revisited. A medical deputation to the Baptist Missionary Society's Congo Field,* London, 1931, p. 30.

[277] On grey powder, see Museum of the Royal Pharmaceutical Society (2007): https://rpharms.com/museum-pdfs/f-syphilis.pdf [last accessed 07.09.2013] and Thomson, John, *Guide to the clinical examination and treatment of sick children,* Philadelphia: Lea Brothers & Co, 1898, pp. 21, 54, 239-240. On the role of syphilis in stillbirths and infant mortality, see for instance Blacklock, *Still-birth and Infant Mortality,* pp. 8–14.

[278] *The Challenge of Pain. Report of the Medical Mission Auxiliary of the Baptist Missionary Society for the year ended March 31st, 1925,* London: Baptist Missionary Society, [1925], p. 27; Moorshead, Robert Fletcher, *Heal the sick. The story of the medical mission auxiliary of the Baptist Missionary Society,* London: Carey Press, 1929, p. 156. See also Wilson, William, "The Making of a Garden", *The Missionary Herald of the Baptist Missionary Society* (1925), pp. 131–132.

[279] Jack Saxton, *San Salvador hospital. Letter to co-workers*, Sept. 1935, in: BMSA, A 124; Saxton, *A medical missionary's experience*.

[280] Phyllis Jessop, *Report from Bembe for the year 1939*, in: BMSA, A 92.

[281] See, for instance, *Relatório sobre o movimento da Sociedade Missionário Baptista em São Salvador do Congo durante o ano 1935*, 8 Febr. 1936, in: BMSA, Box 12 – Africa: Angola and Winifred D. Cuff, *Quibocolo Medical Report for 1939*, in: BMSA, A92. On the education of girls by American missionaries in central Angola, see Heywood, Linda, "Ovimbundo Women and Social Change, 1880-1926", in: Santos, Maria Emília Madeira (ed.), *A África e a Instalação do Sistema Colonial (c. 1885 - c. 1930). Actas da III Reunião Internacional de História de África,* Lisboa: Centro de Estudos de História e Cartografia Antiga, 2000, pp. 441–453.

how African women treated their infants outside the confines of the maternity. But Mary Cushman, a female medical missionary working for the American Board of Commissioners for Foreign Missions in Chilesso, was particularly pessimistic in her memoirs on the effect the courses in infant welfare had even on the Christian native women that had followed them. Umbundu women, she lamented, usually listened with interest, but did not change their customs, claiming that their babies were different from American ones.[282] A similar complaint about such 'passive resistance' can be found in government doctors' reports as well.[283]

Baptist missionaries, doctors and nurses were proud of their maternity work and the favourable impact it had on maternal health and infant mortality rates. In their letters to supporters and sponsors back in Britain, they often highlighted their maternity work. The underlying motive was most likely more than just to express their pride in their work; it was probably also a strategy to obtain more funds.[284] As had previously been the case with sleeping sickness, the missionaries also used this tactic to legitimize the existence of the mission as a whole vis-à-vis a Portuguese administration that was not always favourable towards them, but generally appreciated their efforts to improve the health of the African population. Thus, at the height of a conflict with the local *chefe do posto*, who had levelled accusations of an illegal trade of books and drugs as well as extortion of African patients against the mission, the missionary A. Lambourne defended the work of the Bembe mission by highlighting its maternal and infant welfare programme: "We conclude that before the arrival of the missionaries, the infant mortality reached 80 per cent; but now owing to the efforts made by the competent personnel of the Mission Dispensary as regards ante-natal and post-natal treatment, as well as a hygienic and effective service at the time of birth, the infant mortality is already reduced to 7 per cent amongst women [who have] delivered in the Mission."[285] It is worthy of note that the BMS had greatly expanded its maternity work in the late 1920s, in the very moment when the state had begun to set up its AMI anti-sleeping sickness programme in the region and, therefore, had begun to monopolize the fight against

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[282] Cushman, Mary Floyd, *Missionary Doctor. The Story of Twenty Years in Africa,* New York: Harper & Brothers, 1944, pp. 206–210.

[283] See for instance Amaral, *Natalidade e mortalidade*, p. 183.

[284] Miss A.H. Bell and Dr. W.H. Craven to the Friends who have named beds at San Salvador, 07.01.1933 and M. Stevens to the bed friends of San Salvador, 03.02.1934, both in BMSA, A 124. Summers showed, for Uganda, that the maternity programme of the Church Missionary Society was a huge financial and public relations success in Britain. See Summers, *Intimate colonialism,* pp. 802–804.

[285] A.A. Lambourne, 'Defence' handed to the Administration office at Uige, 14.01.1935, in: BMSA, A 94. For the conflict between the mission and the local *chefe do posto*, see Grenfell, Frederick James, *The history of the Baptist church in Angola and its influence on the life and culture of the Kongo and Zombo people, 1879-1940* (MA Thesis - University of Leeds, Department of Theology and Religious Studies), 1995, pp. 113–114.

this disease.[286] Maternity work had become the new niche, and like the prolonged sleeping sickness treatments before them, maternity work offered a promising evangelical opportunity. As Nancy Rose Hunt has written on the BMS in Yakusu, "women in childbearing crisis" were considered to be "particularly open to conversion".[287]

Between the two world wars, BMS doctors and missionaries consistently characterized their relations with Portuguese state doctors stationed in São Salvador or Bembe as very cordial, wherein both parties granted mutual support and assistance if necessary.[288] In the early 1930s, Dr Alfredo Rezende even translated into Portuguese a widely used manual on the art of motherhood written by BMS missionaries working in the Belgian Congo.[289] Beyond these personal and professional bonds, however, medical work, at the strategic level, became an object of national and religious rivalry. Portuguese state policy towards the medical work of the BMS was unstable over the years, and, more importantly, it was fundamentally characterized by the underlying rationale whereby the spread of Protestant and foreign influence was to be contained.[290] The case of BMS maternity work demonstrates this rivalry very well. Instead of integrating Protestant mission medicine into the state's health programme, the colonial administration chose to compete with it. This was fundamentally different from what has been described with regard to the British colonies of Uganda and Tanganyika, for example, where conflicts of nationality and denomination did not exist and where the (fundamentally protestant) British state supported, through subsidies and/or privileges, the maternity work and or midwife training schemes of British Protestant missions.[291]

Against the backdrop of this rivalry, it was hardly coincidental that, in 1928, the health services planned one of the very first state maternities exactly in São Salvador. "The creation

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[286] By the end of the 1930s at the latest, the BMS had almost no sleeping sickness patients anymore. See Salzberg to Chesterman, 11.06.1938, in: BMSA, A 51.2; Jack Saxton, *Report of San Salvador Hospital 1944*, in: BMSA, A 92.

[287] Hunt, *Colonial Lexicon,* pp. 227 (here quote); 230.

[288] See, for instance, Dr. Salzberg to Dr. Chesterman, 20.03.1938, in: BMSA, A 51-2 (Peter Salzberg); BMS Medical report São Salvador for 1918; Winifred D. Cuff to Dr. Chesterman, 26.12.1939, and Dr. Jack Saxton, *Report of San Salvador Hospital for 1941*, all in: BMSA, A 92. For the perspective of a Portuguese doctor, see Almeida, Carlos de, "Relatório do chefe da Missão do Congo Dr. Carlos de Almeida, referente ao triénio: 1923-1924; 1924-1925; 1925-1926", *Revista Médica de Angola* 5 (1927), pp. 22–79, here p. 24.

[289] Adam, *Africa revisited,* p. 30; Millman, Edith R., *Manual a arte de ser mãe. Traduzido do Inglês por Alfredo Rezende,* London: Carey Press, 1932. The original was publisehd for the first time in 1929, see Millman, Edith R.; Chesterman, Clement, *A mothercraft manual. For senior girls and newly married women in Africa,* London: Christian Literature Society, 1929. In the early 1930s, this handbook seems to have been widely used in Africa, see Brackett, D. G.; Wrong, M., "Notes on Hygiene Books Used in Africa", *Africa. Journal of the International African Institute* 3,4 (1930), pp. 506–515, here p. 514 and Wrong, M.; Brackett, D. G., "Supplementary Notes on Hygiene Books Used in Africa", *Africa. Journal of the International African Institute* 5,1 (1932), pp. 71–74, here p. 74.

[290] For more on this rivalry, see Chapter 5.

[291] See Summers, *Intimate colonialism,* pp. 802–803; Jennings, *Matter of Vital Importance*.

and use of the maternity will fill the most serious gap of the Assistência Médica Indígena in São Salvador, as it will then be possible to say that the *assistência aos indígenas* of the Portuguese Congo is entirely secured by Portugal", Pires dos Santos, the head of the Western Congo AMI zone, wrote.[292] It appears, however, that this maternity ward, which was eventually built in the beginning of the 1930s, did not attract many expectant mothers until the early 1940s. It was, in fact, in this period that BMS medical missionaries grew increasingly anxious about this competition in view of the decrease in the number of confinements in their own maternity ward.[293] This new popularity of the state maternity may probably be ascribed to the combined effects of significant shifts in Catholic missionary doctrine and in state-church relations. In 1936, the Vatican had lifted the ban on religious women working as maternity nurses and midwives and even recommended the training of sister-midwives.[294] In the same year, the Portuguese state had re-allowed Catholic sisters to carry out nursing work in state hospitals.[295] In the wake of these changes, the Franciscan Missionaries of Mary, a Catholic female congregation that had been present in São Salvador since 1908, had taken over the state maternity ward.[296]

It has been argued that the Vatican's change in doctrine triggered a global shift, wherein the Catholic Church quickly became a leading player in the sphere of maternal and child welfare services.[297] In Angola, things moved in the same direction as the Franciscan sisters and other congregations like the Sisters of S. José de Cluny began to take up maternity work and, after the Second World War, to establish their own missionary maternities.[298] On

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[292] *Assistência Médica aos Indígenas,* p. 302.

[293] See, for instance, Dr. Jack Saxton, *Reports of San Salvador Hospital for 1941 and 1944*, in: BMSA, A 92. According to a newspaper article, the maternity in São Salvador had been built upon the initiative of Dr Reis Figueira, see Magova, *Noqui, terra d'Angola*, in: A Província de Angola, 22.08.1934, p. 2. Pictures of the hospital, dated 1934, are proof that it was already built by then. These pictures can be found in: AHU, MU 975 as well as in the journal *A Província de Angola*, 20.04.1934, p. 1.

[294] Brásio, António, *A missionação pela medicina, Actas do III Congresso Internacional dos Médicos Católicos em Lisboa (Portugal), 17 a 23 de Junho de 1947* = Acção Médica 12,45-48 (1948), pp. 462–467, here p. 466; Manton, John, "Administering Leprosy Control in Ogoja Province, Nigeria, 1945-1967. A case study in Government-Mission Relations", in: Hardiman, David (ed.), *Healing Bodies, Saving Souls. Medical Missions in Asia and Africa,* Amsterdam: Rodopi, 2006, pp. 307–331, here p. 314.

[295] Gabriel, Manuel Nunes, *Angola, cinco séculos de cristianismo,* Queluz: Literal, 1978, pp. 466-467; 511. Such nursing work had come to a halt in 1911 due to the anti-religious repression of the First Republic, see *Ibid.,* p. 457.

[296] *Ibid.,* pp. 458–462. Despite the doctrinal prohibition, some female congregations did engage in maternity work before 1936. According to Nancy Rose Hunt, there were 40 Catholic nuns (of 1,057) acting as midwives in the Belgian Congo in 1935. In the mid-1920s, the Franciscan Missionaries of Mary had still refused to take on maternity work in Stanleyville, however. See Hunt, *Colonial Lexicon,* pp. 253–255.

[297] Hardiman, David, "Introduction", in: Hardiman, David (ed.), *Healing Bodies, Saving Souls. Medical Missions in Asia and Africa,* Amsterdam: Rodopi, 2006, pp. 1–57, here p. 24.

[298] For maternity work by the Sisters of Cluny, see Conceição, Lourenço Mendes da, "A obra das Irmãs de San-José de Cluny em Angola", *Angola. Revista de Doutrina e Estudo* 4,17 (1937), pp. 9–17, here p. 16; Costa, Cândido Ferreira da, *Cem anos dos missionários do Espírito Santo em Angola, 1866-1966,* Nova Lisboa: Livr.

the whole, however, Catholic mission medicine remained marginal before the 1950s, because the far more numerous (French and Portuguese) male Catholic congregations in Angola were slow to professionalize their healthcare services, despite the fact that Pope Pius XI had finally recognized the value of mission medicine, effectively opening the door for Catholic medical missionaries in the mid-1920s.[299] Various associations in support of such Catholic medical missionaries had been established throughout Europe and the United states in the 1920s and 1930s.[300] One of the most successful was doubtlessly the Belgian *Aide Médicale aux Missions* (1925), which had already sent some thirty doctors and a certain number of nurses and midwives to Catholic mission stations in the Belgian Congo by the end of the Second World War.[301] Portugal, however, did not follow this trend. Despite public calls by high-ranking missionaries, no similar 'auxiliary institution' was created for the Catholic missions in the Portuguese Empire before the Second World War.[302] In 1943, Padre Manuel Junqueira still lamented the lack of trained personnel and medical infrastructure in the Catholic missions in Angola during a public lecture at the Medical Faculty in Coimbra. With only a few rudimentary dispensaries, they lagged far behind the foreign Protestant missions. Junqueira claimed that Catholic missions needed to be provided with doctors, nurses, hospitals, operation theatres, laboratories, maternities and training courses for African nurses like their Protestant competitors. Because the State was unable to pay for everything, he proposed to create a "Liga de Assistência Social às Missões Católicas e Portuguesas de Angola" in Portugal.[303] But in 1947, when the issue was discussed in a special section of the Third International Congress of Catholic Doctors in Lisbon, a Portuguese branch had still not been opened.[304] For the Portuguese priest Augusto Teixeira Maio, the blame lay with the country's

Sampedro Ed., 1970, p. 171. By 1974, there were 12 Catholic missionary maternities in Angola, see Gabriel, *Cinco Séculos,* p. 512.

[299] Hardiman, *Introduction,* p. 24.

[300] In the years leading up to this paradigmatical shift, a few associations in support of Catholic medical missionaries had already seen the light, but it was from 1925 onwards that their number and influence became significant in Europe and the US. See, for instance, Souto, A. Meyrelles do, *Auxílio médico às missões, Actas do III Congresso Internacional dos Médicos Católicos em Lisboa (Portugal), 17 a 23 de Junho de 1947* = Acção Médica 12,45-48 (1948), pp. 446–455 and Pasteau, O., *L'Aide Médicale aux Missions et la Médecine missionnaire, Actas do III Congresso Internacional dos Médicos Católicos em Lisboa (Portugal), 17 a 23 de Junho de 1947* = Acção Médica 12,45-48 (1948), pp. 468–472.

[301] Villela, Fernandes, *Rapport sur l'Aide Médicale aux Missions de Belgique, Actas do III Congresso Internacional dos Médicos Católicos em Lisboa (Portugal), 17 a 23 de Junho de 1947* = Acção Médica 12,45-48 (1948), pp. 473–492. On the fears this programme triggered in the BMS, see Adam, *Africa revisited,* pp. 95–96.

[302] See, for instance, Estermann, Carlos, "Conferência na Sociedade de Geografia no dia 19 de Janeiro de 1935", *Missões de Angola e Congo* 15 (1935), pp. 38-40; 72-74; 104-107, here pp. 72–73. See also "Através da Imprensa - Os médicos missionarios", *Missões de Angola e Congo* 10,4 (1930), pp. 86–87; "Assistência Médica em Angola", *Missões de Angola e Congo* 20 (1940), pp. 257–260.

[303] Junqueira, *As Missões Católicas*, esp. pp. 10-11; 20-24.

[304] *Comunicações sobre o Auxílio Médico às Missões, Actas do III Congresso Internacional dos Médicos Católicos em Lisboa (Portugal), 17 a 23 de Junho de 1947* = Acção Médica 12,45-48 (1948), pp. 431–540. See especially Souto, *Auxílio médico às missões*, pp. 452–454.

Catholic doctors, who had thus far failed to assist the missions and to alleviate the suffering of the African population in the colonies, causing an "enormous and criminal waste of human and divine potential"[305]

[305] Maio, Padre Augusto Teixeira, *As missões protestantes em Angola e os médicos católicos portugueses, Actas do III Congresso Internacional dos Médicos Católicos em Lisboa (Portugal), 17 a 23 de Junho de 1947* = Acção Médica 12,45-48 (1948), pp. 458–461, quote p. 461.

Conclusion

In the Interwar Years, the idea that African populations suffered from low fertility and excessive infant mortality strengthened the perception among many colonialists in Angola that the colony was undergoing a demographic crisis. Assumptions about fertility and infant mortality were based on ethnographic, medical and other observations, but they probably also gained wide acceptance because they were implicitly confirmed by the existence of similar anxieties in many other African colonies and European countries at the time. Although in Portugal the birth rates had not really begun to decline (and generally remained at a comparatively high level) until the 1930s, influential Catholic doctors like Costa-Sacadura had already issued dramatic warnings that this decrease had started to manifest in the 1920s. At the same time, infant mortality rates in Portugal did not fall markedly in the Interwar Period, contrary to what occurred in the rest of Europe.

Even if it has proven impossible to gauge the direct influence of Portugal's rather exceptional demographic trends – exceptional if one compares them with France, Belgium and Great Britain – on the debates in Angola, it is striking that leading doctors in the colony came to a conclusion that mirrored the situation in metropolitan Portugal: for them, excessive infant mortality was the big problem, not fertility. Undoubtedly, they had reached this conclusion on the basis of a series of novel demographic studies that had been conducted by doctors in AMI zones and during medical missions. Arguably, however, they also clung to the idea of high fertility by downplaying the effects of venereal diseases and birth control practices than for instance their colleagues in the Belgian Congo did.

Accordingly, efforts during the Interwar Period focused mainly on reducing infant mortality. Various schemes came into existence simultaneously: the colonial health services began to construct maternity hospitals and to plan training courses for African midwives; philanthropically minded European women started to run urban dispensaries for newborns; and Protestant medical missionaries adopted similar measures – hospitals, training programmes and support for newborns – in some of their mission stations. Aside from medical and material assistance, all of these schemes also aimed at transforming African women into 'good' mothers. But there were also differences. While government doctors considered their infant and maternal health interventions to be of a primarily preventive nature, Baptist missionaries were glad to assist as many deliveries as possible for reasons of proselytism.[306] Before 1945, however, all these schemes were implemented on a very limited scale, and thus reached only a very small part of the population. This stood in stark contrast

[306] This partly goes against Jennings, *Matter of Vital Importance*.

with the urgency instigated by the elevated percentages of infant mortality that circulated in medical and other reports at the time.

Finally, it is important to note that the idea that fertility was too low among certain segments of the population did not completely disappear. In the next chapter, I will examine, among other things, how the colonial administration discussed reforms of labour migration in order to increase birth rates and to secure the reproduction of the work force.

Chapter 4

Reordering Rural Angola: Model Villages between Hygienic, Agricultural and Labour Reform

Introduction

1. Model Villages, a Medical Utopia
2. Model Villages, Malnutrition and Agricultural Reform
3. Imperial Debates and Colonial Practicalities
4. Recreating Village Life: Detribalization, Denatality and the Reproduction of the Work Force

Conclusion

Introduction

Shortly after reassuming the directorship of the Health Services in Angola in 1926, António Damas Mora also began to plead the cause of so-called model villages. His plan, which he had reportedly conceived during the West African interchange that was held in that same year and which he would further develop over the next few years, envisaged the establishment of new villages, located in healthy environments and provided with hygienic houses, under the supervision of administrative and medical authorities. Only married couples that medical examinations had proven to be free of communicable and other grave diseases would be admitted. Alcohol and other drugs would be strictly prohibited. Moreover, each village was to send a couple to the nearest hospital; the man was to receive an education in medicine and the woman in midwifery, so that the village would become self-sufficient with regard to its basic health needs. Economic incentives and special privileges were offered as a means to enhance the attractiveness of the scheme for the African population. Thus each couple would receive a land allotment large enough to nourish a family, all villagers would have access to education and agricultural aid, and family fathers would be exempted from compulsory long-distance labour recruitment and military conscription.[1]

As can be deduced from Damas Mora's earliest references, the plan to build model villages had originally been a primarily medical project, fuelled by concerns of malnutrition and high morbidity and (infant) mortality rates and designed to establish medical control over the colony's dwindling native populations. Yet, by the end of 1928, his ideas on the model village had merged into a holistic reform programme that would, simultaneously, transform rural life in Angola and resolve some of the colony's fundamental problems. Indeed, António Damas Mora was firmly convinced that model villages embodied the solution to all sanitary, demographic and, eventually, also economic and social problems of the colony. This belief was based on the diagnosis that "the hygienic problem of the primitive tribes" in Angola was inextricably linked to the "actual disorder of their social organisation". Hence, to tackle the

[1] References to this project can be found in António Damas Mora, *Missão Sanitária da S.D.N.*, in: O Século, 03.07.1926; Mora, António Damas, "L'Assistance Médicale Indigène", *Bruxelles-Médical. Revue hebdomadaire des sciences médicales et chirurgicales* 8,41 (1928), pp. 1328–1337, here pp. 1336–1337; Mora, António Damas, "Les services de l'assistance médicale indigène en Angola, pendant 1927", *Revista Médica de Angola* 6 (1928), pp. 9–17, here pp. 16–17; Mora, António Damas, "Os Serviços de Saúde em Angola e a obra de Assistência Médica aos Indígenas", *Boletim da Assistência Médica aos Indígenas e da Luta contra a Moléstia do Sono* 2,9 (1928), pp. 87–94, here p. 93. The most elaborate sketch is Mora, António Damas, "Notas sobre um estatuto de "aldeias indigenas"", *Boletim da Assistência Médica aos Indígenas e da Luta contra a Moléstia do Sono* 2,11 (1928), pp. 235–239.

problems of hygiene and demographic decline, it was imperative that a new social order be instated.[2]

The economic rationale underlying the project, in particular, had grown very explicit. "The ordering of the native villages [*aldeamentos indígenas*]", Damas Mora thus claimed, "will allow us to prevent the waste of so much unused [labour] force and to channel it into the economic production of the colony".[3] In Damas Mora's vision, his plan would stimulate both the African and European sectors of the colonial economy. The construction and multiplication of model villages throughout the territory would give rise to sustained population growth and a steady increase in the agricultural production of the colony. In the mid-term, it would also resolve the issue of labour recruitment. Young males between 18 and 22 would not be allowed to start their own family in these privileged villages, even if they had been raised there. For this period of four years, they would be obliged to work for state or private enterprises or to perform military service, and thus constitute a large, vigorous and growing labour reservoir.[4]

While some key members of the medical staff supported his project of social engineering, Damas Mora acknowledged that it could only succeed were the administrative and medical authorities to work in close collaboration. Yet the relations between both professional groups, he lamented, had frequently been marked in the past by conflict.[5] Initially, he feared that a long period of propaganda would be necessary to convince the administration that the long-term advantages of his project largely outweighed the short-term sacrifices that the financial investment and the exemption of labour recruitment and military conscription might constitute.[6] Yet his unexpected nomination as interim Governor-General in November 1928, to fill the position after the dismissal of Vicente Ferreira, provided a unique opportunity to implement his ideas. "If I have more than 15 days at my disposal", he wrote to the Minister of Colonies upon his acceptance of the appointment, "I will codify the creation of native maternities and native model villages, two measures aimed at impeding the

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[2] Mora, *Assistance Médicale Indigène (1928),* p. 1336.

[3] *Uma entrevista com o sr. dr. Antonio Damas Mora, ilustre Governador Geral de Angola*, in: A Província de Angola (6), 01.01.1929, pp. 1–2.

[4] Mora, *Assistance Médicale Indigène (1928),* p. 1336; Mora, *Notas sobre um estatuto,* p. 238.

[5] Mora, *Les services de l'assistance,* pp. 16–17. On the support from colleagues, see, for example, Camoesas, João, "Sobre a organização da Assistência Médica Indígena", *Boletim da Assistência Médica aos Indígenas e da Luta contra a Moléstia do Sono* 3,2 (1929), pp. 140–155, here pp. 146–147; Mesquita, Bruno Pereira de, "Concentrações indígenas, suas necessidades sociais. Higiene preventiva nos aldeamentos indigenas", *Boletim da Assistência Médica aos Indígenas e da Luta contra a Moléstia do Sono* 3,4-6 (1929), pp. 469–472; Amaral, Anthero Antunes de, *Relatório da missão médica de reconhecimento nosográfico de Catete, 1930-1931* (Colecção de relatórios, estudos e documentos coloniais; 27), Lisboa: Agência Geral das Colónias, 1935, pp. 68–70.

[6] Mora, *Les services de l'assistance,* pp. 16–17. On the temporary loss of recruits, see Mora, *Notas sobre um estatuto,* p. 238.

disappearance of the native populations. If not, I will try to convince the future effective Governor to publish these laws."[7]

In the end, Damas Mora Mora did not promulgate the orders himself and waited for the arrival of the new designated High Commissioner, Filomeno da Câmara Melo Cabral. He was convinced that Filomeno Cabral would approve of his project, since it built upon some of the very ideas the latter had implemented during his governorship in Timor (1910-1917), like the *comunidades agrícolas indígenas*.[8] Moreover, Damas Mora had served as chief medical doctor in Timor from 1914 to 1919 and created bonds of friendship with the Governor. In Angola, however, as I have shown in Chapter 2, both men quickly became the worst of enemies and concurrent with severe financial cutbacks in the recently established African healthcare programme, the model village project was put on hold.[9]

Although this project was designed to reorder colonial society in a profound manner, it was not exceptional in the Interwar Period. Damas Mora himself was keen to challenge the exceptionalist nature of his proposals. Throughout his writings on the model village, he referred to similar endeavours in other parts of the colonial world that had inspired him. He thus mentioned the *aldeamentos* in Timor, the hygienic villages used to combat epidemic venereal disease in Dutch New Guinea, the plans for model villages in the French mandated territory of Togo as well as the hygienic villages situated along the roads in Ubangi-Shari in French Equatorial Africa.[10] Of course, these references not only aimed to demonstrate his erudition and transnational eclecticism, they were also intended as authoritative arguments in his campaign to convince decision-makers in Angola of the validity and importance of the idea. Moreover, aside from their instrumental use, the existence of these and other similar projects demonstrates that the Angolan model village project was an element inserted into a much broader context. In several continents and across imperial borders, colonial powers during the Interwar Period increasingly favoured the social and spatial transformation of native societies by implementing similar such projects.

The example of another holistic biopolitical reform project, involving the spatial and socio-economic reorganization of African populations under hygienic imperatives, might

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[7] Interim Governor-General Damas Mora to Minister of Colonies, 6.11.1928, in: ANTT, Processo Individual de António Damas Mora (Proc. 90760 Pt. 1, Cx. 5620). The same letter can also be found in AHU, MU, GM 2832.
[8] *Uma entrevista com o sr. dr. Antonio Damas Mora, ilustre Governador Geral de Angola*, in: A Província de Angola, 01.01.1929, pp. 1–2.
[9] See Chapter 2.
[10] See Mora, *Les services de l'assistance,* pp. 16–17; Mora, *Assistance Médicale Indigène (1928),* p. 1337; *Uma entrevista com o sr. dr. Antonio Damas Mora, ilustre Governador Geral de Angola*, in: A Província de Angola, 01.01.1929, pp. 1–2; António Damas Mora, *L'état actuel de l'assistance médicale indigène dans certaines colonies et pays sous mandat de l'Afrique équatoriale*, 28.02.1930, p. 40, in: AHD-MNE, 3. piso, armário 28, maço 65. On these projects, see further in this chapter.

underscore this trend. In 1939, the entire region of Haut-Nyong in French-controlled East Cameroon was placed under the exclusive control of the Health Department for “a social enterprise with resolutely demographic aims”. In addition to agricultural aid, a panoply of socio-hygienic reforms – such as the construction of model villages and health infrastructure, the establishment of maternal and infant healthcare programmes and the introduction of ‘sanitary discipline’ through sports and educational programmes – targeted demographic improvement as a precondition for economic development.[11] As Lachenal has convincingly argued, this experiment fulfilled a “political dream” of “medical government”, which was prevalent among colonial hygienists – a vision of unlimited medicalized control over the African population, without the interference of civil or military administrations.[12] In practice, however, complete control turned out to be a utopian dream and the experiment in Haut-Nyong was aborted in 1948 since it had failed to produce the desired results, also in part because of planning errors and the imperatives of the war economy. Nevertheless, some of its core ideas would serve as the basis upon which post-Second World War healthcare schemes were founded.[13]

The French Haut-Nyong scheme as well as Damas Mora’s model village project can be seen as a paradigmatic examples of how, in the nineteenth and twentieth centuries, some European actors conceived of colonial spaces as ‘laboratories of modernity’. This historiographical concept argues that colonies constituted a propitious terrain within which projects of social engineering with far-reaching implications could be envisioned and implemented that would have been (or had already proved) impossible in Europe, due to “popular resistances and bourgeois rigidities of European society at home”.[14] Indeed, both the

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[11] Lachenal, Guillaume, "Le médecin qui voulut être roi. Médecine coloniale et utopie au Cameroun", *Annales. Histoire, Sciences Sociales* 65,1 (2010), pp. 121–156. Quote from Docteur Jean-Joseph David, in: *Ibid.,* p. 137. Another good example is the Anchau settlement scheme in British Nigeria (ca. 1938-1948). In Anchau, the British displaced some 5,000 people from an area with a very high incidence of sleeping sickness to a tsetse-free corridor, where they were concentrated in standardized hygienic villages. Like in the Angolan project, the Anchau resettlement scheme was coupled with a broad programme of agricultural aid and propaganda to stimulate economic development. See Nash, T. A. M., "Regroupement des Populations. The Anchau Rural Development and Settlement Scheme", *Conférence Africaine de la tsé-tsé et la trypanosomiase, Brazzaville, 2-8 février 1948,* Toulouse: Impr. Régionale, 1950, pp. 241–273.

[12] Lachenal, *Le médecin qui voulut être roi,* p. 133 (quotes).

[13] *Ibid.,* pp. 154–155.

[14] On the concept of ‘colonial laboratories (of modernity)’, see Stoler, Ann Laura; Cooper, Frederick, "Between Metropole and Colony. Rethinking a Research Agenda", in: Cooper, Frederick; Stoler, Ann Laura (eds.), *Tensions of Empire. Colonial Cultures in a Bourgeois World,* Berkeley/Los Angeles: University of California Press, 1997, pp. 1–56, here p. 5 (here quote); van Laak, Dirk, "Kolonien als 'Laboratorien der Moderne'?", in: Conrad, Sebastian; Osterhammel, Jürgen (eds.), *Das Kaiserreich transnational. Deutschland in der Welt 1871-1914,* Göttingen: Vandenhoeck & Ruprecht, 2004, pp. 257–279, here pp. 263–265; Tilley, Helen, *Africa as a Living Laboratory. Empire, Development, and the Problem of Scientific Knowledge, 1870-1950,* Chicago: Chicago University Press, 2011, pp. 12-13; 27 and the stimulating view on the debate in Lachenal, *Le médecin qui voulut être roi*, esp. pp. 123-131. It is important to note that my use of the concept of ‘colonial laboratories’ in this context differs from the narrow postcolonial reading of the concept, which has come to dominate for

core ideology of the civilizing mission, which implied that Africa could not remain unchanged, but had to be transformed and developed to overcome its backwardness, and the colonial situation, which deprived most of the population of civil rights while vesting administrators and doctors with greater freedom of action, also vis-à-vis an often weak and distant state, favoured such large-scale reform plans.

The fervour of Damas Mora's ideas can also be deduced from the fact that, despite its initial failure, the concept of model villages did not disappear from colonial debate. On the contrary, it was the beginning of – or at least the first elaborate contribution to – a protracted and evolving debate on model villages in Angola. In this chapter, I will show how, from the mid-1920s to the end of the Second World War, the idea of model villages was discussed in different contexts and at different levels of the colonial administration and how it tied in with medical and demographic concerns as well as with debates about agricultural reform, social disorder and labour migration. I will argue that a wide range of colonial actors, notably hygienists, agronomists and administrators, came to view the reformed village as the ideal setting to improve the health and well-being of the African population and to rationalize economic production. Simultaneously, I will demonstrate that ideas regarding model villages in Angola were shaped by inner- and inter-imperial borrowings and embedded in a broader debate among European colonial powers.

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instance the German debate. Here, the concept has generally been used to overcome an internalist view on German and European history, and hence has been confined to projects and techniques that were 'tested' in the colonies and then transferred to the metropolis. For such a postcolonial view on 'colonial laboratories', see Conrad, Sebastian, "Doppelte Marginalisierung. Plädoyer für eine transnationale Perspektive auf die deutsche Geschichte", *Geschichte und Gesellschaft* 28 (2002), pp. 145–169, here pp. 155–158; Anderson, Clare, *Legible Bodies. Race, Criminality and Colonialism in South Asia,* Oxford/New York: Berg, 2004, p. 167. This is certainly a fruitful approach for German or European history, but reductionist for African history. One could even argue that, by conceptualizing the colony as a laboratory within which to make experiments and produce developments that were ultimately destined to be applied to the metropole, this postcolonial view retains the focus on the metropolis and thus only partly transcends – and partly even reproduces – the very epistemological eurocentrism it set out to overcome. From an Africanist point of view, the colonies must also be seen as laboratories in their own right, where, capitalizing on the 'colonial situation', doctors and scientists, administrators and missionaries envisioned and conducted experiments, not, or at least not only, to test their applicability to the metropolis, but, at least in their view, to reorder and transform, to modernize and improve the existing colonial societies. Moreover, for the colonial populations at large, who were subjected to novel and often very repressive techniques of administration and hygiene, it was of no importance whatsoever whether these were then replicated in Europe or not.

1. Model Villages, a Medical Utopia

From a medical perspective, Damas Mora's project stood at the crossroads of two major shifts in sanitary thinking in colonial Africa, both of which I have discussed at length in Chapter 2: a shift from urban and European healthcare towards rural African healthcare and another from curative and individual medicine to preventive and collective healthcare, often subsumed under the term social medicine. Both transitions were rooted in the early twentieth century, but only began to be implemented on a larger scale after the First World War, without ever being fully endorsed, however, as was certainly the case with social medicine. In Damas Mora's conceptualization of the model village project, both shifts were epitomized: in its focus on the rural masses, the project pursued the ultimate aim of social medicine, which was to take care of the healthy and protect them against disease through the implementation of a whole range of preventive measures.[15]

Indeed, the establishment and multiplication of model villages was meant to bring about the Copernican turn envisioned by Damas Mora and other hygienists, i.e. the shift in focus from the diseased to the healthy. This shift would be facilitated in two complementary ways. On the one hand, the implantation of model villages would improve some of the key 'social determinants of health', such as living environment, housing conditions, diets, income, education level as well as access to child and general healthcare.[16] On the other hand, access to the villages would be restricted, through eugenic selection, to married adults without communicable and hereditary diseases.[17] The combined effects of both measures would enable the colonial health services to direct their attention toward the protection of the healthy rather than the treatment of the ill and diseased: the people living in the model villages would not only be healthier from the beginning, they would also receive better chances to maintain their good health – and to give birth to healthy children.

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[15] For a more elaborate discussion of these issues, see Chapter 2.

[16] For a broader discussion of the concept 'social determinants of health', see Cook, Harold John; Bhattacharya, Sanjoy; Hardy, Anne (eds.), *History of the social determinants of health. Global histories, contemporary debates,* Hyderabad (India): Orient BlackSwan, 2009 and, for Africa, especially Packard, Randall, "The History of the Social Determinants of Health in Africa", in: Cook, Harold John; Bhattacharya, Sanjoy; Hardy, Anne (eds.), *History of the social determinants of health. Global histories, contemporary debates,* Hyderabad (India): Orient BlackSwan, 2009, pp. 42–77.

[17] On the eugenics debate in the Interwar Period, see Chapter 3. Although it would be exaggerated to label Damas Mora as a staunch eugenicist, given the absence of references to eugenics in his other writings, this particular proposal, which he seems to have copied from anti-venereal campaigns in Dutch New Guinea, nevertheless illustrates how the boundaries between social medicine and eugenics were sometimes permeable. See Weindling, Paul, "Social Medicine at the League of Nations Health Organisation and the International Labour Office Compared", in: Weindling, Paul (ed.), *International Health Organisations and Movements, 1918-1939,* Cambridge: Cambridge University Press, 1995, pp. 134–153, here pp. 135-136; 146-148. Compare with De Vogel, Willem T., "La lutte contre le Granuloma Venereum dans la tribu des Marandinois (Nouvelle-Guinée Hollandaise)", *Bulletin de la Société de Pathologie Exotique* 21 (1928), pp. 351–363.

Few Portuguese colonial officials, however, would subsequently endorse the idea of eugenic selection in their writings on the model village.[18] In part, this was because other factors than the hygienic and demographic rationales came to dominate the debate in the 1930s and 1940s, when the model village was re-conceptualized as the ideal site to carry out agricultural reform or to stabilize the labour force, as I will show further on. Agronomists, administrators and entrepreneurs might also have been less receptive to eugenic ideas than medical doctors, who usually formed the core of eugenic societies. Furthermore, concerns over the practicality of eugenic selection and the maintenance of a segregation regime that would separate the elected villagers from the rest might also have played a role.

By contrast, most contributions, whether they came from doctors, administrators, missionaries or entrepreneurs, embraced the idea that newly established model villages would serve – or could be used – to enhance hygienic control and improve the social determinants of health. Generally, doctors were expected to select salubrious locations, free from tsetse flies and anopheles mosquitoes, but still near rivers or water springs as well as roads, so that the villages would have access to water and be more readily accessible for medical assistance. Many believed that model villages would also enhance the efficiency of the health services by concentrating the population, which often lived in very small villages dispersed throughout Angola, into larger agglomerations. In the AMI zones, medical teams would thus be able to visit people directly in their village, and no longer at the concentrations.[19] This increase in the scale of villages, one district intendant claimed, would also enable each village to have its own auxiliary African nurse and midwife. Moreover, villages would be few and accessible enough for the European nurse stationed in the nearest administrative post to visit them every week.[20]

For many, the relocation and re-foundation of native villages also provided the perfect opportunity to improve housing conditions and sanitary provisions. In their supervision of the construction works, European officials were to ensure that individual dwellings were built using more durable materials, with more than one and more spacious rooms, and with enough distance between them.[21] African housing conditions had long troubled Portuguese doctors and administrators in Angola. Although housing structures varied substantially throughout the colony and some influential voices had even qualified them as “superior to the houses of the

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[18] An exception was António Leite de Magalhães, see footnote 133.
[19] See for instance Mesquita, *Concentrações indígenas*; Júlio Garcês de Lencastre, *Relatório do Governador da Província de Luanda para 1934-1935*, pp. 19-20, in: AHU, MU, ISAU 2246.
[20] João de Mesquita, Tese ‘Assistência ao Indígena’, in: *Relatório da Conferência dos Intendentes e Administradores da Província de Benguela realizada de 11 a 16 de Fevereiro 1943*, pp. 34-43, esp. pp. 38-42, in: AHU, MU, ISAU 60.
[21] *Ibid.*; Mesquita, *Concentrações indígenas,* p. 471.

poor classes in Europe”, many viewed the archetypical *‘cubata’* (hut) to be utterly unhygienic, because of its lack of space, proper ventilation and cleanliness.[22] In urban centres, the outbreak of epidemic diseases like smallpox or the bubonic plague had repeatedly empowered hygienists to destroy such dwellings, as they were considered hotbeds of disease.[23] Fears that communicable diseases, including malaria, were provided with reservoirs in the unhygienic African masses had even been instrumental – and had not seldomly been instrumentalized – in the advancement of segregationist policies that aimed to physically separate European from native living areas, often through the creation of a ‘cordon sanitaire’. To some extent, this ‘sanitation syndrome’ (Swanson) beset all colonial powers in late nineteenth and early twentieth century, even if its practical implementation was not always possible and hygienic segregation often remained an official dream.[24]

Angola was not an exception. Calls for urban sanitation and segregation had intensified at the turn of the twentieth century. In the late nineteenth century, important sanitation measures were undertaken in Luanda by Governor-General (and hygienist) António Duarte Ramada Curto.[25] And in 1901 and 1904-1905, two commissions, the first instated by the local government and the second by the Colonial Ministry in Lisbon, drafted extensive recommendations on how to further sanitize the colony’s capital. These included, among others, a modern canalization network, the drainage of swamps and better waste management. Significantly, both commissions also recommended that native neighbourhoods like

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[22] For a very negative view, see for instance Oliveira, Saturnino de Sousa e, *Relatorio historico da epidemia de variola, que grassou em Loanda, em 1864,* Lisboa, 1866, pp. 63–67. For a more positive view, including the favourable comparison with the housing of Europe’s poor, see Bettencourt, Annibal; Kopke, Ayres; Rezende, Gomes de; Mendes, Annibal Correia, *La maladie du sommeil. Rapport présenté au Ministère de la Marine et des Colonies par la Mission envoyée en Afrique Occidentale Portugaise,* Lisboa: Imprimerie de Libanio da Silva, 1903, pp. 13–14 and Diniz, José de Oliveira Ferreira, *A missão civilisadora do estado em Angola,* Lisboa: Centro Tipograpfico Colonial, 1926, p. 15 (here quote). The members of the Sleeping Sickness Commission emphasized that native houses were much more dirty and unhygienic in larger towns than in rural areas.

[23] During the smallpox epidemic of 1864, the city council of Luanda thus destroyed the *cubatas* in Luanda’s city centre and constructed “five quarters of regular huts” in a more distant location. See Oliveira, *Relatório histórico,* p. 130. During the successive waves bubonic plague, unhygienic buildings were closed and almost an entire neighbourhoud, the *bairro do Bungo*, demolished. See Mora, António Damas, "A pandemia de peste durante o ano de 1921. A peste em Angola (1921-1922)", *Revista Médica de Angola* 3 (1922), pp. 7–21 and especially Mora, António Damas, "A segunda epidemia de peste em Loanda. Setembro, Outubro e Novembro de 1922", *Revista Médica de Angola* 3 (1922), pp. 102–117. In both cases, urban reorganization went hand in hand with extensive vaccination campaigns and, in the case of bubonic plague, also disinfection schemes.

[24] See for instance Swanson, Maynard W., "The Sanitation Syndrome. Bubonic Plague and Urban Native Policy in the Cape Colony, 1900-1909", *Journal of African History* 18,3 (1977), pp. 387–410; Curtin, Philip D., "Medical Knowledge and Urban Planning in Tropical Africa", *The American Historical Review* 90,3 (1985), pp. 594–613; Goerg, Odile, "From Hill Station (Free Town) to Downtown Conakry (First Ward). Comparing French and British Approaches to Segregation in Colonial Cities at the Beginning of the Twentieth Century", *Canadian Journal of African Studies* 32,1 (1998), pp. 1–31 and Eckart, Wolfgang U., "Malariaprävention und Rassentrennung. Die ärztliche Vorbereitung und Rechtfertigung der Duala-Enteignung 1912-1914", *History and Philosophy of the Life Sciences* 10,2 (1988), pp. 363–378.

[25] See "Conselheiro Antonio Duarte Ramada Curto - Governador Geral de Angola", *Portugal em África* 5,52 (1898), pp. 137–142, here pp. 141–142. See also Kingsley, Mary, *West African Studies,* London: Macmillan, 1899, pp. 284–285.

Ingombotas or Bungo be destroyed or remodelled; the second commission explicitly urged the "radical and absolute separation of the native and European quarters".[26]

Initially, however, the most attention went to sanitizing neighbourhoods inhabited by Europeans.[27] It was only under the governments of Norton de Matos (1912-1915 and 1921-1924) that the idea to relocate African workers in new neighbourhoods, which would not only be spatially segregated from European neighbourhoods but also conform to improved hygienic standards themselves, took firmer shape. In accordance with the basic assumptions of the sanitation syndrome, the Director of the newly established Native Affairs Department Ferreira Diniz thus demanded in 1914 that the native's living quarters, which had to be situated "outside the borders of the European neighbourhood" and not "in a place that, from the main direction of the wind, could harm the European neighbourhood", should be provided with large roads and hygienic houses and be subject to permanent sanitary control, both in the streets and in the houses, in order to reduce health threats for Europeans.[28] In 1912, Norton de Matos himself had decreed similar stipulations for the native quarter that was to be constructed in Huambo, a newly planned town in the colony's central highlands intended as Angola's future capital.[29] Further laws on the construction of segregated *bairros indígenas* in other towns, including Luanda, were passed during Norton de Matos' second mandate in the early 1920s, but partly due to endless discussions about the exact location and the lack of funding, hygienic and segregated native neighbourhoods would, in most cases, only be built from the 1940s onwards, under the aegis of the newly established Office of Colonial Urbanization (*Gabinete de Urbanização Colonial*) in Lisbon.[30] Significantly, the construction

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[26] Moncada, Francisco Cabral de, *Relatório do Governador Geral de Angola, enviado em Maio de 1902 à Secretaria do Ministério da Marinha,* Loanda: Imprensa Nacional, 1902, pp. 227–231; Parecer apresentado à comissão de saneamento das cidades de Loanda e Lourenço Marques em 17 de Setembro de 1904, in: AHU, SEMU, DGU 594.

[27] See, for instance, *Resumo do estado da saude publica da Provincia d'Angola no Anno de 1906*, pp. 4-5, in: AHU, SEMU, DGU 943. See also Amaral, Ilídio de, *Ensaio de um estudo geográfico da rede urbana de Angola*, Lisboa: Junta de Investigações do Ultramar, 1962, pp. 57–59.

[28] Diniz, José de Oliveira Ferreira, *Negócios indígenas. Relatório do ano 1913,* Luanda: Imprensa Nacional de Angola, 1914, pp. 96-97, quote p. 96.

[29] Fonte, Maria Manuela Afonso da, *Urbanismo e arquitectura em Angola de Norton de Matos à revolução* (Tese de Doutoramento - Universidade Técnica de Lisboa, Faculdade de Arquitectura), 2008, p. 149. See also the discussion of the native neighbourhood's downwind location in Machado, Carlos Roma, "A Cidade do Huambo. Primeira cidade portugueza no Planalto de Benguela", *Revista de Engenharia Militar* 18 (1913), pp. 396-412; 471-486. On the development of Huambo, see Nogueira, Jofre Amaral, *A colonização do Huambo,* Nova Lisboa: Câmara Municipal de Nova Lisboa, 1953 and especially Neto, Maria da Conceição, *In Town and Out of Town. A Social History of Huambo (Angola) 1902-1961* (Ph.D. Dissertation - University of London, School of Oriental and African Studies (SOAS)), 2012, pp. 133–134.

[30] Matos, José Mendes Ribeiro Norton de, *A Província de Angola,* Porto: Edição de Maranus, 1926, pp. 239–241; Mourão, Fernando Albuquerque, *Continuidades e descontinuidades de um processo colonial através de uma leitura de Luanda. Uma interpretação do desenho urbano,* São Paulo: Terceira Margem, 2006, pp. 243-244; 252; Soares, Amadeu Castilho, "Introdução a um estudo do urbanismo em Angola. Bairros indigenas nos Centros Urbanos", *Estudos Ultramarinos. Problemas economicos e sociais. Revista trimestral do Instituto Superior de Estudos* (1960), pp. 119–155, esp. pp. 125-126; Fonte, *Urbanismo e Arquitectura*, esp. pp. 84-88;

of sanitized housing for the working class in Portugal's main cities suffered from a similar administrative inertia: debated and finally planned around 1918-1919, most projects for *bairros sociais* or *bairros operários* were aborted in the 1920s and only materialized from the mid-1930s onwards.[31]

Despite these setbacks, the plans for hygienic model villages in the 1920s clearly mirrored those of the urban *bairros indígenas*.[32] Of course, the sanitation measures that had been designed for urban areas needed to be adapted to rural conditions. The discussion about the treatment of excrement is a good example of the concessions that had to be made. It was out of question that villages would receive canalization, the preferred solution of hygienists for urban areas.[33] Therefore, João de Camoesas proposed that faeces be either incinerated with a special machine or, in a later stage, treated according to the Beccari system. This latter system, he added, had the advantage of producing a kind of manure that agricultural communities could use to fertilize the land.[34] However, Camoesas had previously worked as a hygienist in Lisbon and his technology-driven schemes were far too complicated for rural conditions in an African colony.[35] Doctors with greater AMI experience advocated simpler solutions, like the use of communal pit latrines, also termed 'bored hole' toilets.[36]

118-120; 149-157; 247-252; Morna, Alvaro de Freitas, *Angola. Um ano no Governo Geral (1942-1943), 1. Volume,* Lisboa: Livraria Popular de Francisco Franco, 1944, pp. 183–190. As Claudia Castelo has remarked, these laws also corresponded with Norton de Matos' wish to prevent further miscegenation of the population, see Castelo, Cláudia, ""Um segundo Brasil ou um terceiro Portugal". Políticas de colonização branca da África portuguesa (1920-1974)", *Travessias. Revista de Ciências Sociais e Humanas em Língua Portuguesa* 4/5 (2004), pp. 155–180, here p. 159.

[31] See Ferreira, Maria Júlia, "O Bairro Social do Arco do Cego. Uma aldeia dentro da cidade de Lisboa", *Análise Social* 29,127 (1994), pp. 697–709; Matos, Fátima Loureiro de, "Os bairros sociais no espaço urbano do Porto, 1901-1956", *Análise Social* 29,127 (1994), pp. 677–695.

[32] The close connection between both spaces was even explicit in a law project prepared by Ferreira Diniz, which demanded strict segregation between Europeans and natives in urban areas and the concentration of the African population in native neighbourhoods and villages. See *Projecto do regulamento para a concentração, isolamento e higiene das habitações dos indígenas*, in: Diniz, José de Oliveira Ferreira, *Populações indígenas de Angola,* Coimbra: Imprensa da Universidade, 1918, pp. 747–749. This project was later decreed following modifications, but without greater impact, it seems, on rural Angola. See Alto Comissário José Norton de Matos, *Portaria Provincial n.° 137*, 16.12.1921, in: Secretaria de Colonização e Negócios Indígenas (Província de Angola), *Legislação Provincial,* Loanda: Imprensa Nacional de Angola, 1921, pp. 31-33.

[33] See, for instance, Correia, Alberto Carlos Germano da Silva, "O clima, a nosografia e o saneamento de Loanda", *Revista Médica de Angola* 4,2 (1923), pp. 377–482, here pp. 473–474.

[34] Camoesas, *Organização AMI,* p. 147. On the Beccari system, which was developed in the 1920s, see Diaz, L. F.; Bertoldi, M. de, "History of Composting", in: Diaz, L. F.; Bertoldi, M. de; Bidlingmaier, W. (eds.), *Compost Science and Technology,* Amsterdam: Elsevier, 2007, pp. 7–24, pp. 10-11.

[35] On Camoesas, see Chapter 2.

[36] See, for instance, Mesquita, *Concentrações indígenas,* pp. 471–472; Neves, José da Silva; Sousa, Jacinto de, "Assistência Médica aos Indígenas. Relatório apresentado a Sua Ex.a o Ministro das Colónias quando da sua visita a Angola", *Boletim da Assistência Médica aos Indígenas e da Luta contra a Moléstia do Sono* 3,4-6 (1929), pp. 433–442, here p. 439 and the detailed instructions on how to excavate and use such a latrine in Antero Antunes do Amaral and Alberto Freire de Andrade Pimentel, *Contribuição para a efectivação da Assistência Médica nas Aldeias Indigenas*, in: Conferência dos Intendentes e Administradores da Província de Luanda, 7-15 de Março 1938, pp. 66-70, in: AHU, MU, ISAU 1730.

By the Interwar Period, the disposal of excrement had become a major concern for colonial hygienists in tropical environments. In a highly original study, Warwick Anderson has analysed how excrement captured the attention of American colonial physicians in the Philippines in the first decades of the twentieth century. With the advent of germ theory, direct contact with excrement – and no longer the presence of excremental odours, which had been incriminated by medical science in the nineteenth century – was now seen as a major health risk and their correct disposal as a sanitary imperative. Simultaneously, American physicians believed that native Filipinos – unlike civilized Westerners – were careless with regard to where they defecated. For the sake of both sanitation and civilization, they would have to change their behaviour with regard to human waste. In the American colonial mind, Filipinos would have to learn how to use sanitary pails, pit latrines, or even septic tanks and flush closets as part of a civilizing process through which they could receive “a sort of probationary sanitary citizenship”, depending on their bodily hygiene and self-government.[37]

Colonial doctors in Angola might have been less prolific on the subject than their American colleagues, but they basically adhered to the same principles and practices. In the eyes of Portuguese doctors, instilling African natives with new habits of cleanliness was a civilizational and medical necessity. In the 1920s, AMI doctors started to campaign for the construction of pit latrines in native villages and for the punishment of those who defecated elsewhere.[38] They were galvanized by the discovery of numerous cases of ancylostomiasis or hookworm disease, a parasitic disease that spread through contact with infected faeces and caused severe anaemia. Like elsewhere in the tropical world, including the Philippines, ancylostomiasis and other parasitic worm diseases (helminthiases) had by the late 1920s become a major health concern in Portugal’s African colonies, including Angola.[39] According

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[37] Anderson, Warwick, *Colonial Pathologies. American Tropical Medicine, Race, and Hygiene in the Philippines,* Durham: Duke University Press, 2006, pp. 104-128, esp. pp. 104-107; 116-120, quote p. 106.

[38] In addition to the literature cited in footnote 36, see also Rebêlo, Frederico Leopoldino, "Relatório do Chefe da Missão do Zaire referentes ao periodo Agôsto de 1923 a Setembro de 1924", *Revista Médica de Angola* 5 (1927), pp. 80–91, here pp. 87–88; Ministério das Colónias, *Angola. Caminhos de Ferro Além-Malanje, janeiro e fevereiro de 1931* (Colecção de relatórios, estudos e documentos coloniais; 11), Lisboa: Agência Geral das Colónias, s.d., p. 13 and the recommendations in Companhia do Assucar de Angola, *Breves anotações de profilaxia das doenças tropicais para uso dos seus empregados,* Luanda: Emprêsa Gráfica de Angola, 1937, pp. 14–15.

[39] For Angola, see, for instance, Silva, Francisco Venâncio da, "Note sommaire sur l'infestation parasitaire de l'intestin des indigènes de l'Angola", *Revista Médica de Angola* 4,4 (1923), pp. 381–388 and the still more encompassing study of the incidence and treatment of ancylostomiasis and other parasitic worm diseases in northern Angola by AMI doctor José Pestana: Pestana, José, "Estudo sobre o parasitismo intestinal dos indígenas do Congo", *Boletim da Assistência Médica aos Indígenas e da Luta contra a Moléstia do Sono* 3,2 (1929), pp. 197-210 and 3,4-6 (1929) pp. 482-492. See also Azevedo, João Fraga de, "Contribuição para o estudo da ancilostomiase entre os indígenas de Luanda", *A Medicina Contemporânea* 56 (1938), pp. 371-379; 393-397. The problem was also tackled in other Portuguese colonies in Africa, see, for instance, Ribeiro, Aires Pinto, *Assistência médica ao indígena de Angoche em 1934. Tratamento das helmintíases intestinais na circunscrição do Mogincual,* Lourenço Marques: Imprensa Nacional, 1936. In 1930, the Institute of Tropical Medicine in

to AMI doctor José Pestana, helminthiases were probably even the most important cause for the physical degeneration and poor labour performance of the colony's African population, now that sleeping sickness had increasingly been brought under control, an opinion that would also be endorsed by Damas Mora in his 1934 report.[40]

Generally speaking, the debate on human waste disposal and pit latrines demonstrates incisively that sanitation was often much more than a technical response to a medical problem, and that what was needed was behavioural change. Quite a few doctors were optimistic about the success of their educational efforts in this domain. In many villages in the AMI zones, two of them claimed, Africans had responded positively to the campaigns and had already constructed pit latrines under medical supervision.[41] Others expressed the belief that insistence and guidance would do the job.[42]

As doctors and other commentators imagined the model village as a site of enhanced control, discipline and legibility, they were convinced that it would be the perfect site for the propagation and induction of new habits of hygiene, not only with regard to human waste, but also with regard to eating and drinking habits and personal hygiene in a broad sense. According to agronomist João Casimiro Jacinto, it would thus be possible to oblige villagers to wear clothes, a widely discussed hygienic and civilizational imperative.[43] In Timor, where 20 model villages with up to 70 families had been built in 1928, the Governor expressed this rationale very clearly. For Teofilo Duarte, these villages were "centres of progress", where the vigilance of administrative and medical authorities would lead to a quick and radical change of native habits of clothing, housing and healing.[44]

Lisbon sent a medical commission to São Tomé to investigate parasitic worm diseases, see Mora, António Damas, "História da Escola de Medicina Tropical", *África Médica. Revista Mensal de Higiene e Medicina Tropical* 7 (1941), pp. 196-206; 231-241; 270-278; 298-307; 338-350, here p. 302. On the global fight against hookworm disease by the Rockefeller Foundation in the 1910s and 1920s, see Farley, John, *To Cast Out Disease. A History of the International Health Division of the Rockefeller Foundation (1913-1951),* Oxford: Oxford University Press, 2004, pp. 61–87; Stepan, Nancy Leys, *Eradication. Ridding the world of diseases forever?,* London: Reaktion Books, 2011, pp. 71–76 and Palmer, Steven Paul, *Launching global health. The Caribbean odyssey of the Rockefeller Foundation,* Ann Arbor: University of Michigan Press, 2010.

[40] Pestana, *Estudo sobre o parasitismo intestinal*, pp. 198–199; Mora, António Damas, *A luta contra a moléstia do sono em Angola (1921-1934)* (Relatórios da Direcção dos Serviços de Saúde e Higiene de Angola; 2), Luanda, 1934, pp. 232–233.

[41] Neves/Sousa, *Assistência Médica aos Indígenas,* p. 439.

[42] Ministério das Colónias, *Angola - Caminhos de Ferro Além-Malanje*, pp. 13–14.

[43] Jacinto, João Casimiro, "Relatório Anual de 1930-1931 da Delegação Regional dos Serviços Agrícolas de Benguela - Nova Lisboa", *Boletim da Direcção dos Serviços de Agricultura e Comércio* 3,8-12 (1930), pp. 97–138, here p. 126. On Jacinto's concept, see further in this chapter. On the importance of adequate clothing to prevent pneumonia, see Santos, Francisco Ferreira dos, "Assistência médica aos Indígenas e processos práticos da sua hospitalisação", *Revista Médica de Angola* 4,2 (1923), pp. 51–71, here p. 62 and Diniz, *A missão civilisadora,* p. 15.

[44] Duarte, Teófilo, *Timor (Ante-câmara do inferno?!),* Famalicão: Minerva, 1930, pp. 355–357.

Lastly, the hygienic model village overlapped with the debate on the *sanzalas-enfermarias* (‘village-infirmaries’).[45] Since the early 1920s, Portuguese doctors in Angola and Mozambique, including Damas Mora, had presented plans to establish a *sanzala-enfermaria* in each administrative post alongside the medical facilities.[46] In these villages, ill Africans would live in separate houses together with their families, who would look after them and cook for them. Houses were to be built in durable material, be spacious and well-ventilated. Village accommodation was to include shared kitchens and latrines. Portuguese doctors built on the negative experiences they had made with ‘closed’ concentration camps – where family members had not been allowed to live and care for their sick – believing that the *sanzala-enfermaria* was better adapted to the African lifestyle and sensibilities and would hence meet with more success, a belief which was also shared by their colleagues in neighbouring colonies.[47] This solution would be cheaper and more practical for the medical service as well. As Damas Mora aptly summarized it: “The spirit of the *sanzala-enfermaria* is not to hospitalize the sick in the common meaning of the word, that is with meals provided by the state, but to bring the sick closer to the doctor, so that he can treat a larger number of patients, under better conditions of surveillance, without them having to leave their usual environment”.[48] Moreover, surveillance would allow the patients “to learn hygienic rules which should help much to eradicate bad habits [...] and which we keep repeating to them”.[49]

From the late 1920s onwards, village-infirmaries were effectively built throughout the colony, in the AMI zones but also elsewhere, as the profuse references and pictures in medical reports attest. In the early 1930s, many of the *sanzalas-enfermarias* were financed by the

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[45] The issue of *sanzalas-enfermarias* has already been briefly addressed at the end of Chapter 1 and in Chapter 2.
[46] See Mora, António Damas, "O que devem ser as edificações destinadas à Assistência médica, na Província de Angola. Bairros Sanitários", *Revista Médica de Angola* 2 (1921), pp. 197–207, here pp. 198 (sketch) and 201; Almeida, Carlos de, "Relatório do chefe da Missão do Congo Dr. Carlos de Almeida, referente ao triénio: 1923-1924; 1924-1925; 1925-1926", *Revista Médica de Angola* 5 (1927), pp. 22–79, here p. 36; Santos, *Assistência médica aos Indígenas,* pp. 65–69; Silva, Avelino Manuel da, *Serviço de Assistência aos Indígenas no distrito do Congo, 1930. Relatório elaborado pelo chefe da zona sanitária do Congo, Dr. Avelino Manuel da Silva* (Colecção de relatórios, estudos e documentos coloniais; 9), Lisboa: Agência Geral das Colónias, [193-], p. 19.
[47] Compare with Blanchard, Maurice, "Sur quelques facteurs moraux et matériels d'attraction des indigènes dans les centres de consultation", *Revista Médica de Angola* 4,2 (1923), pp. 201–207, here pp. 204–206 and the *villages de ségrégation libres* or *villages-lazarets* developed by the French doctor Muraz in Ubangi-Shari (AEF), mentioned in Headrick, Rita, *Colonialism, Health and Illness in French Equatorial Africa, 1885-1935,* Atlanta: African Studies Association Press, 1994, p. 365 and described in detail by Muraz, G., "Résumé de l'action, en Afrique Equatoriale Française, pendant huit ans (1920-1927), d'un secteur de prophylaxie de la maladie du sommeil", *Bulletin de la Société de Pathologie Exotique* 21 (1928), pp. 54-65; 141-158, here pp. 60-65. Muraz had reportedly adopted the system of *villages-lazarets* from the Anglo-Egyptian Sudan, where it had successfully been experimented (p. 60).
[48] Mora, António Damas, "A Assistência Médica aos Indígenas e a luta contra a propagação da moléstia do sono, em 1927. Relatório apresentado à Comissão de Assistência aos Indígenas, na sua sessão, extraordinária, de 21 do corrente mês", *Boletim Mensal da Luta contra a Propagaçõ da Moléstia do Sono e da Assistência Médica ao Indígena* 1 (1927), pp. 1–13, p. 2.
[49] Silva, *Serviço de Assistência Congo 1930*, p. 33.

Native Affairs Department.[50] For Damas Mora, the village-infirmary and the model village were conceptually linked: "In social hygiene, the model village will play the role that the *sanzala-enfermaria* fills with regard to therapeutic assistance."[51]

[50] Unfortunately, these reports do not contain descriptions of daily life in these villages. See, for instance, Direcção dos Serviços de Saúde e Higiene da Colónia de Angola, *Numero de formações sanitárias nos diferentes districtos desta colonia*, 10.05.1928, in: ANA, Cx. 4958, who lists 7 sanzalas-enfermarias in different districts, as well as the profuse references and pictures in Silva, *Serviço de Assistência Congo 1930*, pp. 31-40; Silva, Avelino Manuel da, *Serviço de Assistência aos indígenas no distrito do Congo, 1° Semestre de 1931* (Colecção de relatórios, estudos e documentos coloniais; 10), Lisboa: Agência Geral das Colónias, 1931, pp. 19-23 and Ornelas, Augusto; Mesquita, Bruno Pereira de, *Relatório da missão médica de assistência aos indígenas do Cuanza, 1929* (Colecção de relatórios, estudos e documentos coloniais; 24), Lisboa: Agência Geral das Colónias, 1935, pp. 34-35; 52-53; 69-71; 76; 145; 163; Manuel Pereira Figueira, *Relatório do Curador Geral dos Indígenas da Colónia de Angola (1936)*, 30.06.1937, Anexo 2 A (Mapa dos subsídios concedidos para a assistência a indígenas desde Janeiro de 1931 a 31 de dezembro de 1933), in: AHU, MU, ISAU 2243; Direcção de Serviços dos Negócios Indígenas e Curadoria Geral de Angola, *Obras de Assistência aos Indígenas subsidiadas pela Curadoria Geral*, May 1934, in: AHU, MU 975. In Portuguese Guinea, such village-infirmaries, here called *tabancas-enfermarias*, would only be introduced from the mid-1930s onward, see Havik, Philip J., "Public Health and Tropical Modernity. The fight against sleeping sickness in Portuguese Guinea (1945-1974)", *Manguinhos. História Ciências Saúde* (forthcoming).
[51] Mora, *Os Serviços de Saúde (1928)*, p. 93.

2. Model Villages, Malnutrition and Agricultural Reform

If, however, the idea of model villages was defended by a wide range of colonial actors in the 1930s and 1940s, this was because it had to do with more than just hygienic concerns. In many contributions, the medical and demographic aspects were given a secondary role and the model village idea was basically refashioned as an agricultural reform project. This strand of thinking had been present in some of Damas Mora's previous considerations as well, but it clearly became more prominent in the 1930s.

In 1931, the head of the Agricultural Services of the Benguela region, João Casimiro Jacinto, thus presented what he believed model villages ought to be. Jacinto did not reject the hygienic reasons present in Damas Mora's considerations, but he placed stronger emphasis on the possibilities the model village offered for agricultural reform. The concentration and sedentarization (*fixação)* of African families in such villages would enable the colony's agricultural services to more efficiently assist them in improving their cultivation methods. Families living in the villages would be obliged to cultivate the land allotted to them, but to do so they would receive tools and seeds. A small experimental field was to be planted next to the village, where they would be taught new techniques and be able to test new plants and cultivation methods, as well as a seedling nursery, where they would learn "to love trees" instead of destroying them.[52]

Three years later, the model villages were also discussed during the First Congress of Colonial Agriculture in Porto. Agronomist Álvaro de Noronha e Castro, who had worked in Angola since 1928 and previously in Timor, presented a paper on the compulsory cultivation of food crops in which he defended model villages as the ideal solution to hunger. The problem, he stated, was that the natives (in Timor as well as in Angola) were lazy vagrants; their harvests were only sufficient for eight to nine months and during the rest of the year they would not only suffer from hunger and disease, but, in their desperate search for food, get food poisoning or be eaten by lions. The solution he proposed was to settle them in model villages, where each family would be obliged to cultivate at least one hectare of land with food crops and herbs for their own consumption. In addition, he recommended that they keep animals, where possible, as well. Castro viewed this not only as a means in itself, but also as a behaviouristic exercise. Once Africans had learnt to secure their own subsistence by growing food crops in a more systematic manner, he assumed they would easily repeat this experience with other crops destined for the export market. In order to elaborate an adequate scheme, he

[52] Jacinto, *Relatório Anual 1930-1931,* pp. 125–126.

urged the Colonial Ministry to set up a commission composed of an agronomist, a hygienist, a veterinarian, a forest engineer, a Catholic missionary and a local administrator, all of which had long-standing colonial experience. Castro's proposal met with the agreement of the conference participants, but it is unclear whether the Colonial Ministry actually established this commission.[53]

These partly overlapping proposals both show in an exemplary way why agronomists came to see model villages as ideal sites for agricultural reform. If they were built and managed accordingly, model villages could be used to cope with some, if not all, of the most urgent pending questions that colonial powers had identified with regard to African agriculture: i.e. the problems of shifting cultivation and deforestation, low productivity, food insecurity and malnutrition, sedentarization and land property, and the lack of technical assistance.

By the 1930s, the interest colonial scientists and governments were taking in native agriculture was still relatively new. While they had long focused on improving European plantation crops and techniques, it was only following the First World War that they began to pay more attention to the 'modernization' of 'traditional' cultivation methods in sub-Saharan Africa.[54] This was a gradual process and, on the practical level, the results of this growing interest might not have been particularly extensive in the Interwar period. Yet, even if most large-scale schemes of agricultural development would reach their apogee after the Second World War, they were rooted in the debates and first interventionist efforts of the 1920s and 1930s.[55]

In Angola as in many other colonies, the criticism which agricultural experts and other colonial officials levelled against 'traditional' African agriculture primarily regarded the widely used method of shifting cultivation, in which peasants cyclically cleared new fields by

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[53] Castro, Alvaro de Noronha e, *Utilidade e necessidade das culturas alimentares obrigatórias para indígenas das Colónias em proveito próprio. Tese apresentada ao Primeiro Congresso de Agricultura Colonial,* Porto, 1934.

[54] Tilley, *Africa,* p. 117; Hodge, Joseph Morgan, *Triumph of the Expert. Agrarian Doctrines of Development and the Legacies of British Colonialism,* Athens: Ohio University Press, 2007, pp. 90-116; 146-166. For the Portuguese colonies, see, for instance, Geraldes, C. de Mello, "Tese - Fomento Agricola Colonial", *II Congresso Colonial Nacional de 6 a 10 de Maio de 1924. Teses e Actas das Sessões,* Lisboa, 1924, pp. [1-23].

[55] See, for instance, van Beusekom, Monica M., "Colonisation indigène. French rural development ideology at the Office du Niger, 1920-1940", *International Journal of African Historical Studies* 30,2 (1997), pp. 299–323; Isaacman, Allen F., *Cotton is the mother of poverty. Peasants, work, and rural struggle in colonial Mozambique, 1938 - 1961* (Social history of Africa), Portsmouth: Heinemann, 1996; Hodge, Joseph Morgan, "British Colonial Expertise, Post-Colonial Careering and the Early History of International Development", *Journal of Modern European History* 8,1 (2010), pp. 24–46. An (incomplete) overview of large-scale agricultural modernization projects in colonial Africa, most of them initiated after the Second World War, can be found in Voll, Sarah Potts, *A plough in field arable. Western agribusiness in Third World agriculture,* Hanover, NH: University Press of New England, 1980, pp. 79–97. Voll misdates the Office de Niger scheme, however, which was launched in the 1920s and not in 1947, as is stated in van Beusekom.

cutting and burning woodland and then abandoned them after a couple of years when they were exhausted. This extensive method, they asserted, yielded low returns and was, in combination with the 'natural laziness' and 'improvidence' of the Africans, responsible for recurrent food shortages and low export quotes. In addition, experts and officials advanced ecological arguments according to which shifting cultivation destroyed forests that were indispensable for the ecological balance and in doing so accelerated soil erosion. Finally, they also criticized the fact that shifting cultivation intrinsically led to mobile, itinerant cultivators, which were often difficult to find, tax, recruit and control.[56]

To be sure, this was not a monolithic discourse. Helen Tilley has recently unearthed the writings of a handful of agronomists and pedologists in British colonial Africa, who, in the 1920s and especially in the 1930s, came to defend the methods of 'native agriculture' in tropical Africa. They maintained that the native's methods were superior to their European counterparts in that they were better adapted to the environmental conditions and yielded higher returns.[57] Yet, prior to the Second World War even in British Africa these new scientific insights were generally not translated into a reversal of prohibitive colonial policies toward African agriculture.[58] In Angola, a more positive view on shifting cultivation and calls to conserve and gradually improve the system instead of abolishing it would only gain importance well after 1945.[59]

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[56] For an astute analysis, see Moore, Henrietta L.; Vaughan, Megan, *Cutting down trees. Gender, nutrition, and agricultural change in the Northern Province of Zambia ; 1890 - 1990,* Portsmouth, NH: Heinemann, 1994. Portuguese criticism of shifting cultivation can be found in Geraldes, C. de Mello, "Le paysannat indigène. Note critique sur l'encouragement à l'agriculture indigène aux colonies portugaises", in: Exposition Coloniale Internationale de Paris (ed.), *Congrès International et Intercolonial de la société indigène (5 - 10 octobre 1931)*, 1931, pp. 160–164; Castro, *Utilidade e necessidade,* pp. 4; 6; Sousa, António Figueiredo Gomes de Sousa, "Reconhecimento Agronómico do Distrito do Moxico. Relatório apresentada em cumprimento do despacho do Govêrno GEral, de 30 de Setembro de 1924", *Boletim da Direcção dos Serviços de Agricultura e Comércio* 4,12-15 (1931), pp. 116–235, here pp. 216–231; Geraldes, C. de Mello, *Breves considerações sobre a protecção da flora nas colónias. Tese apresentada ao Primeiro Congresso de Agricultura Colonial,* Lisboa, 1934, pp. 11–12.

[57] Tilley, *Africa,* pp. 115–168.

[58] A good explanation for this contradiction can be found in Lord Hailey's *African Survey* from 1938. Although shifting cultivation was reinterpreted as a sound and intelligent way to deal with the reduced fertility of tropical soils *in the past*, changing conditions, most notably the extension of cultivated lands for the production of commercial crops, the restriction of land and the growing problem of deforestation, did not allow its continuation on a large scale *for the future*. Hence, there was an urgent imperative to find new methods of fertilization. What had changed, however, was that (British) experts increasingly believed that the solution was to be found by studying African cultivation methods rather than by imposing European practices. See Hailey, Malcolm (ed.), *An African Survey. A Study of Problems arising in Africa South of the Sahara, Issued by the Committee of the African Research Survey under the auspices of the Royal Institute of International Affairs,* London/New York/Toronto: Oxford University Press, 1938, pp. 879-882; 960-971.

[59] Compare Cerqueira, Ivo Benjamin de, "Memória sobre o desenvolvimento da agricultura indígena", *Boletim Geral das Colónias* 9,92 (1933), pp. 38–80, here pp. 63–64 and Francisco dos Santos Serra Frazão, *Relatorio da Curadoria Geral dos Indigenas, referente aos anos de 1939 e 1940, apresentado pelo chefe do expediente da repartiçao central, no impedimento do respectivo Chefe e Curador Geral*, 25.06.1941, pp. 19–22, in: AHU, MU, ISAU 1725 with a more positive view in Rolo, Jerónimo da Silva, "Reordenamento rural em Angola. Contribuição para o seu estudo", *Estudos políticos e sociais* 4,4 (1966), pp. 1453–1592, here pp. 1456; 1515 and

The rationalities of Interwar agricultural reform

Before analysing in greater detail how colonial regimes tried to curtail shifting cultivation and introduce practices that were believed to be better suited, one must ask why the modernization and increase of African agricultural production gained such particular importance in the Interwar years. I argue that, beyond assumptions of Western technical superiority, which underpinned the criticisms of shifting cultivation, the push for agricultural modernization in the Interwar Period was inextricably linked to economic conjunctures as well as shifting views on the nutritional status of African populations and on the fertility of tropical soils.

First, economic factors played an important role. Until well after the Second World War, the 'colonial pact' did not allow for a real industrialization of the colony; within the economic system of the Portuguese empire, the task of Angola and the other colonies was mainly to produce (cheap) raw materials for the Portuguese and international markets and to consume manufactured goods, including wine, from Portugal. Due to this imperial division of labour, which was reinforced in the early years of the *Estado Novo*, and the absence of mining activities as extensive as those that took place on the Congolese or South-African mining belts, agriculture was by far the colony's most important economic activity.[60] Based on an increasingly negative view of local agricultural systems and concurrent with the consolidation and bureaucratization of territorial control as well as nascent developmental ideologies, the modernization of 'native' agriculture in sub-Saharan Africa attracted growing attention from both colonial scientists and administrative authorities after the First World War.[61] In the

José Redinha's studies of traditional agriculture in Angola, for instance, Redinha, José, "Tradições, práticase conceitos agrícolas entre os Quiocos de Lunda", *Trabalho. Boletim do Instituto do Trabalho, Previdência e Acção Social de Angola* 24 (1968), pp. 73–88. In the late 1960s-early 1970s a vast and very successive 'rural extension programme', the main purpose of which was to improve rather than destroy traditional techniques through comprehensive agricultural aid, would be established in Central Angola, see Bender, Gerald J., *Angola under the Portuguese. The Myth and the Reality,* Berkeley, Los Angeles: University of California Press, 1978, pp. 186–187.

[60] Torres, Adelino, "Pacto colonial e industrialização de Angola (anos 60-70)", *Análise Social* 19,77-78-79 (1983), pp. 1101–1119. For a nuanced discussion of this imperial division of labour in the 1930s and early 1940s, see Clarence-Smith, William Gervase, "The effects of the Great Depression of the 1930s on industrialisation in Equatorial and Central Africa", in: Brown, Ian (ed.), *The economies of Africa and Asia in the inter-war depression,* London: Routledge, 1989, pp. 170–202 and Clarence-Smith, William Gervase, "The impact of the Spanish Civil War and the Second World War on Portuguese and Spanish Africa", *Journal of African History* 26 (1985), pp. 309–326. On export and import products and values, see also Fynes-Clinton, D. O., *Portuguese West Africa. Economic and commercial conditions in Portuguese West Africa* (Overseas Economic Surveys), London: H.M.S.O., 1949, pp. 13–18. For a discussion of Portugal's contradictory policy on alcohol in its colonies in the early twentieth century, which included the prohibition of local brewing (allegedly to fight alcoholism) while stimulating the import of Portuguese wine, see Birmingham, David, "Wine, Women, and War", in: Birmingham, David, *Empire and Africa. Angola and its neighbors,* Ohio: Ohio University Press 2006, pp. 13–27, here pp. 14–19 and Capela, José, *O vinho para o preto,* Porto: Edições Afrontamento, 1973.

[61] For the Portuguese colonies, see, for instance, Geraldes, *Tese Fomento* and Armando Cortezão's report in "Actas das sessões", in: *II Congresso Colonial Nacional de 6 a 10 de Maio de 1924. Teses e Actas das Sessões,*

1920s, however, Portuguese interventions in African agricultural practices remained fairly modest in Angola. In part, this was because of the high hopes that successive colonial governments placed in the development of European agriculture. Indeed, High Commissioners Norton de Matos (1921-1924) and Vicente Ferreira (1926-1928) both promoted large-scale schemes of state-sponsored agricultural colonization by Portuguese immigrants.[62] Yet, these schemes were not mutually exclusive with the reform of African agriculture, in that they envisioned a dual system with European smallholders working on their own account next to African farmers. The fact that European agriculture in Angola continued to be dominated by large estates that relied on African labour was probably of greater impact. Their demand for cheap African labourers competed with the vision of independent African smallholders and, together with administrative inertia, obstructed the reforms that the Provincial Secretary of Agriculture Alberto António Torres Garcia had tried to launch in 1927-1928.[63]

If in Angola, as in most of colonial Africa, the reform of 'traditional' African agriculture only gained particular momentum during the Great Depression of the early 1930s, this was because the crisis cast (at least temporarily) serious doubts on the viability of European agriculture.[64] In order to cope with the economic crisis and, simultaneously, the severe conditions of Salazar's financial austerity regime, an increase in agricultural production destined for the export market was more than ever an economic and financial imperative.[65] However, the pressure that the crisis and the austerity policy put on the colony's budget brought an end to the government's willingness to invest in expensive schemes of agricultural colonization by European smallholders. In fact, Vicente Ferreira's scheme was abruptly aborted by the government of Filomeno da Câmara in 1929, and although European

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Lisboa, 1924, pp. 1–294, here pp. 175–181. For sub-Saharan Africa in general, see Tilley, *Africa,* p. 117; Hodge, *Triumph of the Expert,* pp. 90-116; 118-119; 146-166.

[62] See footnote 66.

[63] See the incisive critique in [Anthero Antunes de Amaral], *Missão de Reconhecimento Nosográfico de Catete* [de 1931], pp. 23-24, in: AHU, MU, AGC 2336. Torres Garcia's reform plans can be glimpsed in Garcia, Alberto António Torres, "A política de fomento agrícola. Intervenção do Estado", *Boletim da Direcção dos Serviços de Agricultura e Comércio* 1,1 (1928), pp. 5–7. More archival research is necessary to further elucidate these plans. Before going to Angola, Torres Garcia had been member of Parliament (1921-1926) and Minister of Labour, Finance and, at three separate times, Agriculture in various governments in Portugal. See Castelo, Cláudia, *Passagens para África. O Povoamento de Angola e Moçambique com Naturais da Metrópole (1920-1974),* Porto: Edições Afrontamento, 2007, p. 72; Marques, A. H. de Oliveira; Guinote, Paulo; Mesquita, Pedro Teixeira, et al. (eds.), *Parlamentares e ministros da 1. república (1910 - 1926),* Porto: Edições Afrontamento, 2000, pp. 228–229.

[64] Cooper, Frederick, "Africa and the World Economy", *African Studies Review* 24,2-3 (1981), pp. 1–86, here p. 35; Jewsiewicki, Bogumil, *Modernisation ou destruction du village africain. L'économie politique de la "modernisation agricole" au Congo belge* (Les Cahiers du CEDAF; 5), Bruxelles: CEDAF, 1983, pp. 18–19; Kassa, Jeannôt Mokili Danga, *Politiques Agricoles et Promotion Rurale au Congo-Zaire (1885-1997),* Paris: L'Harmattan, 1998, pp. 90–93.

[65] For a more detailed analysis of Salazar's policy of financial austerity, see Chapter 5.

colonization projects continued to be discussed and nurtured by colonialists and even the metropolitan government over the next few decades, the latter refused to allocate any public funding in this domain prior to 1945.[66] Furthermore, there were also other reasons why the future of European agriculture in Angola looked grim. Experts like Ivo de Cerqueira believed that most of the existing European agricultural companies would not survive the economic crisis. African farmers, by contrast, were believed to be more resilient to the crisis because they had fewer needs. They were also considered a good option for the future: they were available in large numbers and their productivity could still be greatly enhanced through the introduction of new techniques, better seeds and distribution channels.[67] The active development of African agriculture, in other words, was viewed as an adequate means with which to combat the world crisis, while simultaneously fulfilling the imperatives of the civilizing mission.

Second, agricultural reform plans were animated by growing anxieties over widespread under- and malnutrition and the corresponding desire to increase food security. Arguably, it was in the Interwar Period that colonial powers 'discovered' under- and malnutrition to be serious health problems among their tropical populations in Africa and Asia, and, in the case of Africa, to be important causes of depopulation.[68] Clearly, nutritional problems had not gone completely unnoticed until that point; colonial officials had been aware of recurrent famines and their devastating effects on the African population for many decades, and in the case of Angola even for centuries.[69] Yet, it was only in the 1920s that the confluence of several factors – the growing attention towards African health, new insights in nutritional science and a more pessimistic view on the fertility of tropical soils – provoked

[66] For an elaborate discussion of such plans, see Castelo, *Passagens para África,* pp. 61–106. For the conceptualization and demise of the state-sponsored colonization scheme devised by High Commissioner Vicente Ferreira and the Provincial Secretary of Agriculture Torres Garcia in the late 1920s, see also Garcia, Alberto António Torres, *A tentativa de colonização oficial de 1928. Comunicação apresentada ao Congresso de Colonização de 1934, promovido pela Sociedade de Geografia,* Coimbra: Coimbra editora, 1934.
[67] Cerqueira, *Memória*, esp. pp. 77-80.
[68] See the cutting-edge (though Anglocentric) study of Worboys, Michael, "The Discovery of Colonial Malnutrition Between the Wars", in: Arnold, David (ed.), *Imperial Medicine and Indigenous Societies,* Oxford: Oxford University Press, 1988, pp. 208–225 and, more recently, the similarly Francocentric work of Bonnecase, Vincent, "Avoir faim en Afrique occidentale française. Investigations et représentations coloniales (1920-1960)", *Revue d'Histoire des Sciences Humaines* 21 (2009), pp. 151–174 and Bonnecase, Vincent, *La pauvreté au Sahel: Du savoir colonial à la mesure internationale,* Paris: Karthala, 2011, pp. 29–34. Comparing the work of both authors, it seems that under- and malnutrition landed a bit earlier on the French imperial agenda than on the British.
[69] For long-standing colonial awareness of famine in Angola, see Miller, Joseph C., "The Significance of Drought, Disease and Famine in the Agriculturally Marginal Zones of West-Central Africa", *Journal of African History* 23,1 (1982), pp. 17–61.

serious anxieties over the nutritional status of the African populations, propelling the issue onto the agenda of all colonial powers.

On the one hand, ideas about the prevalence of undernutrition, that is insufficient calorific intake, changed. Prior to the 1920s, starvation and undernutrition had usually been regarded as exceptional occurrences in tropical Africa, caused by prolonged adverse meteorological circumstances and/or wars. According to the common assumption, only when these conditions persisted for a long period of time would the proverbial laziness and improvidence of the native population lead to a hunger crisis.[70] In the 1920s and 1930s, however, many colonial doctors throughout the imperial territories grew convinced that undernutrition was actually a permanent status for a considerable part of the tropical populations under their rule.

In 1925, the French colonial doctor Roubaud thus presented an alarming report to the Academy of Colonial Sciences in Paris, in which he considered undernutrition not only to be endemic in virtually all French colonies but also one of the primary causes of depopulation and low population densities in the tropics.[71] This view was not uncontested, but it gained broad acceptance over the next decade all the same.[72] In 1933, the editors of a broad synthesis on nutritional problems in the French colonies concluded that 30% of the people living in the French colonies were underfed.[73] Or, as Giovanni Trolli, former head of the health services in the Belgian Congo, worded it in a special issue of *Africa*, the journal of the International African Institute, dedicated to nutrition: “Natives of all tropical colonies are, in their village, undernourished or at least not sufficiently nourished to assume sustained and serious muscular effort.”[74] By the late 1920s, leading colonial doctors in Angola had made the same diagnosis. In the opinion of Damas Mora, ignorance and the “chaotic state of the native communities” were responsible for insufficient food production and consequently the chronic undernutrition of a large portion of rural Angolans. It was a vicious cycle, he argued: “Undernourished, they

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[70] See, for instance, Silva, João de Mattos e, *Contribuição para o estudo da região de Cabinda. Memoria para o Congresso Colonial Nacional,* Lisboa: Typographia Universal, 1904, p. 322 and Miller, *Significance of Drought*.

[71] Roubaud, M., "Rapport sur la question de l'insuffisance alimentaire des indigènes dans les possessions françaises. Présenté sur la proposition de M. le Dr. Calmette au nom de la Commission technique de l'Académie des Sciences Coloniales", *Académie des Sciences Coloniales - Comptes Rendus des Séances: Communications* 4 (1924-1925), pp. 357–376.

[72] For contestation, see the timely study by Cheyssial, who claimed that natives in Togo were rather over- than underfed: Cheyssial, A., "Étude de la ration alimentaire des indigènes du territoire du Togo", *Annales de Médecine et de Pharmacie Coloniales* 29 (1931), pp. 503–516. On this study, see also footnote 86.

[73] "Introduction", in: *L'Alimentation indigène dans les colonies françaises, protectorats et territoires sous mandat,* Paris: Vigot, 1933, pp. 9–10, here p. 9.

[74] Trolli, Giovanni, "L'alimentaton chez les travailleurs indigènes dans les exploitations commerciales, agricoles, industrielles et minières au Congo", *Africa. Journal of the International African Institute* 9,2 (1936), pp. 197–217, here p. 197.

do not have enough energy to try to make up for the food deficiency by working, and, when they do not produce, they aggravate the problem of their physiological misery."[75]

This radical shift in the perception of the nutritional status of Africans was closely linked to a more pessimistic view on the fertility of tropical soils. Whereas tropical Africa (and other tropical zones) had long been perceived as a land of plenty, where a luxurious and generous nature produced an abundant amount of food for 'indolent natives', studies between the two world wars reversed this image. They suggested that tropical soils were not only much more diverse, but in many cases also far less fertile than previously assumed, given that they only had thin layers of humus, which was in turn endangered by soil erosion and often lacked elements like calcium and phosphorus essential for plant growth.[76]

In addition, the increasing use of anthropometry in an attempt to rationalize the recruitment of miners, plantation labourers or soldiers generated further evidence that undernutrition was a widespread condition. When measured, a large percentage of the candidates did not qualify for recruitment from a medical perspective, because they did not attain the necessary score on the Pignet index, an index that measured physical robustness by relating thorax circumference to height and weight. While some doctors assumed that the Pignet index, which had been developed on European bodies, might be somewhat less accurate for Africans due to racially determined differences in stature and weight, they nevertheless concluded that many adult male Africans were frail as a result of the chronic undernutrition they had suffered in their villages, recently or during childhood and adolescence.[77] The fact that the Pignet index of workers and soldiers usually improved greatly

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[75] Mora, *Notas sobre um estatuto,* p. 235 (here also quotes). See also the remarks on the nutritional status of African villagers in "Distrito do Mochico - Relatório dos Serviços de Saúde referente a 1927", *Boletim da Assistência Médica aos Indígenas e da Luta contra a Moléstia do Sono* 2,12 (1928), pp. 339–342, here p. 339 and Soares, Tertuliano, "Acerca dalguns problemas de assistência relativos aos trabalhadores indígenas de Africa", *África Médica. Revista Mensal de Higiene e Medicina Tropical* 10,8 (1944), pp. 165–180, here p. 169.

[76] Compare for instance the "enormous vegatative faculties of the soils in Angola and their immeasurable productive capacity" quoted by Monteiro, José Firmo de Sousa, *A agricultura em Angola. Breve resumo sobre os recursos agricolas da provincia de Angola,* Lisboa: Edição da Agência Geral de Angola, 1922, p. 27 with Tilley, *Africa,* pp. 155–157 and Hailey, Malcolm, *An African Survey,* pp. 880; 962-964. On the fallacy of tropical fertility with regard to agriculture, see also Stepan, Nancy, *Picturing Tropical Nature,* London: Reaktion Books, 2001, p. 54. Until the 1920s, colonial officials had generally assumed that Angola was very fertile, see for instance Santos, Gomes dos, *As nossas colónias. Geographia, phisica e politica, etnographia, industria, commercio, navegação, riqueza colonial, trabalho indigena,* Lisboa: Portugal em África, 1903, p. 130; Athayde, Luiz de Mello e, "O perigo do despovoamento de Angola", *Boletim da Sociedade de Geografia de Lisboa* 36 (1918), pp. 227–243, here p. 227.

[77] In Angola, the use of the Pignet index to evaluate the physical aptitude of labourers was recommended by the colonial government in 1928, see Governo Geral de Angola, *Diploma Legislativo n. 3*, 30.04.1928, in: *Boletim Oficial da Colónia de Angola, Série I,* 12.05.1928, pp. 298–299. Diamang was one of the few companies that systematically integrated the calculation of this index into the recruitment procedure. At certain times, however, Diamang adapted its standards so that it could recruit workers who were 'proved' to be physically inapt. See Varanda, Jorge, *"A Bem da Nação". Medical Science in a diamond company in Portuguese Angola* (Ph.D. Dissertation - University College London, Wellcome Trust Centre for the History of Medicine), 2006, pp. 191–244; Cleveland, Todd, *Rock Solid. African Laborers on the Diamond Mines of the Companhia de Diamantes de*

during their time in service was, in turn, mainly attributed to the much better diets they received at their places of employment (and the benefits of physical exercise). Consequently, some doctors even advised, not without cynicism, to ignore the Pignet index during recruitment procedures, since if they did not many undernourished Africans would never receive the opportunity to "benefit from a rich, complete and healthy diet".[78]

On the other hand, colonial doctors in the Interwar Period did not criticize African diets only from the *quantitative* perspective. Concurrent with advances in nutritional science, such as the discovery of vitamins and the recognition of their importance, in the first decades of the twentieth century, they also grew wary of the *quality* of 'traditional' African diets, which they increasingly regarded as unbalanced.[79] Like in other parts of tropical Africa, doctors in Angola pointed to the excess of carbohydrates, largely present in staple foods like manioc and maize, and the lack of (animal) proteins, fats and certain minerals and vitamins in the diets of most 'tribes', due to their limited consumption of meat, fish, dairy products and vegetables. In their view, many Africans not only suffered from undernutrition, but also, and in some cases even predominantly, from malnutrition. The consequences were believed to be huge. Deficient and imbalanced diets were held responsible for various deficiency diseases such as scurvy, beriberi and rickets, a greater susceptibility to a wide range of other diseases, and overall reduced labour productivity.[80] Under- and malnutrition were now also seen as important causes of low birth rates and the tremendous infant mortality rates.[81]

Angola (Diamang), 1917-1975 (Ph.D. Dissertation - University of Minnesota, Faculty of Graduate School), 2008, pp. 76–78. For the link made between poor Pignet index results and undernutrition, see, for instance, Waldemar Gomes Teixeira, *Relatório da Zona Sanitária do Cuanza para 1930*, Junho de 1931, pp. 27-32, in: AHU, MU, AGC 2336 and Sousa, A. A. Almeida e, "Indice de Pignet. Sua evoluação em trabalhadores indígenas de Angola", *Anais do Instituto de Medicina Tropical* 10,4,2 (1953), pp. 3495–3506, esp. p. 3505, where he refers to measurements conducted on Diamang recruits in 1931. Waldemar Teixeira had calculated the Pignet index of over 5,000 Africans from both sexes and all ages in the area around Cazengo. In a few hundred cases, he also calculated the so-called Lefrou index, which was developed by the French colonial doctor Lefrou in order to adapt Pignet's eurocentric formula to the 'particularities' of the African body, but even here, most adult males were considered too frail to be recruited.

[78] Sousa, *Indice de Pignet,* p. 3505 (also quote). For the rapid increase of weight and chest circumference of most conscripts, see, for instance, Cap. José Maria Marques da Cruz, *Relatório da Instrução do 2. contingente de recrutas recebidos pela 1a CII em 1935,* 22.02.1936, p. 7 and anexos 12 and 13, in: Arquivo Histórico Militar, Lisbon (hereafter, AHM), 2a Div., 2a Secç., Cx. 66, Doc. 16. For similar observations with mine workers, see Cleveland, *Rock Solid,* pp. 221–223. For the rapid increase of weight in workers engaged in the sanitary brigades in Luanda, see also João Pinto da Cunha Adrade, Director interino da Direcção dos Serviços e Negócios Indígenas, *Exposição acerca do Trabalho Indígena na Colónia de Angola*, 12.04.1929, pp. 14-15, in: AHD-MNE, 3. Piso, Armario 1, Cx. 637.

[79] On the history of nutritional science, see Carpenter, Kenneth John, "A Short History of Nutritional Science", *Journal of Nutrition* 133,3 (2003), pp. 638-645; 133,4 (2003), pp. 975-984; 133,10 (3023-3032); 133,11 (3331-3342), on vitamins esp. pp. 3023-3029.

[80] For Angola, see, for instance, Sant'Anna, José Firmino, "O problema da assistência médico-sanitária ao indígena em Africa", *Revista Médica de Angola* 4,2 (1923), pp. 73–178, here pp. 99–102; "Problemas da alimentação", *Boletim da Assistência Médica aos Indígenas e da Luta contra a Moléstia do Sono* 3,3 (1929), pp. 286–288; *Distrito de Mochico - Relatório 1927*, p. 339; Mesquita, *Concentrações indígenas,* pp. 471–472; Silva, Aristides Cândido da Costa e, "Béribéri", in: Khalil, M. (ed.), *Comptes Rendus du Congrès International de*

Initially, the idea that many Africans suffered from under- and/or malnutrition had rested upon a growing body of general nutritional knowledge and local medical and anthropological observations.[82] Growing anxieties, however, echoed in Roubaud's admonitory report, prompted a number of field studies on local diets in Africa from the mid-1920s onwards.[83] Certainly, they remained infrequent and limited in scale until after the Second World War, when the FAO (Food and Agricultural Organization) and especially the nutritional committee of the CCTA (Commission for Technical Co-operation in Africa south of the Sahara) began to substantially endorse field studies on nutrition in colonial Africa.[84] The impact of these early studies, however, went far beyond their limited empirical scope as they received much attention in national and international scientific communities, and set new standards and avenues of research. The studies which Orr and Gilks conducted in British Kenya in the late 1920s, for instance, where they compared the diets and health condition of two tribes, the Masai and the Akikuyu, resulted in the entrenchment of supposed categorical differences between 'pastoral' and 'agricultural' tribes, which were further generalized by subsequent researchers. They also reiterated the superiority of diets based on meat and dairy products over vegetarian ones.[85] Furthermore, long before it was published, Cheyssial's

Médecine Tropicale et d'Hygiène, Le Caire, Egypte, Décembre 1928, vol. 2, Le Caire: Imprimerie Nationale, 1929-1932, pp. 855–858; Ornelas, Augusto, *Primeiro viver. Luz e vitaminas, Conferência realisada no Palácio do Comércio, Indústria e Agricultura de Benguela, primeira da série de Conferências da "Casa das Beiras", 19 de Agosto de 1933,* Benguela, 1933, pp. 19–26. This analysis of malnutrition was shared by many hygienists, see for instance the summary of 'colonial dietary problems' in Burnet, Et; Aykroyd, W. R., "Nutrition and Public Health", *Quarterly Bulletin of the Health Organisation of the League of Nations* 4,2 (1935), pp. 323–474, here pp. 448–454.

[81] See Chapter 3.

[82] See, for instance, Sant'Anna, *Problema da assistência,* pp. 99–102 and Roubaud, *Rapport*.

[83] In addition to those mentioned in the following footnotes, these studies also included MCCulloch, W. E., "An inquiry into the dietaries of the Hausas and Town Fulani of Northern Nigeria", *West African Medical Journal* 3 (1930), pp. 1–75, cited by Worboys, *The Discovery of Colonial Malnutrition,* pp. 224 note 34; Hardy, George; Charles, Richet; Lasnet (eds.), *L'Alimentation indigène dans les colonies françaises, protectorats et territoires sous mandat,* Paris: Vigot, 1933 and the Nyasaland Nutrition Survey (1938-1940), analysed by Brantley, Cynthia, *Feeding families. African realities and British ideas of nutrition and development in early colonial Africa,* Portsmouth, NH: Heinemann, 2002.

[84] The CCTA and preceding intercolonial initiatives organized nutritional conferences in French Cameroon (1949), Gambia (1952) and Angola (1956), which brought together (colonial) nutrition experts from France, Great Britain, Belgium, Portugal, South Africa and Rhodesia as well as officials from the FAO. See the conference proceedings in *Conférence interafricaine sur l'alimentation et la nutrition. Dschang-Cameroun, 3-9 octobre 1949,* Paris: La documentation française, 1949; Colonial Office (ed.), *Malnutrition in African mothers, infants and young children. Report of the second inter-African conference on nutrition held under the auspices of the Commission for Technical Co-Operation in Africa south of the Sahara (C.C.T.A.) at Fajara, Gambia, 19th-27th November, 1952,* London: H.M.S.O., 1954 and *Conférence inter-africaine de la nutrition - Conferência inter-africana de nutrição - Inter-African Nutrition Conference. 3. sessão, Luanda, Outubro 1956. Communicações*, 2 vols, Luanda, 1956. On the CCTA, see also Chapter 2. At the third conference hosted in Luanda in 1956, a multitude of studies on Angola were presented.

[85] See Orr, John Boyd; Gilks, J. L., *The Physique and Health of Two African Tribes*, London: H.M.S.O., 1931 and, on these studies, Worboys, *The Discovery of Colonial Malnutrition,* pp. 210–213; Brantley, Cynthia, "Kikuyu-Maasai Nutrition and Colonial Science. The Orr and Gilks Study in late 1920s Kenya revisited", *The International Journal of African Historical Studies* 30,1 (1997), pp. 49–86.

pioneering study from 1925 on the nutritional value of 'normal' African diets in four districts of Togo piqued the interest of at least some of the participants of the LNHO West African study tour during their stay in this mandated territory.[86] Damas Mora expressed great enthusiasm for this new pillar of preventive medicine and recommended that similar nutrition studies be conducted in all African colonies, if possible under the supervision of the Epidemiological Bureau that was still in the planning.[87] Back in Angola, Damas Mora integrated this issue in his AMI reform programme, exhorting doctors to study "the composition of the usual food ration of the natives, from the point of view of quantity and quality, and, if possible, of its nutritional value as well, the reason being that these studies were to serve as the basis of a scientific correction [of their diet] through the addition of those foodstuffs they need".[88] Whether or not such studies were effectively conducted in Angola before 1945 is unclear.[89] What is certain, is that the flow of scientific publications only started in the 1950s, when nutritional research on the Portuguese colonies was institutionalized with the establishment of a Nutrition Section at the Lisbon School of Tropical Medicine in 1951, a Nutrition Commission within the Colonial Ministry in 1955 and a Provincial Nutrition Commission in Angola in 1956.[90]

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[86] Cheyssial's study seems only to have been published in 1931, see Cheyssial, *Étude de la ration alimentaire (1931)*, later reprinted as Cheyssial, A., "Étude de la ration alimentaire des indigènes du territoire du Togo", in: Hardy, George; Charles, Richet; Lasnet (eds.), *L'Alimentation indigène dans les colonies françaises, protectorats et territoires sous mandat,* Paris: Vigot, 1933, pp. 281–289. See, on this study, also Bonnecase, *Pauvreté,* pp. 31–32.

[87] Damas Mora, *Rapport au sujet des services sanitaires de Dakar*, 06.06.1926, p. 22 and 27, in: LONA, R. 955, 12B/58594/41908. See also António Damas Mora, *Missão Sanitária da S.D.N.*, in: O Século, 03.07.1926. On the LNHO study tour and the Epidemiological Bureau, see Chapter 2.

[88] Alto Comissariado da República em Angola (Vicente Ferreira), "Diploma Legislativo n. 463 (09.12.1926)", in: Alto Comissariado da República em Angola; Direcção dos Serviços de Saúde e Higiene (eds.), *Diploma Legislativo do Alto Comissariado n.° 463 de 9 de Dezembro de 1926 e diversos diplomas referentes á Doença do sono publicados desde 1911 a 1924,* Loanda: Imprensa Nacional, 1927, pp. 5–21, art. 21§12. This call was repeated in *Problemas da alimentação*.

[89] Although no studies on the traditional diets of specific ethnic groups in Angola were published before the 1940s, one cannot exclude that doctors had conducted small-scale studies in unpublished reports. Overall, it is safe to say that Portuguese scientific activity in this area was limited, as has been pointed out by Colaço, Amadeu Teixeira Feijó, "Saúde e higiene. Acerca da alimentação dos africanos", *Boletim Geral das Colónias* 26,312 (1951), pp. 107–121, here p. 112 and Reis, Carlos dos Santos, *A nutrição no ultramar português (subsídio para uma bibliografia)* (Publicações do Centro de Estudos Demográficos), 2 vols, Lisboa: Instituto Nacional de Estatística, 1973-1974.

[90] See Colaço, *Saúde e higiene,* p. 112; Azevedo, J. Fraga de, *Cinquenta anos de actividade do Instituto de Medicina Tropical (24 de Abril de 1902 - 24 de Abril de 1952),* Lisboa, 1952, p. 37; Carneiro, Rui de Sá, "Comissão de nutrição do Ministério do Ultramar", *Anais do Instituto de Medicina Tropical* 12,3 (1955), pp. 537–546 and, on the work of the Provincial Commission in Angola, Pena, Antero Jacques, "Rações de trabalho. Alimentação africana: caso de Angola", *Boletim do Instituto de Angola* 17 (1963), pp. 73–87. Important studies include Velho, Homero de Liz Abreu, "Subsídio para o estudo da alimentação dos indígenas em Angola", *Agronomía Angolana* 9 (1954), pp. 171–186; Nunes, José António Pereira, "A alimentação na baixa de Cassange. Inquéritos de consumo e nutricionais, campanhas alimentares e obras de fomento", *Anais do Instituto de Medicina Tropical* 17,1/2 (1960), pp. 283–435 and Ferrão, Francisco; Xabregas, Joaquim, "Investigações agronómias nacionais no âmbito da nutrição e alimentação africana", *Agronomía Angolana* 12 (1960), pp. 61–96.

The dearth of Portuguese scientific studies in this domain prior to the 1950s does not mean that the problem was totally ignored. In the late 1920s, the emerging field of nutrition studies did not fail to capture the interest of leading colonial hygienists in Angola. Thus, nutrition studies conducted in other tropical regions figured prominently in the review section of the *Boletim da Assistência Médica aos Indígenas*.[91] And, most importantly, the heightened concern over nutrition instigated practical consequences, and measures were taken to improve diets and enhance food security. Indeed, while some Interwar reports on colonial nutrition blamed colonialism for the deterioration of diets in colonial Africa, there was even greater unanimity that colonialism was also the solution for under- and malnutrition.[92] A new biopolitical imperative emerged among colonial powers in Africa. Thus Henri Labouret, a former colonial administrator who had become one of France's foremost specialists in African cultures and languages, averred in terms reminiscent of Foucault's later writings on the birth of biopolitics that "it is an urgent necessity to feed them to make them live."[93] Leading French colonial officials and doctors agreed and advocated a "policy of full stomachs" *(politique du ventre plein)*.[94]

The impact this new political imperative had on the diets of Africans during the Interwar Period should certainly not be overestimated, for either Angola or other African colonies. Interventions met with many obstacles and colonial administrations often considered other challenges to be more urgent. Yet, certain groups were more affected than others and, generally speaking, the interventions of the Interwar Period paved the way for more encompassing measures after 1945.

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[91] See for instance Camoesas, João, "Review of 'The place of the banana in diet, by W. Eddy e M. Kellg'", *Boletim da Assistência Médica aos Indígenas e da Luta contra a Moléstia do Sono* 2,11 (1928), pp. 278–280; Camoesas, João, "Review of 'The nutritive value of maize and its various preparations on Java, by P. Jansen e F. Donatts"", *Boletim da Assistência Médica aos Indígenas e da Luta contra a Moléstia do Sono* 2,12 (1928), pp. 373–374; Sousa, Jacinto de, "Review of "Vitamina-B deficinecy in infantes: its possibility, prevalence and prophylaxis, by George W. Bray", *Boletim da Assistência Médica aos Indígenas e da Luta contra a Moléstia do Sono* 3,2 (1929), pp. 194–195.

[92] See Worboys, *The Discovery of Colonial Malnutrition*, esp. pp. 217-219.

[93] Labouret, Henri, "L'alimentation des indigènes en Afrique Occidentale Française", in: Hardy, George; Charles, Richet; Lasnet (eds.), *L'Alimentation indigène dans les colonies françaises, protectorats et territoires sous mandat,* Paris: Vigot, 1933, pp. 139–154, here p. 153. Henri Labouret served in the colonial army and, from 1918 onwards, in the colonial administration of French West Africa. In 1926, he was appointed Professor at the École des Langues Orientales in Paris and Co-Director of the International Institute of African Languages and Cultures in London. From 1929 onwards, he also taught at the French École Coloniale. See Wilder, Gary, *The French Imperial Nation-State. Negritude and Colonial Humanism between the Two World Wars,* Chicago: University of Chicago Press, 2005, p. 58.

[94] Lasnet, "Préface", in: Hardy, George; Charles, Richet; Lasnet (eds.), *L'Alimentation indigène dans les colonies françaises, protectorats et territoires sous mandat,* Paris: Vigot, 1933, pp. 5–7, here p. 7; Muraz, "L'alimentation indigène en Afrique Équatoriale Française", in: Hardy, George; Charles, Richet; Lasnet (eds.), *L'Alimentation indigène dans les colonies françaises, protectorats et territoires sous mandat,* Paris: Vigot, 1933, pp. 177–211, here p. 211. The term was coined by Jules Carde, Governor-General of the AOF between 1923 and 1930, see Conklin, Alice, *A Mission to Civilize. The Republican Idea of Empire in France and West Africa, 1895-1930,* Berkeley: University of California Press, 1997, p. 220.

One of the most obvious and direct interventions in African diets regarded the food rations provided to African workers in private mining and agricultural companies or in the colonial armies. The desire to rationalize and standardize these food rations predated the nutritional studies of the late 1920s. In order to reduce mortality rates among workers and to bolster their health and productivity, colonial governments had already established standard food rations in the 1910s.[95] From the 1920s onwards, most of these rations were recalculated on the basis of new nutritional insights. On behalf of governments and private companies, doctors and chemists now determined the nutritional value of local food items and elaborated standard diets, which not only provided enough calories but also more variation and balance, especially with regard to proteins and vitamins.[96]

This shift can also be observed in Angola. In 1927, Damas Mora revised the official diet, which had been decreed six years earlier, on the premise that it lacked a scientific basis. Analysing the diet of 1921 (and the few variations which it allowed), Damas Mora criticized that it was too voluminous to be digested properly, that it contained too many calories and not enough vitamins, and that it was too monotonous. After studying the recommended food rations in Northern Rhodesia and the Belgian Congo, he now proposed a revised diet, which secured the internationally recommended calorific intake of about 3,500 calories while offering more variation and vitamins through the addition of rice, vegetables and maize flour. He also recommended standard food rations for the wives and children of workers.[97] These revisions were largely based on the recommendations made by a medical commission in the Belgian Congo. In 1926, this commission had conducted a large number of experiments with different food rations in prisons and hospitals in order to find the ideal diet for the African

[95] For the Portuguese colonies and Angola in particular, see, for instance, Alfredo Martins da Silva Borges, *Circunscrição de Cacongo - Relatório sobre assistência aos indígenas e profiláxia da varíola, paludismo e doença do sono*, 1913, pp. 28–31, in: ANA, Cx. 3374; Diniz, *Negócios indígenas 1913,* p. 71, art. 13; Governo Geral de Angola, *Regulamento local do trabalho dos indígenas no distrito de Mossâmedes. Aprovado e mandado pôr em execução por portaria provincial n." 68, de 20 de Março de 1918,* Loanda: Imprensa Nacional, 1918, art. 27-30. For São Tomé, see *Portaria 44*, 19.04.1922, in: Boletim Oficial de São Tomé, 06.05.1922. I would like to thank Marta Macedo for this last reference.

[96] For the Belgian Congo and South Africa, see Trolli, *Alimentation* and Orenstein, A. J., "The Dietetics of Natives employed on the Witwatersrand Gold Mines", *Africa. Journal of the International African Institute* 9,2 (1936), pp. 218–226. For French West Africa, see for instance Labouret, *Alimentation des Indigènes,* p. 153.

[97] Compare Alto Comissariado da República em Angola (Norton de Matos), *Decreto n.° 41 com as Instruções que regulam o emprêgo de trabalhadores indígenas nas obras do Estado*, 03.08.1921, in: *Boletim Oficial da Colónia de Angola, Série I,* 04.08.1921, pp. 206–208, art. 6 with Alto Comissariado da República em Angola (Vicente Ferreira), *Diploma Legislativo n. 670*, 15.12.1927, in: *Boletim Oficial da Colónia de Angola, Série I,* pp. 863–868. On this, see also Garcia, José de Penha, "Le problème de l'alimentation des indigènes dans l'Empire Colonial Portugais", in: Institut Colonial International (ed.), *Compte Rendu de la XXIVe Session tenue à Rome, les 1er, 2 et 3 juin 1939,* Bruxelles: Etablissements généraux d'imprimerie, 1939, pp. 457–467, here pp. 462–464.

worker.[98] A few years later, the standard diet for African conscripts in Angola was recalculated along similar lines.[99]

The implementation of these new scientifically based diets met with several obstacles, however. While the 1927 decree was legally binding for state employees, it only provided guidelines for private enterprises. Their food policy was regulated by the less detailed stipulations of the *Código do Trabalho Indígena* ('Native Labour Law') of 1928.[100] Inspection reports suggest that while some companies, like Cassequel, did indeed, at least at certain moments, follow the diets proposed by Damas Mora, others, like the fishing companies in Porto Alexandre, did not.[101] Even Diamang, the biggest private company in Angola, periodically reduced rations in the late 1920s and 1930s to save money or because there were problems with food supply. Indeed, local food production was not always sufficient and imports often slow and expensive. The main problem, however, was that many companies did not endorse the biopolitical rationale put forth by the colonial state and were hence unwilling to invest in the long-term health of their employees.[102] Even when company directors were prepared to implement the standard food rations, this did not automatically mean that the food reached the workers. Not infrequently, official food policies were thwarted by mine or plantation overseers who abused their power by witholding food, distributing it unequally or not controlling its quality.[103]

Another issue was that African workers did not always want to eat all the food they received. The diets were sometimes not adapted to their liking, the moment eating habits varied according to region or ethnicity, and workers were often recruited from far away.[104] While the staple food in northern Angola was manioc, cereals, mainly maize, were

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[98] See van Hoorde, L., "Etude de la ration du Travailleur Noir au Katanga", *Annales de la Société Belge de Médecine Tropicale* 7 (1927), pp. 37–93.

[99] See Ferreira, Octávio Sousa de, "Alimentação do soldado indígena", *Revista Militar* 85 (1933), pp. 203–221.

[100] Ministério das Colónias, *Decreto 16.199, aprovando o Código do Trabalho dos Indígenas nas colónias portuguesas de Africa, Diário do Governo, Série I,* 06.12.1928, pp. 2243–2284, art. 231-235 (p. 2466).

[101] Compare João Amadeu de Trindade, *Trabalho sobre assistência indígena e regime alimentar dos trabalhadores indígenas*, in: Actas da Conferência dos Intendentes e administradores da Província de Benguela, 11-16 Fevereiro 1943, pp. 49-63, here pp. 51-52, in: AHU, MU, ISAU 60 with Nunes de Oliveira, *Relatório do Inspector Superior da Administração Colonial. Inspecção à Colónia de Angola, 1944*, 04.02.1945, in: AHU, MU, ISAU_A2.01.002/012.00067, pp. 220-221. In his account on the diet in Cassequel in 1944, Esteves inadvertently confirms that this company used the standard food rations decreed in 1927, see Esteves, Emmanuel, *O caminho-de-ferro de Bengela e o Impacto Económico, Social e Cultural na sua Zona de Influencia (1902-1952)* (Tese de Doutoramento - Universidade do Porto, Faculdade de Letras), 1999, p. 546.

[102] On Diamang's food policy, see Varanda, *A Bem da Nação*, pp. 260-269.

[103] Varanda, *A Bem da Nação*, pp. 286-288.

[104] Soares, *Acerca dalguns problemas*, pp. 169–170. A combination of the problems addressed here caused one of the most tragic examples of ill-managed food policy in interwar Africa, which occurred in the neighbouring colony of French Equatorial Africa. In the late 1920s, more than 17,000 Africans working on the Congo-Océan railway died, mainly due to ill-calculated rations, problems of food supply, and the underestimation of the resistance that the introduction of new foodstuffs caused. See Muraz, *Alimentation indigène*, pp. 179; 200-204; 206; Headrick, *Colonialism, Health and Illness,* pp. 273–310.

predominant in southern Angola.[105] And whereas most colonial nutritionists highly valued meat for its proteins, it was not common in most diets, either because it was unavailable, for instance in regions where sleeping sickness had made cattle breeding impossible, or because certain ethnic groups were reluctant to eat (certain kinds of) it. Paradoxically, most cattle-breeding groups in southern Angola figured amongst the latter.[106] Many Portuguese doctors and administrators also complained that Africans liked to trade part of their rations for other foodstuffs or clothing. To prevent this "natural tendency", it was recommended that rations be distributed and consumed in canteens, under due surveillance.[107]

As well as the improvement of food rations for African workers and soldiers, colonial governments also reflected upon solutions that contemplated the population at large. In the Interwar Period, under- and malnutrition was reframed as an agricultural issue, as a problem of local mis- and underproduction that could be resolved through agricultural reform, that is through the introduction of new crops, techniques, storage facilities and mentalities.

Agricultural Reform and Model Villages

In summary of the argument I have just made, one can say that agricultural reforms in Interwar Angola obeyed mainly two distinct and potentially conflicting rationales: modernizing and increasing agricultural production was considered necessary to make more money on the export market and to enhance food security within the colony. The problem was finding a balance between the two. It was feared that if African smallholders produced more export crops such as cotton or coffee, they might increase their income, but would have less land, time and even incentives to produce food crops.

Model village projects like those conceived by João Casimiro Jacinto and Álvaro de Noronha e Castro were meant to reconcile both imperatives by steering production. Villagers would be more or less told what crops to produce and how much land to cultivate.

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[105] Velho, *Subsídio para o estudo*, pp. 173–175.

[106] Almeida, António de, "Carne de mamíferos. Tabu alimentar dos nativos das Colónias Portuguesas", *Anuário da Escola Superior Colonial* 25 (1943-1944), pp. 153–162, here pp. 157 (for Angola); Velho, *Subsídio para o estudo*, p. 184. This reluctance was observed among many pastoralist groups in Equatorial Africa and usually ascribed to the fact that cattle were "symbols of wealth and honour", see Burnet/Aykroyd, *Nutrition and Public Health,* p. 449 (here quote). Some also condemned the colonial ban on firearms, which had made hunting a much more difficult task, see Mesquita, *Concentrações indígenas,* p. 472 and António de Almeida, *Relatório do Governo do Distrito do Moxico (1931)*, Febr. 1932, p. 21, in: AHU, MU, GM 600.

[107] Soares, *Acerca dalguns problemas*, p. 170; Simões, Tito Serras, "Ração alimentar para trabalhadores negros", *Anais do Instituto de Medicina Tropical* 3 (1946), pp. 385–466, here pp. 453–454. See also Varanda, *A Bem da Nação*, p. 264. Already in 1921, Norton de Matos had called upon the employers to prevent workers from selling or giving away their food, see Alto Comissariado da República em Angola (Norton de Matos), *Decreto n.° 41,* art. 6§3.

Experimentation fields, the distribution of tools and improved seeds as well as further technical assistance, including the introduction of new animal breeding techniques in regions where this was possible, would, in turn, enhance production. Their visions of model villages thus intersected with two agricultural reform projects that were animatedly discussed in the late 1920s and early 1930s: forced cultivation schemes *(culturas indígenas necessárias)* and state farms *(granjas administrativas).*

In 1931, the Angolan government had decreed that every male adult native, who was fit to work and did not have another occupation, was obliged to cultivate at least one hectare of land with crops the type of which was to be indicated by the local administrator upon the advice of the Agricultural Services. The decree's preamble was explicit about the double goal of this measure, which was to improve the nutritional status of the population and to increase the trade volume.[108] Supporters of this policy, like Ivo de Cerqueira, Director of the Native Affairs Department between 1930 and 1932, João Clemente da Mota Furtado, Director of the Agricultural Services in the late 1920s-early 1930s, and Álvaro de Noronha e Castro, described the use of compulsion as a patriotic necessity and paternalistic measure. In their opinion, it would be a win-win situation: not only would the colonial economy benefit from this system, but also the natives themselves would, since they would be better fed, increase their income and acquire healthy 'habits of work'. These supporters also made reference to similar policies in other colonies like the Belgian Congo or Timor, where they seemed to work well, and highlighted the difference in their programmes with regard to the infamous 'Cultivation System' *(Cultuurstelsel)* instituted in Dutch Indonesia in the nineteenth century, which had only been intended to benefit the state and not the farmers.[109] Indeed, for similar reasons and with much inter-imperial borrowing, French and Belgian colonies had already implemented compulsory cultivation schemes. Despite the condemnation of these schemes as a form of forced labour by the 1930 Geneva convention of the ILO, they would continue to enforce them, albeit often inconsistently, until the mid-1940s in the French case, and until the end of the colonial era in the Belgian case.[110]

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[108] Governo Geral de Angola, *Diploma Legislativo n.° 239*, 26.05.1931, in: *Boletim Oficial da Colónia de Angola, Série I,* 04.06.1931, pp. 38–39.

[109] Cerqueira, *Memória,* pp. 59–62; Castro, *Utilidade e necessidade*, pp. 5-11. See also Furtado, João Clemente da Mota, *Assistência agrícola aos indígenas. Tese apresentada ao Primeiro Congresso de Agricultura Colonial,* Porto: Imprensa Moderna, 1934, pp. 12–13 and Furtado, João Clemente da Mota, *Relatório sobre a cultura e comércio de algodão, conforme o decreto no 11994,* Loanda: Direcção dos Serviços de Agricultura, 1928, pp. 17–18. On the Dutch 'Cultivation System' *(Cultuurstelsel)*, see Fasseur, Cornelis, *The politics of colonial exploitation. Java, the Dutch, and the Cultivation System,* Ithaca, NY: Southeast Asia Program Cornell University, 1992.

[110] For the Belgians, see Northrup, David, *Beyond the bend in the river. African labor in Eastern Zaire, 1865 - 1940,* Athens, Ohio: Ohio Univ. Center for Internat. Studies, 1988, pp. 138-148; 190-197; Kassa, *Politiques agricoles*, pp. 99–134. For the French, see Cooper, Frederick, *Decolonization and African society. The Labor*

In Angola, the decree would never be officially implemented and enforced. However, from the late 1930s onwards, forced cultivation would be a social reality in the cotton zones demarcated by the Angolan and Mozambican colonial states. Here, African farmers had little other choice than to obey the instructions of concessionary companies and to grow more cotton in order to meet production quotas.[111] The way in which the idea of 'necessary' or 'compulsory crops' *(culturas necessárias* or *obrigatórias*) practically unfolded exposed the tension that existed between the imperatives of food security and export production. In many cotton growing areas – and this also applied to French and Belgian colonies – the forced cultivation of cotton, a very labour intensive process, prevented African farmers from growing food crops, which in turn led to recurrent food shortages.[112] The practicalities of the cotton scheme thus diverged from the wheat campaigns of the late 1920s and early 1930s. In this last instance, the imperatives of enhancing both food security and export production had been more closely intertwined, one of the reasons why the wheat campaigns had also received

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Question in French and British Africa, Cambridge: Cambridge University Press, 1996, pp. 91; 189; van Beusekom, Monica M., *Negotiating Development. African Farmers and Colonial Experts at the Office du Niger, 1920 - 1960,* Portsmouth, NH: Heinemann, 2002, pp. 95–97. See also the overview in Leplae, Edm, "Les cultures obligatoires dans les pays d'agriculture ariérée", *Ve Congrès international d'Agriculture Tropicale, Anvers (28-31 juillet 1930),* Bruxelles: Imprimerie Industrielle et Financière, [1931], pp. 61–67. Leplae was the architect of the forced cultivation scheme in the Belgian Congo and one of the most vigorous proponents of the idea.

[111] For Angola, see Pitcher, M Anne, *Politics in the Portuguese empire. The state, industry, and cotton (1929-1974),* Oxford: Clarendon Press, 1993, pp. 120–121; Carreira, António, *Angola da escravatura ao trabalho livre. Subsídios para a história demográfica do século XVI até à independência* (Temas Portugueses; 3), Lisboa: Arcádia, 1977, pp. 151–165. While cotton cultivation in colonial Africa, including Mozambique, has received very much scholarly attention, the social history of cotton production in (northern) Angola remains to be written. In her study on the politics and economics of cotton in the Portuguese Empire, Ann Pitcher has focussed on high level policies, often from a metropolitan perspective, paying little attention to local policies, practices and conflicts. See Pitcher, *Politics*. For Mozambique, there are several good studies, among which Vail, Leroy; White, Landeg, "'Tawani, Machambero!'. Forced Cotton and Rice Growing on the Zambezi", *Journal of African History* 19,2 (1978), pp. 239–262; Isaacman, Allen, "Peasants, Work and the Labor Process. Forced Cotton Cultivation in Colonial Mozambique, 1938-1961", *Journal of Social History* 26 (1992), pp. 104–144 and Isaacman, *Cotton*. From the burgeoning literature on other colonial powers, see especially Likaka, Osumaka, *Rural Society and Cotton in Colonial Zaire,* Wisconsin: University of Wisconsin Press, 1997; Bassett, Thomas J., *The Peasant Cotton Revolution in West Africa. Côte d'Ivoire, 1880 - 1995,* Cambridge: Cambridge University Press, 2001; van Beusekom, *Negotiating Development*; Levrat, Régine, *Le coton en Afrique occidentale et centrale avant 1950. Un exemple de la politique coloniale de la France,* Paris: L'Harmattan, 2008; and Zimmerman, Andrew, *Alabama in Africa. Booker T. Washington, the German empire, and the globalization of the new South,* Princeton: Princeton University Press, 2010.

[112] For Angola, see Carreira, *Angola da escravatura,* pp. 160–161; for Mozambique, see for instance Isaacman, *Cotton,* pp. 150–170. For other colonies, see, for instance, van Beusekom, *Negotiating Development,* pp. 94–96 and Likaka, esp. pp. 4; 34-40; 133. Likaka pays much attention to the conflict between cotton and food production in the Belgian Congo and the strategies of peasants to ensure food security. Forced cotton cultivation was one of the main causes of the revolt in the Baixa do Cassange in northern Angola in early 1961, which initiated the war of decolonization in Angola, see Freudenthal, Aida, "A Baixa de Cassanje: algodão e revolta", *Revista Internacional de Estudos Africanos* 18-22 (1995-1999), pp. 245–283.

the enthusiastic approval from António Damas Mora and the ample financial support from the *Comissão da Assistência Indígena*.[113]

The vision of agriculturally-oriented model villages also tied in with the ongoing discussions on *granjas administrativas* or state farms. The idea of state farms as designated sites for experimentation, innovation and education went back to military initiatives in the late nineteenth and early twentieth century. In the mid-1890s, the first *granja militar* was founded in Humpata, and between 1907 and 1910 the idea was picked up by Governor-General Henrique de Paiva Couceiro as well as the military District Governor in southern Angola, João de Almeida. This last began to establish *granjas* in many of the colony's military and administrative posts. The declared goal of these farms was to test and disseminate new crops and new cultivation and breeding techniques amongst both the European colonizers and the local native population.[114] Simultaneously, they also served to produce food for the troops and the people working for the civil administration. Over the next two decades, state farms emerged here and there, but while the *granjas militares* were brought under uniform military rule, the *granjas administrativas* remained largely based upon the personal initiative and control of local administrators.[115]

Under the changing conditions of the early 1930s, the idea of *granjas administrativas* regained momentum and was translated into a comprehensive uniform scheme of agricultural reform. Each of the several hundred existing *postos civis* (posts administrated by civil authorities) was to have a *granja administrativa* where, under the supervision of the *chefe de*

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[113] See Furtado, João Clemente da Mota, *Angola. Campanha do trigo: 1928-1930* (Colecção de relatórios, estudos e documentos coloniais; 1), Lisboa: Agência Geral das Colónias, [1931]; *Uma entrevista com o sr. dr. Antonio Damas Mora, ilustre Governador Geral de Angola*, in: A Província de Angola, 01.01.1929, pp. 1–2. For the financial support, see also Boletim da Assistência Médica 2,12 (1928), pp. 392-393. Preparatory studies in the colony's experimental agricultural stations had not only suggested that the Angolan highlands were particularly suitable for the large-scale cultivation of wheat, but that the wheat that was grown there was very rich in proteins and fats, nutritional components often lacking in local diets. Moreover, the cultivation of wheat did not hinder the growth of other crops, see Furtado, *Campanha do Trigo,* pp. 17-20; 51; 56. The Angolan wheat campaigns were closely linked to the large wheat campaigns that were launched around the same time in metropolitan Portugal and other European countries, see Saraiva, Tiago, "Fascist Labscapes. Geneticists, Wheat, and the Landscapes of Fascism in Italy and Portugal", *Historical Studies in the Natural Sciences* 40,4 (2010), pp. 457–498.

[114] See Couceiro, Paiva, *Angola. Dois anos de governo.Junho de 1907-Julho de 1909. Historia e Comentarios, Com Prefácio de Norton de Matos,* Lisboa: Edições Gama, 1948 [1910], esp. pp. 194; 229; Almeida, João de, *Sul d'Angola. Relatório de um Governo de Distrito (1908-1910),* Lisboa: Typ. do Annuario Commercial, 1912, esp. pp. 268; 298; 334; 549-554. See also Braz, César Augusto de Oliveira Moura, *Relatório do Governador do Distrito da Huila, ano de 1912,* Coimbra: Imprensa da Universidade, 1918, pp. 45–46.

[115] For the *granjas militares* and how they functioned in the late 1920s, see for instance the reports on the *granjas militares* of the 'Native Infantry Companies' *(Companhias Indígenas de Infantaria)* in AHM, 2a Div., 2a Secç., Cx. 63, n.3. According to Rolo, the *granjas administrativas* had been regulated in 1911, but, if one heeds the preamble of the 1931 decree, these regulations were quickly disregarded. Compare Rolo, *Reordenamento rural,* pp. 1495–1496 and Governo Geral de Angola, *Diploma Legislativo n° 238 sobre as granjas administrativas*, 26.05.1931, in: *Boletim Oficial da Colónia de Angola, Série I,* 04.06.1931, pp. 32–37, preamble.

posto and the colony's Agricultural (and Cattle Breeding) Services, local cultures would be improved and promising new ones introduced. Africans would be taught how to use new tools and apply new techniques, for instance with regard to soil fertilization and rotation. Where possible, each *granja* would therefore employ a professional farmer trained in Portugal, as well as European or African overseers. The main target group would be all 14 to 16 year old African boys and girls, who would be brought to work on the farm in small groups for the duration of four months at a time.[116]

The *granjas* were meant to be a solution to the eternal problem of agricultural education. They would function at the intermediary level between the expanding network of experimental agricultural stations and African villages. This initial scheme, however, met with serious problems. Both the Colonial High Council *(Conselho Superior das Colónias)* in Lisbon and many local administrators criticized that it was not compatible with the restricted budget of the *postos*. The latter also protested against the tremendous amount of paperwork the new regulations entailed and their loss of autonomy, as the new *granjas* were to be supervised by the Agricultural Services.[117] As a consequence of these difficulties and the passive resistance of many local administrators, most of the pre-existing loosely organized *granjas* failed to meet the new standards and lost their right to exist.[118] Only after a much-solicited simplification of the legislation in 1936 did the scheme begin to take root in rural Angola. By the end of the 1930s, there were dozens of officially recognized *granjas administrativas* in all of the provinces.[119]

Yet, regaining the collaboration of the local administrators had come at a certain cost. Critics contended that the new scheme did not work and that attempts at disseminating new agricultural crops and techniques through the *granjas* had mostly failed. A common argument

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[116] Governo Geral de Angola, *Diploma Legistlativo n° 238*; Governo Geral de Angola, *Diploma Legistlativo n° 463 sobre as granjas administrativas*, 29.03.1933, in: *Boletim Oficial da Colónia de Angola, Série I,* 01.04.1933, pp. 169–176. This initial scheme was based on the experiment that administrator Queiroga conducted in his *circunscrição*, see Queiroga, C. Brito de, "Desenvolvimento agícola e aumento da produção indígena na colónia de Angola", *Boletim da Agência Geral das Colónias* 8,82 (1932), pp. 41–58 and Cerqueira, *Memória,* pp. 54–59.
[117] See Conselho Superior das Colónias, *Parecer 487*, 04.07.1932, in: AHU, Conselho Superior das Colónias, Livro 2 (1931-1932); António Lopes Mateus, *Relatório e Propostas da Reunião Extraordinária do Conselho de Governadores de Angola realizada nos dias 7 a 11 de Maio de 1935*, 11.05.1935, p. 17, in AHU, MU, ISAU 1730. Julio Garcez de Lencastre, *Relatório da Primeira Reunião dos Intendentes e Administradores da Província de Luanda de 11-18 Abril 1935*, pp. 145-152, in: AHU, MU, ISAU 1730; Júlio Garcês de Lencastre, *Relatório do Governador da Província de Luanda para 1934-1935*, pp. 50-51, in: AHU, MU, ISAU 2246.
[118] See, for instance, the lengthy report of administrative inspector Raúl Pires, who did not find a single legally established *granja administrativa* during his inspection tour through the Province of Huíla in 1934: Raúl Pires, *Relatório da Inspecção à Provincia de Huíla*, 30.12.1934, in: AHU, MU, ISAU 1665.
[119] Governo Geral de Angola, *Diploma Legislativo n.° 823 sobre as granjas administrativas*, 02.06.1936, in: *Boletim Oficial da Colónia de Angola, Série I,* 02.06.1936, pp. 219–222; António Lopes Mateus, *Relatório da Conferência dos Governadores de Província realizada em Maio de 1938*, 21.05.1938, p. 33 and Anexos 3 to 7, in: AHU, MU, ISAU 1731. See also Amadeu de Bettencourt Reys, *Relatório da Repartição Central dos Negócios Indígenas para o ano de 1942 (printed Luanda 1948)*, p. 82, in: AHU, MU, ISAU 1661.

was that the 'debureaucratization' of the regulations had returned the initiative to the administrators, who were mostly unlearnt autodidacts in agricultural matters. In the absence of professional farmers and the shortage of technical assistance from the Agricultural Services, they often chose the wrong crops, soils or seeds. These failures, in turn, inspired little confidence in the African population.[120] Some observers also added that the Africans who worked at the *granjas* generally did not become the champions of agricultural reform the colonial authorities had hoped for. Many of them experienced their time at the state farms as a form of punishment, they stated, and afterwards did not bother to transmit the knowledge they had acquired to their wives, who were usually in charge of daily agricultural work in the villages.[121] While this criticism addressed the long-standing issue of differently gendered visions of agricultural work between Europeans and Africans, it was also a consequence of the revised 1936 decree, in which the initial target group of male and female adolescents had been replaced with convicts and *remissos de imposto*, male adults who had not been able to pay their taxes.[122] Despite the rhetoric of modernization, *granjas administrativas* were in practice often less about the dissemination of new agricultural techniques than about producing food and sometimes even the generation of surplus income for the administrative authorities.

While model village projects in the 1930s integrated elements of the forced cultivation schemes and the state farms, they offered further advantages, even from the vantage point of agricultural reform. The villages, more than the other schemes, had clear spatial implications. They responded to the widespread belief among agricultural experts that the dispersion and mobility of the African population was – aside from being a problem of political control, an issue I will address further on in this chapter – one of the main obstacles to the 'modernization' of African agriculture. The concentration and sedentarization of the rural population in improved village structures would offer new possibilities for agricultural

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[120] Oscar Freire de Vasconcelos Ruas, *Relatório da Inspecção Administrativa de Angola*, 30.12.1937, pp. 17-18, in: AHU, MU, ISAU 1665; Manuel Pereira Figueira, *Relatório do Curador Geral dos Indígenas da Colónia de Angola (1937)*, 15.05.1938, pp. 15-17, in: AHU, MU, ISAU 2243; Manuel da Cruz Alvura, *Relatório do Governo da Província de Malanje para 1941 e 1942*, 31.12.1942, pp. 45-46, in: AHU, MU, ISAU 1663.2.
[121] Frazão, *Relatório (1939-1940)*, pp. 19-20.
[122] Compare Governo Geral de Angola, *Diploma Legislativo n° 238 sobre as granjas administrativas (1931)*, art. 27-34 and Governo Geral de Angola, *Diploma Legistlativo n° 463 sobre as granjas administrativas (1933)*, art. 22-26 with Governo Geral de Angola, *Diploma Legislativo n° 823 sobre as granjas administrativas (1936)*, art. 8-9.

education, production and trade, while simultaneously suppressing the custom of shifting cultivation.[123]

This belief was not exclusive to the Portuguese. Agricultural experts in other colonies came to debate peasant villagization in similar terms. The so-called 'centralization' policy in British Southern Rhodesia, now Zimbabwe, is a good example. In 1929, the chief agriculturist in the Native Affairs Department, Emory Alvord, started to advocate the idea of permanent model villages as ideal sites for the dissemination of 'modern' land husbandry methods. The villages were to be established in 'native reserves' on the borders of arable land and to comprise hygienic houses, a school, a church, grain bins and pit latrines. Alvord's policy was highly successful: by 1944, almost one third of the colony's native reserves had been centralized.[124] Another example may be found in the so-called *paysannats* in the Belgian Congo. Much debated in the early 1930s, when the world economic crisis affected the colonial economy, this concept of 'native peasantship' was conceived along the same lines: in order to modernize 'traditional' agriculture, it targeted the 'stabilization' of African peasants in newly defined villages. Due to the resistance of European planters, however, who did not want to loose their labour force nor their predominant position in the agricultural sector, the policy of *paysannats* did not go beyond these timid attempts in the 1930s. It was only implemented on a large scale in the 1950s following the approval of the colony's first ten-year development plan in 1949.[125] After the Second World War, the colonial government in Mozambique would resettle cotton farmers in so-called *concentrações*.[126]

[123] See, for instance, Geraldes, *Le paysannat indigène,* p. 161; Jacinto, *Relatório Anual 1930-1931,* pp. 125–126; Castro, *Utilidade e necessidade*; Rolo, *Reordenamento rural,* p. 1509; Colaço, Pedro de Portugal, "A colonização europeia e indígena em Angola", *Boletim da Sociedade de Geografia de Lisboa* 53 (1935), pp. 238–253, here pp. 245–249.

[124] Davis, A. G., "The Work of E.D. Alvord in the Mazowe Valley", *Zambezia* 19,1 (1992), pp. 47–63, here p. 52; Moore, Donald S., "The Crucible of Cultural Politics. Reworking "Development" in Zimbabwe's Eastern Highlands", *American Ethnologist* 26,3 (1999), pp. 654–689, here pp. 660–662. See also Kramer, Eira, "A Clash of Economies. Early Centralisation Efforts in Colonial Zimbabwe, 1929-1935", *Zambezia* 25,1 (1998), pp. 83–98 and Alvord, Emory D., "Agricultural Life of the Rhodesian Natives", *The Southern Rhodesia Native Affairs Department Annual* 7 (1929), pp. 9–16.

[125] Schlippe, Pierre de, *Shifting Cultivation in Africa. The Zande system of Agriculture,* London: Routledge, 1956, pp. 18–19; Nelson, Samuel H., *Colonialism in the Congo basin, 1880-1940,* Athens, Ohio: Ohio University Press, 1994, pp. 157–158; Jewsiewicki, *Modernization,* pp. 19-20; 51-52; Kassa, *Politiques agricoles*, pp. 90–98. An extensive account of the *paysannats* after the Second World War can be found in Kassa, *Politiques agricoles*, pp. 135–182.

[126] Isaacman, *Cotton,* pp. 135–141.

3. Imperial Debates and Colonial Practicalities

The amplitude of the debates as well as the importance they were given in the 1930s becomes obvious if one looks at the arenas in which the model village was discussed. Beyond the expert circles of hygienists and agronomists, the idea became an issue of intense debate in the different echelons of Angola's civil administration, from the Governor-General down to the simple *chefe de posto*. But, as the multiple connections with Timor have already suggested, the debate also transcended the borders of Angola. In the 1930s, it was discussed on the imperial stage at several colonial congresses, which took place in the metropolis. Though it was not always uncontested, the model village became a subject of imperial interest that eventually captured the attention of the Colonial Minister himself.

Many aspects of the model village concept were discussed during the First Congress of Colonization in Porto in September 1934. Organized by the Geographical Society of Lisbon and presided by the Conde de Penha Garcia, it was one of the six major colonial conferences that took place during the Portuguese Colonial Exposition in Porto that year.[127] The Congress brought together eminent members of Portugal's intellectual colonial elites – many of which had long-standing experience in colonial administrations – to discuss the interrelated questions of 'white' and 'native' colonization.[128] Undoubtedly, 'white' colonization, a much-debated issue among colonial elites during the Interwar Period, attracted the most attention, and only a minority of the papers discussed its 'native' counterpart.[129] Yet, most of these papers considered villagization as a possible or even necessary measure for the improvement of the current situation of the African populations in the Portuguese colonies. Sharing assumptions of population decline, low density and dispersion, disorder and economic backwardness, they asserted that villagization, together with hygienic, agricultural and mental reform, were well-suited measures with which to regenerate the African populations.

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[127] With the exception of a few papers, which were later printed in journals or separately, the papers presented to the Congress of Colonization were not published in a complete form. Typescripts can be found in AHU, MU, AGC 950 (Casa Forte). For the conclusions of these papers, see the summaries in 1. Exposição Colonial Portuguesa, *Conclusões das teses apresentadas ao Primeiro Congresso de Colonização. 26-29 de setembro de 1934,* Porto, 1934. Succinct proceedings were published in *Boletim Geral das Colónias* 115 (January 1935), pp. 115-132. The other conferences were organized around the topics of the Military, Agriculture, Exchange, Anthropology and Education. For an overview, see *Boletim Geral das Colónias* 114 (December 1934), pp. 92-162 and 117 (March 1935), pp. 109-132. For the discussion of model villages at the Congress of Colonial Agriculture, see the discussion of Noronha e Castro's paper in the previous section.

[128] See 1. Exposição Colonial Portuguesa, *Congresso de Colonização. Projecto de regulamento da constituição do congresso. Atribuições das comissões, direitos e deveres dos congressistas. Finalidade do congresso,* Porto, 1934, pp. 10-11.

[129] For the debates on 'white' colonization in the Interwar Period, see also Castelo, *Passagens para África,* pp. 61–106, who briefly analyses the 1934 Congress on Colonization from that perspective (pp. 78-79).

Participants approached the issue from different perspectives. Missionary António Miranda Magalhães, for instance, praised the Christian villages, which usually surrounded Catholic missions in the colonies, as examples of progress. Under the vigilant eye of the missionaries, these villages, which were peopled by former mission pupils and other Christianized Africans, were composed of "modest but hygienic, aligned and well-situated houses" and were built in the surrounding countryside of the civilizing facilities of the mission station: school, farm, workshops and dispensary.[130] Ferreira Diniz, former Director of Angola's Native Affairs Department under Norton de Matos, basically re-summarized the comprehensive programme of native policy that he had developed over the years. He thereby repeated his call to regroup the African population in new villages that would be established in healthy and fertile locations, with large and hygienic houses.[131] José Silvestre Ferreira Bossa, the Head of the recently founded *Inspecção Superior da Administração Colonial* (ISAC) ('High Inspection of the Colonial Administration') in the Colonial Ministry, tackled the issue from the perspective of land rights.[132] If Portugal wanted to develop its colonies and pursue its civilizing mission, he argued, it had to sedentarize and villagize the populations, which habitually lived scattered and in (semi-) nomadic conditions and as such were hardly within reach for all sorts of medical and technical assistance. According to Bossa, however, villagization would not be self-evident. In order to succeed, it would be necessary to instil the African natives with an understanding and an acceptance of private landed property. Until now, he criticized, few Africans in Portuguese and other European colonies had made use of the colonial laws that had been expressly designed to give them legal ownership over the land. Therefore, Bossa pleaded for the creation of new laws that would entice natives to gain full ownership over the land within demarcated 'native reserves'. Ownership would, in turn, be the key to successful sedentarization, in that it would entail certain rights and advantages but also obligations and responsibilities.

The most elaborate and concrete paper on native villagization came from lieutenant colonel António Leite de Magalhães, a senior colonial official with long-standing experience

[130] António Miranda Magalhães, *O desenvolvimento e fixação da população indígena e as missões* [1934], in: AHU, MU, AGC 950. Missionaries in Angola had pursued the formation of Christian villages for decades, and, if one includes the Italian Capuchins present already in the seventeenth century, even centuries, see Vos, Jelmer, "Child Slaves and Freemen at the Spiritan Mission in Soyo, 1880-1885", *Journal of Family History* 35,1 (2010), pp. 71–90, esp. pp. 72-73.

[131] José de Oliveira Ferreira Diniz, *Métodos para activar o desenvolvimento da populaçao indígena e sua fixação* [1934], in: AHU, MU, AGC 950. Compare with Diniz, *A missão civilisadora* and footnote 32.

[132] José Silvestre Ferreira Bossa, *O regime de concessão de terras aos indígenas nas colónias de África* [1934], in: AHU, MU, AGC 950. The task of the ISAC was to inspect the administrative services in the colonies and report to the Minister of Colonies. More details on the ISAC can be found in Chapter 5.

in the colonial administrations of Timor, Angola and Guiné.[133] In his paper, which was structured as a law proposal, Leite de Magalhães also defined the sedentarization and the concentration of the native populations in the Portuguese colonies as the essential condition for their development and well-being. His villagization plan integrated many of the ideas advanced by Damas Mora and agricultural reformers, in that it strove for a profound transformation of African rural life by combating endemic diseases, improving hygienic conditions, excluding the weak and the sick, modernizing and increasing agricultural production, regulating communal work, reforming labour recruitment and integrating 'traditional' African or newly appointed authorities into the administrative apparatus of the colony. An important novelty in his proposal was the distinction between 'Christian' and 'pagan' villages, wherein the Christian villages were characterized by their composition of married couples of former mission pupils. This meant that, in Magalhães' view, the state was to support and further enhance the long-standing missionary practice of creating Christian villages.[134] Living in Leite de Magalhães' model village was also supposed to develop a sense of private property in the native populations: the family farms, which would each comprise a farmhouse, stables and 1 ha of land for fruit trees and vegetables, could never be sold or subdivided, but only passed on through the mechanisms of inheritance.

By the end of the conference, the participants all agreed upon the necessity to villagize the native population in the Portuguese colonies, albeit the terms of this recommendation were vague and not binding.[135] Yet, the conference had further pushed the whole idea, especially Leite de Magalhães' paper, which had been highly acclaimed by the audience, would in particular enjoy an extended afterlife.[136] The paper was re-discussed during the Second Conference of Colonial Governors in Lisbon in 1936, and it eventually served as the basis for the decree project on native villagization presented by the Minister of Colonies,

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[133] António Leite de Magalhães, *Bases para uma nova organisação social económica das populações indígenas de Angola e Moçambique tendo por fim a sua fixação e o seu desenvolvimento* [1934], in: AHU, MU, AGC 950. This paper was also published as Magalhães, António Leite de, "Bases para uma nova organização social-económica das populações indígenas de Angola e Moçambique, tendo por fim a sua fixação e desenvolvimento", *Missões de Angola e Congo* 15 (1935), pp. 8–13. António Leite de Magalhães had served as a soldier and administrator in Timor, was Governor of the Cuanza District (1920-1924) and Secretary of the Interior (1926) in Angola. He was also the Governor of Guiné from 1928 to 1931. In 1935 he became the Director of the Military Department in the Colonial Ministry, and until his death in 1944 he would also hold a place on the Colonial Imperial Council. On his career, see Processo Individual de António Leite de Magalhães, in: AHM, Cx. 2625. Leite de Magalhães was also much interested in anthropological questions, see, for instance, Magalhães, António Leite de, "Subsídios para o estudo etnológico de Timor", *Trabalhos da Sociedade Portuguêsa de Antropologia e Etnologia* 1,2 (1920), pp. 37–65 and Magalhães, António Leite de, *Relatório do Governador do Distrito do Cuanza-Sul. Geografia histórica, física, política e económica do distrito, (referido a 30 de Junho de 1922),* Lisboa: Centro Tipografico Colonial, 1924, pp. 44-81.

[134] See footnote 130.

[135] *Boletim Geral das Colónias* 115 (January 1935), pp. 115-132, here p. 130.

[136] *Ibid.*, p. 125.

Francisco Vieira Machado, in 1939.[137] Officially denominated as the 'Social and Economic Organization of the Native Populations', this decree project, which was given much publicity through its publication in the Boletim Geral das Colónias, the regime's official colonial journal, was approved (with alterations) by the *Conselho Superior do Império* (Colonial High Council) and the *Câmara Corporativa* ('Corporative Chamber') two years later, but it was never promulgated.[138]

Notwithstanding, the trajectory of the model village demonstrates to what extent this topic had acquired, in the 1930s, a central place in the discussions on the future of the *indigenato* colonies. It had become a pervasive, perhaps even obsessive idea. The reformed village was widely imagined to be the cornerstone of a forward-looking social order. By improving the conditions of work and life of the native populations, it would help to resolve "all problems of administration, settlement, civilization, development and nationalization" in the colonies, Vieira Machado concluded in 1939. It would be a long-term endeavour, he added, possibly even "of more than one generation", but the important thing was to get started.[139]

By that time, the discussions in Portugal, which had themselves been stimulated by colonial officials from Angola, had long revived the debate in Angola. Shortly after his arrival in Angola in February 1935, Governor-General António Lopes Mateus (1935-1939) placed the idea of model villages on the colonial agenda. At the first Council of Governors (*Conselho dos Governadores*) – a newly established forum within which the Governor-General could discuss crucial questions of colonial policy with the governors of the five provinces in Angola – in Luanda in May of that year, the Governor-General presented his villagization project and ordered the governors to study the implementation of the project in their respective provinces.[140] Each was to devise a type of model village that was adapted to the local

[137] "2. Conferência dos Governadores Coloniais", *Boletim Geral das Colónias* 137 (1937), pp. 3–90, here p. 46; Machado, Francisco José Vieira, "Colonização - Projectos de decretos pelo Ministro das Colónias. Organização Social e Económica das Populações Indígenas", *Boletim Geral das Colónias* 16,178 (1940), pp. 163–179. The Second Conference of Colonial Governors brought together the governors of all eight Portuguese colonies for discussions in Lisbon between 29 October and 9 December 1936.

[138] See Conselho Superior do Império, "Organização social e económica das populações indígenas. Parecer n.° 44 - Processo de Consulta n.° 37", *Boletim Geral das Colónias* 191 (1941), pp. 7–97 and Câmara Corporativa, "Parecer sobre o projecto de decreto realtivo à organização social e económica das populações indígenas", *Boletim Geral das Colónias* 17,191 (1941), pp. 98–120.

[139] Machado, *Organização social e económica,* p. 174.

[140] António Lopes Mateus, *Relatório e Propostas da Reunião Extraordinária do Conselho de Governadores de Angola realizada nos dias 7 a 11 de Maio de 1935*, 11.05.1935, pp. 18-27, in AHU, MU, ISAU 1730. This forum had been established for all colonies by the Reforma Administrativa Ultramarina in 1933, see Ministério das Colónias, *Decreto-lei 23.229 que aprova a Reforma Administrativa Ultramarina*, 15.11.1933, in: *Diário do Governo, Série I,* 15.11.1933, pp. 1915–1995, art. 372-376.

conditions of their own province but also adhered to a general overarching framework. In Lopes Mateus' conception, questions of hygiene were not completely absent, but they were clearly secondary to the goal to increase agricultural production.

As a general rule, the villages were to be established in fertile areas, not further than 50 km away from the nearest railway and well-connected by roads. Each was to be comprised of twenty to forty families and placed under the command of an appointed African chief *(regedor)* and monitored by a European agricultural expert. Preferably, the men would be recruited from the ranks of former soldiers, as these were believed to be amongst the most robust, intelligent and civilized Angolans. As in Damas Mora's project, Lopes Mateus wanted to entice Africans to join the villages by dispensing them from tax payment, public works and long-term labour contracts. And just like Damas Mora, Lopes Mateus' ultimate aim fell nothing short of reordering Angola into a colony of model villages. In a first stage, he proposed that the construction of "300 to 400 villages, that is, 60 to 80 in each province" would be financed with money from the central government in Luanda. After that, it would be the responsibility of the local district administrators to front the construction costs of any new villages. "I would even think", he concluded, "that after that [first stage], the administrators will compete to establish as many villages as possible."[141]

All five of the province governors agreed upon the expediency of Lopes Mateus' project and, over the next few years, the issue would figure prominently on the agenda of the colony's administrative apparatus. Its implementation was further discussed during the – theoretically semi-annual, though in practice mostly annual – meetings of the local administrators with their respective province governor and also in the annual reports of the province governors to the Governor-General.[142] Although these high- and meso-level sources are mostly silent or vague on the individual local processes of planning, enforcement and resistance, they nevertheless offer some valuable insight. They strongly suggest that the recommendations of Lopes Mateus jolted the administrative apparatus into action, but that over the next few years his vision of hundreds of model villages was only incompletely and unevenly realized.

At the end of 1935, the Governor of the Luanda Province, Júlio Garcês de Lencastre, who had previously worked in the administration of Timor, reported that "all *circunscrições* [were] working on the construction of villages aimed at concentrating the natives and

[141] *Ibid.*, p. 25.
[142] The semi-annual conferences held by the administrators and their respective province governor had also been established by the Reforma Administrativa Ultramarina in 1933, see Ministério das Colónias, *Decreto-lei 23.229,* art. 377-378. Many of these reports for the period 1935-1945 can be found in AHU, MU, ISAU 1730 and 1731.

organizing the *sobados* ('African chieftaincies')". Throughout the Luanda Province and mainly in the Congo Region, "there [were] already important new villages, all of them in selected locations and close to the roads." For those driving on the roads of the Congo Region, he added, it was most satisfactory to "observe the succession, in short distances, of villages as centres of prosperity and well-being".[143] Three years later, one of his successors called attention to the hygienic model houses that the local administration had been (and still was) building in the Damba District. They were spacious, made of durable materials and had "the characteristic look of constructions in the Congo Region". They were also built in neat rows and distant from each other and, in the near future, collective latrines would be constructed as well. [144]

Positive messages also came from the Provinces of Bié and Benguela. "Close to Silva Porto", Bié Governor António de Almeida stated in his annual report for 1935-1936, "I have already laid the foundation of a model village. The chapel is already finished and the school well on its way. I hope to start the construction of the houses, in stone, brick and lime, also in this year."[145] In the same report, the chief doctor of the province referred to the – presumably identical – "model village which [was] being founded in Catemo in accordance with all principles of hygiene, with toilets, bath rooms and washing places and which [would] serve as an example for the natives who would come from the interior to Silva Porto."[146] In 1937, the Governor of the Benguela Province, Eurico Nogueira, was proud to announce before his administrators that the first model village had been finished and was soon to be inaugurated by the Governor-General himself.[147] The location of this village was proof of the nexus between agricultural reform and villagization. It was established on the lands of the *Estação de Sementes e Fruteiras da Cuima* ('Station of Seeds and Fruit Trees in Cuima'), one of the most important experimental sites of the Agricultural Services in Angola, and coordinated by Jacinto Casimiro, the agronomist who had already advocated peasant villagization years

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[143] Júlio Garcês de Lencastre, *Relatório do Governador da Província de Luanda para 1934-1935*, p. 19 (quotes) and pp. 40-42, in: AHU, MU, ISAU 2246.

[144] Raúl de Lima (Director Provincial da Administração Civil e Encarregado do Governo da Província), *Relatório do Governo da Província de Luanda para 1938*, 30.04.1939, pp. 32-34, in: AHU, MU, DGAC 543.

[145] António de Almeida, *Relatório do Governo da Província de Bié para 1935-1936*, 31.12.1936, p. 81, in: AHU, MU, ISAU 1727. The province governor had already referred to this project in his previous report, see António d'Almeida, *Relatório da Província do Bié referido ao ano económico de 1934-1935*, 31.12.1935, p. 86-87 and pp. 97-99; in: AHU, MU, GM 2894.

[146] Manuel Joaquim dos Santos, *Relatório dos Serviços de Saúde e Higiene na Província de Bié referente ao ano écónómico de 1935-1936*, 01.01.1937, included in António de Almeida, *Relatório Bié 1935-1936*, pp. 83-91, quote p. 84, in: AHU, MU, ISAU 1727.

[147] Eurico Nogueira, *Relatório da Reunião dos Intendentes e Administradores da Província de Benguela realizado em Maio de 1937*, 21.05.1937, pp. 12-13, in: AHU, MU, ISAU 1730. See also Eurico Nogeuira, *Relatório do Governo da Província de Benguela para o ano de 1937*, s.d., p. 16 and 25, in: AHU, MU, ISAU 1663.1.

before.[148] Nogueira, who had been an active supporter of Lopes Mateus' project from the very beginning, instructed his administrators to treat the subject as a top priority, and in 1938 at least one other model village was inaugurated in Ganda.[149]

In the semi-arid southern Province of Huíla, by contrast, the situation was more complicated. When the province governor questioned his administrators during their annual meeting in 1938 about the feasibility of villagization, he received very divergent answers. While some stated that they were making progress, others objected that it was a sheer impossibility to villagize the nomadic pastoralists living in the province, and possibly a bad idea as well, because it would increase the risk of cattle disease.[150] These objections did not just appear out of thin air. Previously, other 'experts' like the veterinarian doctor and amateur anthropologist António Lebre, who had studied the customs of the pastoralists in the southern part of the province, had dismissed the idea on similar grounds.[151] They were also consistent with the reservations that Henrique Galvão, former Governor of Huíla and now senior member of the ISAC, had formulated with regard to the villagization project in his report to the Colonial Minister. Although Galvão in principle welcomed the project, he believed it to be unrealizable under the current economic conditions in Angola. As long as the colonial government did not create new economic structures and incentives, the "reasons of a hygienic nature and the reasons of a technical nature with regard to work and land use" that caused the Africans to live scattered would continue to prevail and all attempts at villagization would be doomed to fail.[152] To close the issue, the Governor of Huíla instructed his administrators to attempt villagization whenever possible, but warned them not to press too hard, since "he did not want that the concentration of the natives should disturb their peace".[153]

On the basis of these reports, it is safe to say that, with the exception of some administrators in southern Angola, the territorial administration generally adhered to the project, and province governors even tended to assign high priority to it. At the same time,

[148] By the end of 1936, there were nine experimental stations and laboratories in Angola, see António Lopes Mateus, *Relatório do Governador Geral de Angola para o ano de 1936*, pp. 48-49, in: AHU, MU, ISAC 546.
[149] Eurico Nogueira, *Relatório do Governo da Província de Benguela para o ano de 1938*, s.d., p. 5, in: AHU, MU, DGAC 543.
[150] *Actas da Conferência dos Intendentes e Administradores da Província da Huíla*, 4-12 Abril de 1938, 3a Sessão (06.04.1938), in: AHU, MU, ISAU 1730.
[151] Lebre, António, "Costumes gentílicos dos povos de além Cunéne", *Trabalhos do 1.° Congresso Nacional de Antropologia Colonial, Porto, Setembro de 1934,* vol. 2, Porto: Edições da 1.a Exposição Colonial Portuguesa, 1934, pp. 76–192, here p. 185.
[152] Henrique Galvão, *Parecer sobre o Conselho de Governadores de 7 a 11 de Maio de 1935 em Luanda*, 12.05.1936, in: AHU, MU, ISAU 1730.
[153] *Actas da Conferência dos Intendentes e Administradores da Província da Huíla*, 4-12 Abril de 1938, 3a Sessão (06.04.1938), p. 3 (quote), in: AHU, MU, ISAU 1730.

however, the reports suggest that the underlying rationales of the model village project did not always go hand in hand. Administrators, doctors and agronomists often had diverging priorities or even gave different interpretations to the concept of 'model village'. Some administrators thus seem to have conflated it with the practice of resettling and rebuilding villages in the vicinity of roadways. This was not necessarily at odds with the idea of model villages, but in some cases it was, when, for example, it turned out to be damaging to the agricultural production of communities and hence to their standard of life.

This practice, which had probably been borrowed from other colonies, had been introduced for medical reasons in the prophylactic sectors of the AMI Congo Zone in the late 1920s.[154] Here, the basic idea had been to remove the population from the forests and from near rivers, where the risk of contracting sleeping sickness was high, and to resettle them in select, healthier locations near the roads.[155] This quickly became a widespread policy, which was not only mentioned in the reports of Portuguese doctors and administrators but also attracted the attention of foreign travellers. After having visited the region in early 1931, the Baptist medical inspector T.B. Adam wrote: "for example, on the 47 km of road between Quibocolo and Damba there are 47 villages within a few hundred yards of the road."[156] The success of this kind of village displacement stemmed from the fact that medical imperatives dovetailed with the interest of the local administrators. Many administrative tasks, most notably tax collection, became easier if the population lived in visible and easily accessible places.[157] Aware of these advantages, the general government in Luanda had even included a clause recommending the relocation and concentration of the population in villages along the roadsides in the new regulations on the collection of native tax in 1931.[158] Gradually, this measure had also been adopted in other regions and provinces.[159]

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[154] In his report to the League of Nations, Damas Mora referred to the creation of new hygienic villages along the roads in Ubangi-Shari, a region with an elevated incidence of sleeping sickness in French Equatorial Africa. See Mora, *L'état actuel*, p. 40 and footnote 47. The concentration and relocation of populations along roadways was also an older administrative practice that had, for instance, been carried out for taxation and control purposes before and after the First World War by the Germans and the French in Cameroon. See Geschiere, Peter, *Village communities and the state. Changing relations among the Maka of South-Eastern Cameroon since the colonial conquest,* London: Kegan Paul, 1982, pp. 28; 158; 431-432 note 3 and 455 note 26.

[155] See Silva, *Serviço de Assistência Congo 1931,* pp. 22–24.

[156] Adam, T. B., *Africa revisited. A medical deputation to the Baptist Missionary Society's Congo Field,* London, 1931, p. 67. On the rapid success of this measure, see also Júlio Garcês de Lencastre, *Relatório do Governador da Província de Luanda para 1934-1935*, pp. 19; 40-42, in: AHU, MU, ISAU 2246.

[157] See, for instance, explicitly Miguel António de Freitas Barros, *Relatório anual do encarregado do Governo da Província de Luanda referente ao ano económico de 1935-1936*, 30.07.1937, p. 110, in: AHU, MU, ISAU 1727.

[158] Colónia de Angola, *Regulamento do recenseamento e cobrança do imposto indígena. Aprovado por Diploma Legislativo n.° 237, de 26 de Maio de 1931,* Luanda: Imprensa Nacional, 1931-1932, art. 36.

[159] See, for instance, António de Almeida, *Uma viagem de estudo a Angola [em 1934]*, [1935], p. 22, in: Instituto Camões (henceforth, IC), Processo 1391 - Escola Superior Colonial; António d'Almeida, *Relatório da Província do Bié referido ao ano económico de 1934-1935*, 31.12.1935, p. 87, in: AHU, MU, GM 2894.

Yet, in their quest for legibility, some administrators lost sight of the hygienic and agricultural aspects of the displacements. Out of ignorance or even indifference, they sometimes chose locations where the soil was not fertile enough – a fact that also attracted the attention of the inspectors of the ISAC. Henrique Galvão and Óscar Ruas warned in 1937 that the displacement of native villages was a practice administrators needed to "treat with the greatest caution, since there were settlements which had previously been rich and which now lacked everything, as the land where they had been settled did not produce anything."[160] Notwithstanding, warnings in later reports raise the suspicion that such 'errors' continued to happen, also because some administrators were still reticent to consult doctors or agronomists in the matter.[161]

On the whole, there is little doubt that from the late 1920s onwards colonial officials began to intervene in the spatial, economic and hygienic dimensions of African village life in Angola. Although it is difficult to appraise their realization on the ground, a close reading of the available sources nevertheless suggests that, both in number and the amplitude of the reforms, they remained but a shadow of the ideals laid out in the plans by hygienists, agronomists and governors. If Damas Mora's or Lopes Mateus' visions of hundreds of model villages did not materialize as such in the 1930s and early 1940s, it was due to a diverse array of reasons – reasons which echoed some of the basic tensions of colonial rule in the Interwar Period.

First, medical and agricultural services did not expand quickly enough to provide comprehensive wide-scale technical assistance. Many regions were not regularly visited by doctors and agronomists, and, moreover, local administrators did not always appreciate their involvement.

The second major reason regards precisely the role of these local administrators. The report the administrative inspector Óscar Ruas filed on the Lobito District *(concelho de Lobito)* in 1940 is very illuminating in this respect. Ruas levelled sharp criticism at the local administrator. Nearly everywhere in the district, he observed, the African population continued to live in *sanzalas* ('villages') that were too small and dirty to meet the hygienic and economic standards of the villagization programme. The only two model villages the administrator had begun to construct in 1937 had never been finished. Yet villagization was

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[160] Oscar Freire de Vasconcelos Ruas, *Relatório da Inspecção Administrativa de Angola*, 30.12.1937, pp. 5-6 (quote p. 6), in: AHU, MU, ISAU 1665.

[161] See, for instance, Daniel Duarte Silva, *Relatório da Conferência dos Intendentes e Administradores da Província de Luanda realizado em 16 de Dezembro de 1941*, 31.12.1941, p. 12, in: AHU, MU, ISAU 1730; Oliveira, *Relatório Inspecção 1944*, p. 209.

not an impossible task, Ruas emphasized, as he referred to the successful villagization of the recalcitrant Quiocos peoples by a zealous *chefe de posto* in another part of the colony. All that was needed was a local administrator who was willing to invest the time and effort required.[162] According to Ruas and other ISAC inspectors like Luís Vieira Fernandes and Henrique Galvão, this precisely was one of the main shortcomings of Portuguese colonialism. During the late 1930s and early 1940s, they ceaselessly complained that local administrators in Angola were neither numerous nor, with exceptions of course, were they well-trained, well-equipped and zealous enough to fulfil the myriad of tasks assigned to them. The inspectors also accused the central government of further aggravating the situation by transferring administrators from one post to another every other year, thus preventing them from acquiring the necessary in-depth knowledge of local conditions and winning over the confidence of the local population.[163]

A third reason why Lopes Mateus' villagization scheme failed to transform the colony's countryside was its lack of funding. In 1935, Lopes Mateus had promised to finance the first stage of his scheme with money from his general government in Luanda, but it seems that this did not happen and that, in general, local administrators were left with their own restricted budgets.[164] Given the larger picture, this is not necessarily surprising. During the Interwar Period, development schemes in colonial Africa were severely constrained by the reigning ideology of colonial self-sufficiency, for which colonies had to fund their projects almost exclusively with the (always scarce) money that the colony had itself generated from such sources as head taxes and customs duties.[165] Portugal was no exception to this general trend: Salazar's obsession with balanced budgets and financial austerity, for both metropolis and colonies, was notorious.[166] Even when, in 1938, Angola's first development plan *(Fundo de Fomento)* was passed, the bulk of the 150 Million escudos was to be spent on large

[162] Óscar Ruas, *Inspecção ordinária à Provincia de Benguela – Concelho de Lobito e postos 1940. Relatório 1*, pp. 96-99, in: AHU, MU, ISAU 1669.

[163] See for instance Henrique Galvão, *Relatório da Inspecção Superior aos Serviços Administrativos de Angola, vol. I*, 10.08.1938, pp. 4–5, in: ANTT, AOS/CO/UL-8E, pasta 1; Henrique Galvão, *Parecer sobre o relatório de Óscar Ruas,* 28.07.1941, in: AHU, MU, ISAU 1669; Luís Vieira Fernandes, *Parecer sobre relatórios anuais dos Governadores das Províncias de Benguela (1938) e da Huíla (1940)*, 01.11.1943, pp. 3-4, in: AHU, MU, ISAU 62; Vieira Fernandes, *Parecer sobre o relatório anual do Governador da Província de Luanda (1942)*, 05.01.1944, p. 4, in: AHU, MU, ISAU 62. This argument is developed in greater detail in Chapter 5.

[164] For a complaint regarding the restricted budgets in this matter, see for instance António d'Almeida, *Relatório da Província do Bié referido ao ano económico de 1934-1935*, 31.12.1935, p. 87, in: AHU, MU, GM 2894. A detailed study of the colony's budgets of the late 1930s might corroborate this suspicion.

[165] See for instance Cooper, Frederick, *Africa since 1940. The past of the present,* Cambridge: Cambridge University Press, 2002, pp. 17–18.

[166] Havik, Philip J., "Tributos e impostos. A crise mundial, o Estado Novo e a política fiscal na Guiné", *Economia e Sociologia* 85 (2008), pp. 29–55, here pp. 33–34; Galvão, Henrique; Selvagem, Carlos, *Império ultramarino português. Monografia do Império, III Volume: Angola,* Lisboa: Empresa Nacional de Publicidade, 1952, pp. 265–272; Meneses, Filipe Ribeiro de, *Salazar. A Political Biography,* New York: Enigma books, 2010, pp. 46–52. For more details, see Chapter 5.

infrastructure works, such as railways, harbours, roads and mine prospecting and not on social improvement. Accordingly, the 10 Million escudos allocated to healthcare were for the construction and improvement of the medical infrastructure, mainly *sanzalas-enfermarias* and hospitals, and not for small-scale hygienic and agricultural improvement in villages.[167] Angola (and Mozambique) might indeed have received their first development plans ahead of the British and French colonies in Africa, as Clarence-Smith has remarked, but these plans still followed an older development logic that the British *Colonial Development and Welfare Act* from 1940 and the French *Fonds d'Investissement pour le Développement Economique et Social* from 1946 – both explicitly designed to increase the general level of welfare and raise the standard of living – would render obsolete.[168]

Finally, the displacement and sanitization of villages was an intervention that instigated the protest and resistance of African villagers. Although the available colonial sources are not at all prolific on this issue, several motives for protest can be discerned. In open contradiction with the colonial commonplace that Africans did not feel any bond with their birth- or homeland, villagers often opposed resettlement because this meant that they would have to abandon their fields.[169] Even when these were situated in insalubrious

[167] This first colonial development fund for Angola was conceived for the period 1938-1945 and financed through loans and additional taxes. The modalities of this *fundo de fomento* had been extensively discussed by the Angolan Government since 1934, and, with amendments, was later approved by the *Conselho do Império Colonial* and the *Câmara Corporativa* in Lisbon. See António Lopes Mateus, *Nota sobre a actividade oficial e particular em Angola, durante o primeiro ano do seu actual governo, fornecida aos jornais de Luanda*, 10.02.1936, in: AHU, MU, GM 2747; Conselho do Governo da Colónia de Angola, *Sessões 2-21,* Luanda: Imprensa Nacional, 1935-1936, here Sessão 21 (extraordinária), 27.02.1936, 29.02.1936, 02.03.1036 and 04.03.1936, pp. 471-502; 518-519; Conselho do Império Colonial, *Parecer n. 32 (Processo 52): Relatorio e bases para a criaçao e aplicaçao do Fundo de Fomento de Angola*, 30.07.1936, in: AHU, Conselho do Império Colonial, Livro de Pareceres, 3a Secção, 1936-1937; António Vicente Ferreira, *Relatório da Câmara Corporativa n. 122 sobre o Projecto de decreto-lei 'Plano de fomento da colónia de Angola'*, 03.08.1938, in: *Diário das Sessões da Câmara Corporativa*, 9. Suplemento ao n. 192 (03.08.1938); Ministério das Colónias, *Decreto-Lei 28.294 - Fundo de Fomento da Colónia de Angola*, 16.08.1938, in: *Boletim Oficial da Colónia de Angola, Série I,* 1938, pp. 495–498. In 1937, the Portuguese government had already approved a similar 300 Million Fund for Mozambique, see Ministério das Colónias, *Decreto n. 27.537 - Fundo de Fomento da colónia de Moçambique*, 25.02.1937, in: *Diário do Governo, Série I,* 1937, pp. 162–163. Despite the outbreak of the Second World War, the Angolan government continued with the implementation of the plan, see Banco de Angola, *Relatório e Contas. Exercício de 1941,* Lisboa, 1942, pp. 43–47 and Fynes-Clinton, *Portuguese West Africa,* p. 5. A new five-year plan for 1946-1950 was approved in 1945, see *Ibid.,* pp. 5–6.

[168] According to Clarence-Smith, Portugal's colonial development plans preceded those "of most democratic colonial powers", see Clarence-Smith, *The effects of the Great Depression,* p. 179. On French and British development plans in Africa, see Cooper, *Decolonization,* pp. 65-73; 194-195; Hodge, *Triumph of the Expert,* pp. 179–206; White, Nicholas, "Reconstructing Europe through Rejuvenating Empire. The British, French, and Dutch Experiences Compared", *Past and Present* Supplement 6 (2011), pp. 211–236, esp. pp. 222-224.

[169] This common assumption can be found in many colonial writings of the Interwar Period, see for instance, António Leite de Magalhães, *Bases para uma nova organisação social económica das populações indígenas de Angola e Moçambique tendo por fim a sua fixação e o seu desenvolvimento*, Preamble art. 8, in: AHU, MU, AGC 950.

lowlands, they were not always willing to move to new locations.[170] According to Serra Frazão, villagers were also wary of leaving their memories, ancestors and the protective spirits of these ancestors behind.[171] The alignment of houses, the use of new building materials and other hygienic provisions did not meet with unanimous approval. Resettling Africans in an improved village was, as Baeta Neves admitted still in 1955, "always a matter of controversy, because of the difficulty to adapt the village to the native traditions and psychology and at the same time reconcile it with the most recommended conditions of hygiene and comfort."[172]

[170] Júlio Garcês de Lencastre, *Relatório do Governador da Província de Luanda para 1934-1935*, p. 42, in: AHU, MU, ISAU 2246; Manuel da Cruz Alvura, *Relatório do Governo da Província de Malanje para 1941 e 1942*, 31.12.1942, p. 64, in: AHU, MU, ISAU 1663.2.
[171] Serra Frazão, *Reabilitação dos Negros. Estudo crítico sobre diversos aspectos de Angola*, 1942, in: AHU, T 215, pp. 131-133.
[172] Neves, Gustavo Bebiano Baeta, "Realizações sociais nas zonas algodoeiras", *Actividade Económica de Angola* 40-41 (1955), pp. 63–74, here p. 69.

4. Recreating Village Life: Detribalization, Denatality and the Reproduction of the Work Force

Portuguese debates over model villages and villagization in the Interwar Period were never about hygienic and agricultural reform alone. Damas Mora had imagined model villages as the cornerstone of an all-encompassing programme of social reform, as the means with which to reorganize rural life and native societies on the whole. In his opinion, colonial rule had thrown 'traditional societies' into deep disarray and a well-needed radical reform would, among other things, produce labourers for the colonial labour market without alienating them from village life.[173] This diagnosis was linked to a broader strand of thinking that was gaining importance at the time. In the Interwar Period, quite a few Portuguese colonial intellectuals had become increasingly concerned with the alleged disintegration of 'traditional' rural societies in colonial Africa. In their view, labour migration, military conscription and missionary education had created a growing group of Africans who did not live in their 'traditional' tribal structures and did not aspire (or, regardless of their attempts, were unable) to reintegrate into 'traditional' village life after the completion of their contracts or education. Critics also pointed out that Portugal's destructive policy towards 'traditional' authorities had exacerbated this tendency. Many of the *sobas* ('chiefs') had been deposed and replaced by others who did often not enjoy the same legitimacy. Moreover, the often ruthless subordination of 'traditional' or newly appointed chiefs by local administrators and their *cipaios* – hired African policemen – had greatly diminished their prestige among their subjects. In most native communities, the *soba* had become "a virtual figure", Ivo de Cerqueira lamented, and the decline of his power had provoked the rise of a multitude of *sobetas* ('little chiefs'). This fragmentation of power, which was still criticized in 1937 by Manuel Pereira Figueira – one of Ivo de Cerqueira's successors at the head of the Native Affairs Department – was said to hamper efficient colonial rule and further the disintegration of African societies.[174]

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[173] See the introduction of this chapter.

[174] Diniz, *A missão civilisadora,* pp. 85–86; Casimiro, Augusto, "Política Administrativa de Angola", *Boletim da Agência Geral das Colónias* 5,47 (1929), pp. 37–68, here pp. 40–42; Moreira, Eduardo, *General Report of the Rev. Eduardo Moreira's Journey in the Portuguese African Colonies, 20th January to 23rd November 1934,* London/New York: World Dominion Press, [1935], pp. 5-6; Direcção dos Serviços e Negócios Indígenas [Ivo Benjamin de Cerqueira], *Organisação social indigena. Seu estado actual - usos e costumes*, 1930, in: AHU, MU, AGC 2336, pp. I-XXI, esp. pp. IV-VII, quote p. IV. Cerqueira's report was printed almost twenty years later, see Cerqueira, Ivo Benjamin de, *Vida social indígena na colónia de Angola. Usos e costumes,* Lisboa: Agência Geral das Colónias, 1947. See also Manuel Pereira Figueira, *Relatório do Curador Geral dos Indígenas da Colónia de Angola (1936)*, 30.06.1937, p. 21, in: AHU, MU, ISAU 2243. For António de Almeida, it was interestingly the very peace that the Portuguese colonizers had enforced upon the African 'tribes' which had furthered disintegration, by removing the necessity for larger agglomerations. See Almeida, António de, "Esboço histórico das organizações tradicionais dos regulados indígenas de Angola e Moçambique. Os grandes régulos,

This was not only a Portuguese debate. In the Interwar Period, all colonial powers in Africa grew anxious about detribalization and, as happened so often with other issues of great pan-colonial concern, it was discussed in great length by the International Colonial Institute in 1936.[175] Portuguese and other colonial officials feared that, due to detribalization, an increasing number of Africans would go on living, often without fixed residence, near the bigger colonial towns. Their itinerant and wayward behaviour coupled with the lack of possibilities to control them through 'traditional' authorities would pose a problem of control for colonial governments. Due to their unruly behaviour, the Director of the Native Affairs Department in Luanda, Ivo Benjamin de Cerqueira, also remarked in 1930, many of them ended up in jail.[176]

In Angola, this image of vagrant and violent *destribalizados* was also based on earlier experiences. In the 1910s, the repatriation of thousands of *serviçais* from the cocoa plantations of São Tomé and Príncipe, upon the order of the Portuguese government as a way to prove wrong British accusations of slavery, had elicited great concern from Angola's colonial society, because many of the repatriated workers did not exactly behave as was expected.[177] Initially, many of the *repatriados* had stayed around the port towns where they

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os chefes indígenas. Situação actual", in: Comissão Executiva dos Centenários (ed.), *Memórias e comunicações apresentada ao Congresso Colonial (IX Congresso)* (Publicações do Congresso do Mundo Português; 14-16), vol. 15, Lisboa, 1940, pp. 527–542, here p. 540. See also, with further references, Newitt, Malyn, *Portugal in Africa. The last hundred years,* London: Hurst, 1981, pp. 100-102; 104-106. On the precarious position of African chiefs in the Portuguese colonies, see Keese, Alexander, *Living with Ambiguity. Integrating an African Elite in French and Portuguese Africa, 1930 - 61,* Stuttgart: Steiner, 2007, pp. 69–90. Here, as in most of his monograph, however, Keese focuses on the period 1945 to 1960 and overlooks much of the discussion within the administration during the Interwar Period. For a detailed analysis of Portuguese policy of appointed chiefs in Guinea from the late nineteenth century until after the Second World War, see Havik, Philip J., "Tchon I Renansa. Colonial Governance, Appointed Chiefs and Political Change in 'Portuguese Guinea'", in: Keese, Alexander (ed.), *Ethnicity and the long-term perspective* (CEAUP Studies on Africa; 1), Bern: Lang, 2010, pp. 155–190. There is no similar study for Angola as of yet.

[175] On French and British anxieties, see Cooper, *Decolonization*. For the discussion at the International Colonial Institute, see Institut Colonial International (ed.), *Compte Rendu de la XXIIIme Session teune à Londres, les 5, 6, 7 et 8 Octobre 1936,* Bruxelles: Etablissements généraux d'imprimerie, 1937, pp. 29-89 and the rapports presented by Père Pierre Charles and Major Orde Browne: Charles, Pierre, "Le problème des centres extra-coutumiers et quelques-uns de ses aspects", in: Institut Colonial International (ed.), *Compte Rendu de la XXIIIme Session teune à Londres, les 5, 6, 7 et 8 Octobre 1936,* Bruxelles: Etablissements généraux d'imprimerie, 1937, pp. [27-180] (Annexe 2) and Browne, G. St. J. Orde, "The Condition of Native Communities in or near European Centres", in: Institut Colonial International (ed.), *Compte Rendu de la XXIIIme Session teune à Londres, les 5, 6, 7 et 8 Octobre 1936,* Bruxelles: Etablissements généraux d'imprimerie, 1937, pp. [1-25] (Annexe 1). See also Browne, G. St. J. Orde, *The African Labourer,* London: Frank Cass, 1967 [1933], pp. 100–105.

[176] Direcção dos Serviços e Negócios Indígenas [Ivo Benjamin de Cerqueira], *Organisação social indigena. Seu estado actual - usos e costumes*, 1930, pp. VI-VII, in: AHU, MU, AGC 2336.

[177] While thousands of workers had been forcibly shipped as 'contract labourers' (*serviçães)* from Angola to São Tomé from the 1850s onwards, they were usually not repatriated. Only under the pressure of British humanitarians, who accused the Portuguese of continuing to allow slavery, did the repatriation of labourers start in 1910. Until well into the twentieth century, repatriation continued to be irregular, however, and many labourers only returned after ten or twenty years. See Duffy, James, *A Question of Slavery. Labour Politics in Portuguese Africa and the British Protest, 1850-1920,* Oxford: Clarendon Press, 1967; Clarence-Smith, William Gervase, "Cocoa Plantations and Coerced Labor in the Gulf of Guinea", in: Klein, Martin A. (ed.), *Breaking the Chains. Slavery, Bondage, and Emancipation in Modern Africa and Asia,* Madison: University of Wisconsin

had landed instead of going 'home'. This was in part because most had been away for more than ten or even twenty years and some did not even know where exactly they came from.[178] Newspapers and colonial officials complained about the disturbance they caused to colonial society because of their vagrant, drunken, violent, but sometimes also pitiful behaviour, as some of them had not received their repatriation bonus and lived off of charity. Interestingly, reports were often outspokenly self-critical about Portugal's responsibility. Thus Simão de Laboreiro, a local administrator who had repeatedly come into contact with repatriated workers in the early 1910s, blamed the unruly behaviour of the *repatriados* upon the failure of the colonial civilizing mission. Having lived and worked under rigid disciplinary conditions, he stated, they had not been able to interiorize labour habits and, instead, developed a profound dislike of labour and order. Once they were freed from the plantations, they would rather steal, kill or die of starvation than work.[179]

But also those who returned to their villages were often seen as "an element of disorder and a germ of destruction".[180] This view is neatly summarized by Francisco dos Santos Serra Frazão, the interim director of the Native Affairs Department in 1940-1941: "In contact with different customs, nourished in a different way and even under a different climate, the native begins to change his way of being; and the day he returns to his homeland, when we believe that he now has working habits, we observe that we have a person in front of us who is, if not revolted, at least carrying the germs of something which does not fit the quiet serenity of village life. From Blacks who have been for five or six years in São Tomé, we sometimes hear the absolute refusal to work whatsoever, whether it is imposed by the chief or the [Portuguese] authorities."[181]

Colonial anxieties over 'detribalized natives' laid bare the ambivalence of the civilizing mission. Rather than embracing them as bearers of progress on their way to assimilating European culture – an assimilation that was still the official aim of Portuguese native policy, certainly for the long term – many colonialists primarily viewed these in-

Press, 1993, pp. 150–170; Higgs, Catherine, *Chocolate Islands. Cocoa, Slavery, and Colonial Africa,* Athens: Ohio University Press, 2012. For the numbers of repatriated workers, see Duffy, *A question of slavery,* pp. 211; 228-229 and Amadeu de Bettencourt Reys, *Relatório da Repartição Central dos Negócios Indígenas de Angola para o ano de 1942*, pp. 306-308, in: AHU, MU, ISAU 1661.

[178] Duffy, *A question of slavery,* pp. 216–218.

[179] Laboreiro, Simão de Sousa, *Relatório do Administrador da Circunscrição Civil da Ganda, 1914-1915,* Loanda: Imprensa Moderna, 1916, pp. 137–138.

[180] Direcção dos Serviços e Negócios Indígenas [Ivo Benjamin de Cerqueira], *Organisação social indigena. Seu estado actual - usos e costumes*, 1930, p. VI, in: AHU, MU, AGC 2336.

[181] Frazão, *Relatório (1939-1940)*, pp. 37-38 (quote p. 38).

betweens as a potential threat for colonial rule and order.[182] Not unlike the *mestiços* or perhaps even more so the freed slaves of almost a century before, these "socially hybrid beings", as Ivo de Cerqueira termed them, were still considered incapable of dealing with the 'progress' and 'civilization' that had been brought to them.[183] While 'detribalization' and assimilation were long-term goals, Africans were generally not considered ready for it yet. In this vein of thought, the Belgian priest Pierre Charles concluded in his report for the International Colonial Institute that when detribalized Africans might no longer live under tribal authorities, but their lives would still be governed by custom. Therefore, they needed either to be preserved in their intermediate status, but kept under close colonial control and guidance, a solution preferred by Charles, or to be reintegrated as quickly as possible in what Europeans viewed as 'tribal' societies.[184] These proposals reflected a basic contradiction of colonial native policy: although the telos of the civilizing mission was to create modern citizens, colonialism in practice for the most part did not go beyond reproducing either ethnic group identities or 'deficient', not yet fully civilized, colonial subjects.[185]

According to J.M. da Silva Cunha, the Portuguese government in Angola did not formulate any consistent policy to deal with the intermediate group of 'detribalized' Africans before the 1950s, when they were increasingly seen as a potential hotbed of anti-colonialist sentiment.[186] While there is much truth in this, it is important to note that the issue was nevertheless debated and that the main solution proposed, and at times also implemented, involved villagization. Indeed, to counter, or rather control, the disintegration of 'traditional' structures, Portuguese officials advocated grouping detribalized Africans in special

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[182] On the persistence of assimilationist ideals in Portuguese native policy, see Keese, *Living with Ambiguity,* pp. 91–94. See also, for instance, the comments of Cortesão in Institut Colonial International, *Compte Rendu de la XXIIIme Session*, pp. 83-86.

[183] Direcção dos Serviços e Negócios Indígenas [Ivo Benjamin de Cerqueira], *Organisação social indigena. Seu estado actual - usos e costumes*, 1930, p. VI (quote), in: AHU, MU, AGC 2336. On the ambivalent position of freed slaves in Angola and the South-Atlantic world, see Coghe, Samuël, "The Problem of Freedom in a Mid Nineteenth-Century Atlantic Slave Society. The Liberated Africans of the Anglo-Portuguese Mixed Commission in Luanda (1844–1870)", *Slavery and Abolition* 33,3 (2012), pp. 479–500. On the debates about *mestiços*, see Chapter 3.

[184] Pierre Charles in Institut Colonial International, *Compte Rendu de la XXIIIme Session*, pp. 34-35.

[185] On this contradiction, see for instance Eckert, Andreas, "Zeit, Arbeit und die Konstruktion von Differenz. Über die koloniale Ordnung in Afrika", *Comparativ* 10,3 (2000), pp. 61–73 and Comaroff, John L., "Governmentality, Materiality, Legality, Modernity. On the Colonial State in Africa", in: Deutsch, Jan-Georg; Probst, Peter; Schmidt, Heike (eds.), *African Modernities. Entangled Meanings in Current Debate,* Oxford: James Currey, 2002, pp. 107–134, esp. pp. 115-118.

[186] See the criticism in Cunha, J. M. da Silva, "O enquadramento social dos indígenas destribalizados", *Revista do Gabinete de Estudos Ultramarinos* 2,5/6 (1952), esp. pp. 25-30. For the colonial discourse on *destribalizados* in the 1950s, see Soares, Amadeu Castilho, *Política de bem-estar rural em Angola. Ensaio* (Estudos de ciências políticas e sociais; 49), Lisboa: Junta de Investigações do Ultramar, 1961, pp. 173-174; 210-249 and Cruz, Elizabeth Ceita Vera, *O estatuto do indigenato - Angola. A legalização da discriminação na colonização portuguesa,* Lisboa: Novo Imbondeiro, 2005, pp. 106–111.

settlements.[187] In the 1910s, the colonial government in Angola had in fact resettled a part of the workers that had been repatriated from São Tomé and Príncipe in newly built villages. Until 1919, 21 such villages had been created in various districts with more than thousand inhabitants in total housed therein.[188] This, however, was only about 5% of the roughly 20,000 *serviçais* that had been shipped back to Angola by that point. And unlike the *centres extra-coutumiers* in the neighbouring Belgian Congo in 1931, these villages do not seem to have received a permanent special statute. A major reason might have been that in Angola the problem lost some of its relevance and urgency, as the number of repatriated workers from the cocoa islands was much reduced in the 1920s and 1930s compared with the 1910s.[189]

Nevertheless, the idea of regrouping former contract labourers and soldiers into new villages continued to be cited in colonial writings. In the early 1930s, for instance, the administrator of Damba was praised in various colonial reports for having organized such a village with former soldiers and their families.[190] Officially backed by the central government in Luanda, this example was also adopted elsewhere.[191] Most importantly, many of the model village projects intersected with detribalization anxieties, inasmuch as it was explicitly stated that former soldiers, wage labourers or mission boys and girls as the inhabitants of the model villages were the preference.[192] Certainly, this choice might also have rested on the belief that

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[187] Laboreiro, *Relatório Ganda*, p. 138; Ferreira, António Vicente, "Alguns aspectos da política indígena de Angola (1934)", in: Ferreira, António Vicente (ed.), *Estudos Ultramarinos,* vol. III, Lisboa: Agência Geral das Colónias, 1953-1955, pp. 35–50.

[188] Antonio Carlos de Assunçao Teixeira (Secretário dos Negócios Indígenas e Curadoria dos Serviçais), *Informação para o Ministério das Colónias*, 19.12.1919, and *Mapa das povoações estabelecidas pelas autoridades administrativas desta provincia para instalação dos indígenas repatriados de S. Tomé e Príncipe*, 20.12.1919, both in: AHD-MNE, 3.Piso, A.12, M. 168. See also the decrees from Governor-General Norton de Matos, *Portaria Provincial n. 1.146*, 17.10.1912, and *Portaria Provincial 282*, 19.03.1913, reprinted in: Diniz, *Negócios indígenas 1913,* pp. 173-175 and 182-184. See also Rolo, *Reordenamento rural,* p. 1508.

[189] On the *centres extra-coutumiers* in the Belgian Congo, see Baumer, Guy, *Les centres indigènes extracoutumiers au Congo belge,* Paris: Domat-Montchrestien, 1939. For the numbers, see Amadeu de Bettencourt Reys, *Relatório da Repartição Central dos Negócios Indígenas de Angola para o ano de 1942*, pp. 306-308, in: AHU, MU, ISAU 1661 and Duffy, *A question of slavery,* pp. 211; 228-229. In the 1920s and 1930s, the total number of repatriated workers only amounted to about 10,000.

[190] Júlio Garcês de Lencastre, *Relatório do Governador da Províncie de Luanda para 1934-1935*, pp. 19 and 42, in: AHU, MU, ISAU 2246; António Lopes Mateus, *Relatório e Propostas da Reunião Extraordinária do Conselho de Governadores de Angola realizada nos dias 7 a 11 de Maio de 1935*, 11.05.1935, p. 52, in: AHU, MU, ISAU 1730; António Lopes Mateus, *Relatorio e Propostas da Reunião Ordinária do Conselho de Governadores de Angola realizada nos dias 7 a 14 de Junho de 1937*, pp. 8-9, in: AHU, MU, ISAU 1730.

[191] António de Almeida, *Exposição feita pelo Governador da Província do Bié sobre o assunto do recrutamento militar*, in: António Lopes Mateus, *Relatorio e Propostas da Reunião Ordinária do Conselho de Governadores de Angola realizada nos dias 7 a 14 de Junho de 1937*, Anexo 1, p. 4, in: AHU, MU, ISAU 1730. For general recommendations, see António Lopes Mateus, *Relatório do Governador Geral de Angola para 1936*, p. 67, in: AHU, MU, ISAC 546. See also Amadeu de Bettencourt Reys, Informação n. 71 para o Governador Geral, 05.07.1942, reprinted in: *Relatório da Repartição Central dos Negócios Indígenas de Angola para o ano de 1942*, p. 347, in: AHU, MU, ISAU 1661.

[192] See for instance António Leite de Magalhães, *Bases para uma nova organisação social económica das populações indígenas de Angola e Moçambique tendo por fim a sua fixação e o seu desenvolvimento*, Base 5, in: AHU, MU, AGC 950; António Lopes Mateus, *Relatório e Propostas da Reunião Extraordinária do Conselho de*

these particular groups would be, because of prior exposure, more likely to (further) internalize European notions of hygiene and agriculture. But, arguably, enclosing these 'dangerous' groups in model villages also served to ensure that they would further evolve under close colonial control and not become a threat to colonial rule. The fact that in virtually all projects the villages were to be led by a newly appointed *regedor* or village headman as the intermediary between the colonial administration and the village population is further evidence of this desire for control.[193]

Model village schemes can also be read as a *preventive* measure against the interrelated threats of detribalization and proletarianization. The villages were congruent with the rural future that several eminent Portuguese colonialists had envisaged for Angola in the Interwar Period – a future, in which the colony would be peopled by farmers, living in tribal organizations and bound to their villages by landed property. "It is towards 'peasantship' *(ruralato)* that the native must evolve. 'Déracinement' and forced labour implemented outside the present social framework would be prejudicial to the rational evolution of Africa", Ivo Benjamin de Cerqueira concluded in a paper presented at the Economic Conference in Luanda in 1932. The same vision of rural Angola had previously been endorsed by Augusto Casimiro, the former Governor of the Congo District and Secretary of the Interior.[194] Another prominent advocate of (re)peasantization was General José Ribeiro Norton de Matos, former Governor-General of Angola (1912-1915 and 1921-1924). According to Norton de Matos, the peasantization of the African population went hand in hand with rethinking European colonization and agriculture. Angola, he stated in a conference paper in 1940, was not a place for large European plantations with subordinate African labourers. Such plantations should disappear and African peasants should become independent smallholders, rooted in rural village structures. Whenever the colony's mines, factories or harbours were in need of African labourers, these should be taken from villages in the region or those nearby that had been created especially for that purpose, so that the labourers would remain rooted in village structures, and not become proletarianized.[195] This vision was less altruistic than it seems – many colonialists in the 1930s wanted wage-labourers to remain rooted in their villages in order to avoid proletarianization and its consequences: i.e. the labour movements and strikes

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Governadores de Angola realizada nos dias 7 a 11 de Maio de 1935, 11.05.1935, p. 22, in AHU, MU, ISAU 1730; Machado, *Organização social e económica*, art. 8.

[193] In addition to the projects cited in the previous footnote, see also Mora, *Notas sobre um estatuto,* p. 237; Jacinto, *Relatório Anual 1930-1931,* p. 126.

[194] Cerqueira, *Memória,* p. 63. Similarly Casimiro, *Política Administrativa,* pp. 51–52.

[195] Matos, José Mendes Ribeiro Norton de, "Síntese das medidas aconselháveis para impulsionar o povoamento indígena de Angola", in: Comissão Executiva dos Centenários (ed.), *Memórias e comunicações apresentada ao Congresso Colonial (IX Congresso)* (Publicações do Congresso do Mundo Português; 14-16), vol. 15, Lisboa, 1940, pp. 479–525, here pp. 493; 506-507.

on the one hand, and the costs (and social unrest) that would arise in the case of unemployment, disability or retirement.[196] By keeping wage-labourers bound to their villages, employers would also be able to avoid paying family wages and to devolve the costs of reproduction to the village economy.[197]

The ideas discussed by Cerqueira, Casimiro and Norton de Matos were, in other words, inextricably linked to a large, complex and changing debate on the social and spatial organization of colonial labour in Angola. For them, detribalization and the destruction of native societies could be prevented, or at least slowed, by reforming the labour recruitment system that normally extracted male workers from their villages for long periods of time. If, however, such calls for labour reform gained much relevance especially during periods of economic expansion, like the late 1920s and the late 1930s-early 1940s, it was not only because of underlying detribalization fears, but also and probably mainly because these fears were closely intertwined with pervasive anxieties over population decline and labour scarcity. Indeed, many in the Interwar Period argued that the way in which colonial labour was organized exacerbated the demographic problem: colonial administrators as well as doctors, missionaries and anthropologists blamed the practice of single-male long-distance and long-term labour migration to colonial plantations, mines and fishing industries – and in the case of conscripts to military barracks – for the stagnation or even the decrease of the population.

On the one hand, there was broad consensus that long-distance migration increased mortality amongst labourers, especially when they were moved from one climatic zone to another, for instance from the rather temperate and dry central Angolan highlands to the hot and humid plantations of northern Angola or São Tomé and Príncipe, or the other way around. Based on the same premises as the debate on European acclimatization, such migrations were believed to invalidate acquired immunities, for instance against malaria, and to depreciate the general health of African workers.[198] In South Africa, parallel concerns had already in 1913

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[196] For an acute analysis of the problem, see Browne, *The African Labourer*, pp. 113-114; 116.

[197] Ball, Jeremy, ""I escaped in a coffin". Remembering Angolan Forced Labor from the 1940s", *Cadernos de Estudos Africanos* 9-10 (2005/2006), pp. 61–75, here p. 74. On the debate on family wages in French and British Africa, see Cooper, *Decolonization,* pp. 101-102; 322-348.

[198] For the opinions of doctors, see Sant'Anna, *Problema da assistência,* p. 74; Correia, Alberto Carlos Germano da Silva, "A necessidade do estudo antropológico das populações coloniais", *Trabalhos do 1.° Congresso Nacional de Antropologia Colonial, Porto, Setembro de 1934,* vol. 1, Porto: Edições da 1.a Exposição Colonial Portuguesa, 1934, pp. 157–183, here pp. 175–176. For the same concerns in the colonial administration, see for instance António Leite de Magalhães, *Problemas da Colónia*, in: A Província de Angola, 24.07.1926, p. 1; Cerqueira, *Memória,* p. 47; António de Almeida, *Relatório do Governador da Província do Bié referido ao ano económico de 1934-1935*, pp. 46-51, in: AHU, MU, GM 2894 or José Ribeiro da Cruz, *Relatório do Chefe dos Serviços, interino, da Repartição Central dos Negócios Indígenas, ano de 1941*, [1942], pp. 81-84, in: AHU, MU, ISAU 1725.

provoked a ban on the recruitment of so-called ‘tropical Africans’, meaning Africans who came from north of the 22° parallel, for labour in the mines. This interdiction, which Africans had often avoided by migrating in stages, was revoked in the mid-1930s because of better acclimatization previsions due to medical progress.[199] In Angola, a different solution was adopted in the 1930s. Some of the bigger enterprises in Angola adopted the practices used in the mining industries of the Belgian Congo and introduced periods of acclimatization during which new arrivals were submitted do medical examinations and treatments and adapted to new climate, diets and working discipline.[200]

On the other hand, long-distance migration was increasingly blamed for the fall in the birth rates and hence the natural reproduction levels of the African population. Although ‘denatality’ amongst contract labourers had already been identified as a depopulating factor decades before, it only became the object of intense debate in the colonial administration in the late 1930s and early 1940s.[201]

This periodization was not accidental. It coincided with the *Estado Novo*’s new rush for economic development after the Depression, which was epitomized by the establishment of a colonial development fund *(Fundo de Fomento)* for Angola in 1938, and the sharp economic growth that occurred in the Portuguese colonies during the Second World War, which had been favoured by the demands of the international war economy and possibly even enhanced by the country’s neutrality.[202] This economic expansion, which was common to most colonies in sub-Saharan Africa between 1935 and 1945, strongly increased the demand for African labour and reanimated the debate about labour scarcity, leading, among other things, to the reintroduction of government-supported forced labour in many colonies,

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[199] Newitt, Malyn, *A history of Mozambique,* London: Hurst, 1995, pp. 491-498 and pp. 506-508 on African strategies to avoid the ban; Packard, Randall, "The Invention of the 'Tropical Worker'. Medical Research and the Quest for Central African Labor on the South African Gold Mines, 1903-36", *The Journal of African History* 34,2 (1993), pp. 271–292.

[200] Cleveland, *Rock Solid,* pp. 73-74; 79-80; Varanda, *A Bem da Nação,* pp. 230–233. Colonial doctors also advocated acclimatization periods for conscripts, see Sant'Anna, José Firmino, "A selecção médica dos recrutas e auxiliares das forças indígenas nas colónias portuguesas", *Anais do Instituto de Medicina Tropical* 1,1 (1943), pp. 145–186, here pp. 151-153; 171-177. For the Belgian Congo, see "Ordonnance du Gouverneur du Katanga, du 28 octobre 1930, concernant l'acclimatisation des indigènes recrutés ou engagés pour travailler dans le Haut-Katanga Industriel et provenant d'autres régions", *Bulletin de l'Office International d'Hygiène Publique* 23,9 (1931), pp. 1569–1571; van Campenhout, Emile, "Considérations sur l’utilisation de la main-d’oeuvre au Congo Belge", *Bulletin de l'Office International d'Hygiène Publique* 23,9 (1931), pp. 1627–1651, here pp. 1637–1638.

[201] For early concerns, see Leitão, Alberto de Souza Maia, *Relatório da visita sanitaria aos concelhos da léste de Loanda mais victimados pela doença do somno,* Porto: Typ. A Vapor da Empreza Litteraria e Typographica, 1901, p. 127 and Matos, *A Província de Angola,* p. 247. See also António Leite de Magalhães, *Problemas da Colónia*, in: A Província de Angola, 24.07.1926, p. 1 and Sasportes, Simão, *A colonização branca e o aumento da população indígena em Angola e Moçambique. Tese apresentada ao primeiro Congresso da Colonização,* Lisboa, 1934, pp. 12; 15-16.

[202] On the economic changes of the 1930s and early 1940s, see Clarence-Smith, *The effects of the Great Depression* and Clarence-Smith, *The impact of the Spanish Civil War*. On the *Fundo de Fomento*, see footnote 167.

including Angola.[203] In 1942, the idea of labour scarcity was now even officially endorsed by a study on labour supply and demand that had been commissioned by the new Governor-General Álvaro de Freitas Morna. Whereas previous studies in 1923-1925, 1926 and 1935 had concluded that there was a large surplus of able-bodied men of working age compared to the labour demands of both the European and African economy, the 1942 study suggested that the demand (ca. 574,000 workers) now almost equalled the highest possible supply (ca. 586,000 workers) and that there was already a small deficit in two of the five provinces.[204]

The 'denatality' argument against long-distance migration basically purported that most male labour migrants served their contracts without their family and hence did not have the chance to procreate. Governor-General Álvaro Freitas Morna expressed this idea in dramatic terms. In his opinion, the 180,000 contract labourers who had spent one to two years away from home in 1943 equalled 100,000 unborn babies.[205] But the criticism of single male long-distance migration went beyond its effect on the birth rates. It was also said to affect the well-being and motivation of the labourers at the working sites, to promote promiscuity and prostitution amongst the women who stayed behind in the villages, to reduce the agricultural production in these villages and to alienate workers from their societies of origin, thus hampering their reintegration once they had fulfilled their contract.[206]

These additional factors played an important role in the condemnation of single male long-distance migration, since Freitas Morna's ideas about denatality were not shared by all colonial officials. The following example illustrates this. When, in 1943, the governor of the north-eastern Province of Malange asked his subordinate administrators to evaluate the effects of single male labour migration, many of them maintained that it did not affect the birth rates, since most women did not wait long before entering sexual relations with other men and bearing their children. By contrast, they all agreed that these extramarital relations and the often ensuing divorces furthered the disintegration of the family, that "small social and

[203] For the effects on labour demand and labour conditions, see Killingray, David; Rathbone, Richard (eds.), *Africa and the Second World War,* Houndmills: Macmillan, 1986; Dumett, Raymond, "Africa's Strategic Minerals During the Second World War", *Journal of African History* 26,4 (1985), pp. 381–408; Vickery, K., "The Second World-War Revival of Forced Labour in the Rhodesias", *International Journal of African Historical Studies* 22,3 (1989), pp. 423–437. For the reintroduction of forced labour in Angola and Mozambique, see Clarence-Smith, *The impact of the Spanish Civil War,* p. 322 and Tornimbeni, Corrado, "The State, Labour Migration and the Transnational Discourse. A Historical Perspective from Mozambique", *Stichproben. Wiener Zeitschrift für kritische Afrikastudien* 8 (2005), pp. 307–328, here pp. 316–317.

[204] For the first two studies and the debate in the 1920s, see Chapter 2. The study in 1935 is mentioned in A. Lopes Mateus, *Relatório do Governador Geral de Angola, primeiro trimestre de 1935*, Abril 1935, in: AHU, L 5725, p. 46. For Freitas Morna's 1942 study, see Morna, *Angola,* pp. 212–218.

[205] Morna, *Angola,* p. 173.

[206] António de Almeida, *Relatório do Governador da Província de Bié para 1938*, 31.12.1938, Vol. I, pp. 17-18, in: AHU, MU, DGAC 543; Alberto Cardoso Martins e Menezes Macedo, *Relatório da viagem de Estudo a Angola em 1939 (para a Companhia do Fomento Colonial)*, p. 10, in: ANTT, AOS/CO/UL-8B; Frazão, *Relatório (1939-1940)*, pp. 37-38 and Cruz, *Relatório (1941)*, pp. 50-51.

economic cell which we must care for", and hence of the native society as a whole. When, in other words, they more or less unanimously condemned single male labour migration, it was less because of its supposed effects on the birth rate and more because they defended the Portuguese moral ideal of stable, faithful and possibly monogamous relationships and of the nuclear family as the most basic unit of society.[207] The position of the province governor was clearly influenced by this view. Single male labour migration always caused denatality in the strict sense, he concluded in his report to the Governor-General, because extramarital pregnancies were an aberrance that was not to be sanctioned by the colonial state.[208]

In the late 1930s and early 1940s, two different solutions to these problems were intensely discussed within the colonial administration: local recruitment and family migration, including the resettlement of these families in new villages. As to local recruitment, the colonial government instructed that labourers should be employed as much as possible within their administrative district *(circunscrição)*, so that they would be able to visit their wives and family regularly and maintain their connection to their village. Based on the comprehensive 1942 survey, which had compared the number of valid men with the labour needs in each administrative division (*circunscrição*, province and the colony as a whole), Freitas Morna concluded that there were manpower shortages in a few regions, but that local recruitment would be able to satisfy the bulk of the labour demands in most parts of the colony. Consequently, he prohibited the employment of workers outside their province of origin except for special cases that required his personal consent.[209] Figures for the years 1942 to 1944 strongly suggest that this policy was indeed implemented. More than 90% of the recruited labourers were employed, if not within their own *circunscrição*, at least within their province.[210]

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[207] Manuel da Cruz Alvura, *Relatório da Conferência dos Intendentes e Administradores da Província de Malange, realizada de 2 a 8 de Dezembro de 1942 – Acta da Reunião*, pp. 9-13, in: AHU, MU, ISAU 1730. The quote is from Manuel da Cruz Alvura, *Relatóro do Governador da Província de Malanje para o ano de 1943*, p. 14, in: AHU, MU, ISAU 1663. A similar view on the nuclear family can be found in Cruz, *Relatório (1941)*, p. 50. On the importance of the family in the ideology of the Estado Novo, see Chapter 3.

[208] Manuel da Cruz Alvura, *Relatório da Conferência dos Intendentes e Administradores da Província de Malange, realizada de 2 a 8 de Dezembro de 1942 – Relatório para o Governador Geral*, 28.01.1943, pp. 3-5, in: AHU, MU, ISAU 1730.

[209] Morna, *Angola,* pp. 212–218. For a new calculation in 1944, see *Disponibilidades de Mão de Obra nos Concelhos e Circunscrições das Províncias, referido ao ano de 1944*, in: Colónia de Angola, Repartiçao Central dos Negocios Indigenas: Mão de Obra – Elementos Estatisticos (1945), in: AHU, MU, ISAU 1661.

[210] *Destino dos contratados de cada (1942-1944)*, in: Colónia de Angola, Repartiçao Central dos Negocios Indigenas: Mão de Obra – Elementos Estatisticos (1945), in: AHU, MU, ISAU 1661. Officially, recruitment was performed by licensed recruiters (angariadores) and not by state administrators, whose direct intervention in the process was prohibited by the 1928 Native Labour Code (Código de Trabalho dos Indígenas). But beyond what were probably widespread contraventions, the rationalization of labour migration described above meant that recruitment "became in a certain way state directed", as the Director of the Native Affairs Department

By that time, a similar shift towards 'local recruitment' had already occurred in the colony's policy of military recruitment. In the 1930s, Portugal's long-standing practice of stationing African conscripts far away from their home regions had come under increasing attack.[211] Governor-General Lopes Mateus denounced the system as expensive and unpopular amongst the Africans, and it was also heavily criticized during the conference of province governors in Luanda in May 1937 as well as in the preceding conferences of administrators at the provincial level.[212] One senior province governor argued that the policy had been useful in times of military conquest in that it prevented soldiers from having to fight against people of their own 'tribe', but in times of peace, this measure was useless, expensive and it had "the inconvenience of fuelling their almost forgotten nomadic drive", since many did not return home upon conclusion of their service.[213] Others emphasized the negative effects this form of long-distance migration had upon the birth rates.[214] In the end, all provincial governors agreed upon employing conscripts only in their region of origin, so that they would be able to go to their villages regularly, like in Europe.[215] Military recruitment and training reports from the second half of the 1930s suggest that this policy shift was indeed implemented.[216] Yet, while these new policies might indeed have reduced climatic and cultural uprooting, it is almost

concluded. See Amadeu de Bettencourt Reys, *Relatório da Repartição Central dos Negócios Indígenas para o ano de 1943* (printed Luanda 1948), pp. 271-272 (quote p. 271) and for the licensing system pp. 272-274, in: AHU, MU, ISAU 1661. For the pressure of European entrepreneurs on local administrators and the interventions of the latter in labour recruitment, see Keese, Alexander, "Searching for the Reluctant Hands. Obsession, Ambivalence and the Practice of Organising Involuntary Labour in Colonial Cuanza-Sul and Malange Districts, Angola, 1926–1945", *Journal of Imperial and Commonwealth History* 41,2 (2013), pp. 238–258. Angola thus followed suit along with most other colonies during the Second World War, see for instance, Killingray, David, "Labour Mobilization in British Colonial Africa for the War Effort, 1936-46", in: Killingray, David; Rathbone, Richard (eds.), *Africa and the Second World War,* Houndmills: Macmillan, 1986, pp. 68–96 and Vickery, *Second World-War Revival*.

[211] For an early voice, see Dias, Gastão Sousa, *A defesa de Angola. Separata da Revista Militar,* Lisboa: Revista Militar, 1932, pp. 20–21.

[212] António Lopes Mateus, *Relatório do Governador Geral de Angola para o ano de 1936*, p. 67, in: AHU, MU, ISAC 546; *Conselho de Governadores de Angola. Reunião ordinária realizada nos dias 7 a 14 de Junho de 1937. Relatorio e Propostas*, pp. 11-17 and Anexos 1 and 2, in: AHU, MU, ISAU 1730.

[213] António de Almeida, *Exposição feita pelo Governador da Província do Bié sobre o assunto do recrutamento militar*, in: *Conselho de Governadores de Angola (1937),* Anexo 1, in: AHU, MU, ISAU 1730.

[214] José Ribeiro da Cruz (Administrador de Camaxilo), in: José Diogo Ferreira Martins, *Relatório da Reunião dos Administradores da Província de Malange*, 30.07.1937, p. 4, in: AHU, MU, ISAU 1730. For the presumed effect on fertility (and marriage patterns), see also Echenberg, Myron, "Faire du Nègre. Military Aspects of Population Planning in French West Africa, 1920-1940", in: Cordell, Dennis D.; Gregory, Joel W. (eds.), *African Population and Capitalism. Historical Perspectives,* 2nd ed., Boulder; London: Westview Press, 1994 [1987], pp. 95–108, here p. 108.

[215] *Conselho de Governadores de Angola (1937),* p. 12-13, in: AHU, MU, ISAU 1730.

[216] While reports show that recruits were still sent to other regions to be trained in 1935, reports from 1938 reveal that recruits were trained locally. Compare Cap. Jorge Figueiredo de Barros, *Relatório da Instrução do 1. contingente de recrutas recebidos pela 1a Companhia Indígena de Infantaria em 1935*, 18.10.1935 and Cap. José Maria Marques da Cruz, *Relatório da Instrução do 2. contingente de recrutas recebidos pela 1a CII em 1935*, 22.02.1936, esp. anexo 4, both in: AHM, 2a Div., 2a Secç., Cx. 66, Doc. 16, with Paulino Luiz do Carmo, *Relatório da instrução de recrutas na 8a Companhia Indígena de Infantaria*, 12.02.1938 and Manoel do Rosario Curado, *Relatório*, 15.10.1938, both in: AHM, 2a Div., 2a Secç, Cx. 66, Doc. 17. See also the recommendation in *Missão militar às colónias*, 2 vols, Lisboa: Ministério das Colónias, 1943-1944, vol. II, p. 481.

certain that, because of the considerable size of the colony's provinces (and even *circunscrições*) – Angola was 14 times the size of Portugal – and the dearth of motorized transport facilities in many regions, many labourers and conscripts were still employed too far from their villages to go home regularly.

Overall, local recruitment was not applicable everywhere in Angola. Given the uneven distribution of the population, most observers acknowledged that it would be impossible to entirely dispense with long-distance labour migration, since there was often a lack of workers in those areas in which they were most needed. In the early 1940s, the central administration therefore began to encourage permanent family migration. Clearly influenced by the evolving model village debate, Governor-General Freitas Morna recommended that workers settle with their families in new villages established at walking distance from their work place and organized according to hygienic standards.[217] Together with other high-ranking officials, he had high hopes that this scheme, aimed at improving the local reproduction of the work force, would be the definitive solution of the labour recruitment problem.[218]

In some cases, like for the fishing industries on the sparsely populated coast of southern Angola, the administration even encouraged the resettlement of whole villages. The fishing industries in Mossamedes and Porto Alexandre were highly unpopular among the peoples living in the interior of Southern Angola because working conditions were harsh and the southern Angolans were primarily semi-nomadic cattle breeders and not fishermen.[219] In order to resolve this particular labour recruitment issue, the director of the Native Affairs Department instructed in 1942 that, with the help of former fishing industry workers and catechists, professional labour recruiters should try to convince local African authorities in southern Angola to relocate their village, "with all its inhabitants, old and young, healthy and diseased", near the fishing companies. While this proposal acknowledged the importance of genuine village life for the continued well-being of its workers, it was also underpinned by economic rationales. According to Amadeu de Bettencourt Reys, when they encountered the "same spirit of social life, the same 'meeting place' *(jango)* and talismans, their chief, etc.",

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[217] Morna, *Angola,* p. 173; Governor-General Freitas Morna to Governor of the Benguela Province, 26.11.1942, reprinted in Amadeu de Bettencourt Reys, *Relatório da Repartição Central dos Negócios Indígenas para o ano de 1942 (printed Luanda 1948)*, pp. 344-346, in: AHU, MU, ISAU 1661.
[218] Morna, *Angola,* p. 219; José Ferreira Rodrigues Figueiredo dos Santos, *Relatório do Governador da Província de Luanda referente ao ano de 1942, Apendix 2 (Mão de Obra)*, pp. 7-16, in: AHU, MU, ISAU 1667.
[219] Frazão, *Relatório (1939-1940)*, pp. 40-41; Cruz, *Relatório (1941)*, p. 48; Oliveira, *Relatório Inspecção 1944*, pp. 220-221.

the African workers would feel less deracinated and therefore would be more willing to stay.[220]

Most certainly, family migration to European mines and plantations was not a completely new phenomenon in Angola, given that some women had already accompanied their husbands before it was officially encouraged.[221] African soldiers for decades had also been granted the right to settle, under certain conditions, with their family in military villages near the barracks.[222] And although some administrators had rejected this system during their discussions in the late 1930s because of the 'disorder' the accompanying women caused, it is unlikely that this system was abolished, even when recruitment became more locally oriented.[223] At the First Colonial Military Congress in Porto in 1934, eminent military officers still defended family migration. Nascimento Moura believed that it would help to persuade Africans to enlist voluntarily and that the proximity of their families would, in the case of battle, also serve to stimulate their bravery.[224] Faithful to his ideas about how African labourers should remain rooted to their village life, General Norton de Matos proposed that African soldiers as often as possible be housed with their families in so-called *quarteis-sanzalas* or 'barrack-villages', an idea he continued to defend in 1940. These *quarteis-sanzalas* would consist of separate family houses, be subject to hygienic control, including the prohibition of alcohol, and soldiers and their family members would be obliged to "perform some moderate agricultural labour in fields and *granjas* established in the vicinity of the barracks".[225]

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[220] Amadeu de Bettencourt Reys, Chefe da Repartição Central dos Negócios Indígenas, to Director dos Serviços de Administração Civil, 04.11.1942, reprinted in Amadeu de Bettencourt Reys, *Relatório da Repartição Central dos Negócios Indígenas para o ano de 1942 (printed Luanda 1948)*, p. 343, in: AHU, MU, ISAU 1661.

[221] See, for instance, Ball, Jeremy, *"The colossal lie". The Sociedade Agricola do Cassequel and Portuguese Colonial Labor Policy in Angola, 1899-1977* (Ph.D. Dissertation - University of California), 2003, pp. 112–114, who states that around 1914 about half of the 1,700 labourers lived with their wives and families in self-built villages near the sugar plantations of Cassequel.

[222] See *Regulamento para o recruamento das forças indígenas da Província de Moçambique,* Lourenço Marques: Imprensa Nacional, 1906, art. 118-124; Ministério das Colónias - Direcção Geral Militar, *Decreto 19.220 que regula o recrutamento militar nas colónias*, 09.01.1931, in: *Diário do Governo, Série I,* 09.01.1931, pp. 53–59, here art. 54 and more specifically for Angola: Governador Geral Interino, Eduardo Ferreira Viana, *Regulamento dos Serviços de Recrutamento Militar da Colónia de Angola*, 11.04.1933, in: *Boletim Oficial da Colónia de Angola, Série I,* 20.04.1933, pp. 235–288, here Parte III, art. 106-114. See also Martins, E. A. Azambuja, *O soldado africano de Moçambique,* Lisboa: Agência Geral das Colónias, 1936, pp. 90 and 92.

[223] More research is needed here. Compared with other colonies, the social history of African soldiers in Angola is one of the many historographical gaps yet to be filled. For French and British Africa, see for instance Echenberg, Myron, *Colonial conscripts. The Tirailleurs Sénégalais in French West Africa, 1857-1960,* Portmouth: Heinemann, 1991; Parsons, Timothy, *The African rank-and-file. Social implications of colonial military service in the King's African Rifles, 1902-1964,* Oxford: Heinemann; James Currey, 1999.

[224] Moura, Nascimento, "Recrutamento dos oficiais em serviço nas colónias e recrutamento dos indígenas", in: 1. Exposição Colonial Portuguesa (ed.), *Primeiro Congresso Militar Colonial. Relato dos trabalhos realizados,* Porto: Imprensa Moderna, 1934, pp. 145–150, here pp. 148; 150

[225] Matos, José Mendes Ribeiro Norton de, "A missão do Exército na Colonização Portuguesa", *Revista Militar* 86 (1934), pp. 420–423, here pp. 422 (here quote); Matos, *Síntese,* pp. 493; 508.

Nor was it the first time that colonial officials discussed the idea. Family migration had already been devised as a panacea for the 'eternal' problem of labour recruitment to São Tomé and Príncipe. In the early 1920s, various colonialists including Norton de Matos, had proposed the permanent colonization of the cocoa islands with families from Angola and other Portuguese colonies, but their vision of independent African smallholders was not well received amongst the powerful planters on the islands.[226]

What was largely new in the 1930s, however, was the rationality of the debate. The support of family migration had become intrinsically linked to the issue of birth rates, the defence of family values and the concept of hygienic model villages. New was also the resolute attention Governor-General Freitas Morna dedicated to the issue. Upon his resignation in 1943, he appeared confident that the construction of model villages was well underway and that "within three or four years, the labour recruitment problem would be fully resolved."[227]

The importance of this reform debate stems from the fact that its declared goal, the 'stabilization' and local reproduction of the labour force nearer to the work sites, was the exact opposite of the largest labour recruitment system used in sub-Saharan Africa at the time, that of the South African gold mines, which continued to rely on temporary single-male labour migration, notably from Mozambique.[228] Stabilization policies as devised by the colonial authorities in Angola were rare in sub-Saharan Africa before 1945, but there is little doubt that the Portuguese had been inspired by the pioneering efforts that were being made in the Belgian Congo.[229]

Indeed, as various studies have shown, big mining enterprises in Katanga like the *Union Minière du Haut-Katanga* (UMHK) had begun to 'stabilize' the African work force in villages near their work sites in the 1920s. Though it was interrupted by the economic depression of the early 1930s, this 'stabilization policy' was later continued and intensified from the late 1930s onwards. It was also copied on the adjacent Northern Rhodesian Copperbelt. UMHKs vision to locally reproduce the labour force was quickly crowned with

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[226] Matos, *A Província de Angola,* p. 247; Nascimento, Augusto, "São Tomé e Príncipe", in: Marques, A. H. de Oliveira (ed.), *O Império Africano, 1890 - 1930* (Nova História da Expansão Portuguesa; 11), Lisboa: Estampa, 2001, pp. 201–258, here pp. 222–223.

[227] Morna, *Angola,* p. 219.

[228] For a more detailed discussion of the labour migration scheme of South African mines and its reliance on workers from Mozambique, see Chapter 5. For a discussion of the pros and cons of migrant labour in the South African mines, see Wilson, Francis, *Labour in the South African Gold Mines, 1911-1969,* Cambridge: Cambridge University Press, 1972, pp. 127–139.

[229] Some high-ranking officials in Angola's administration explicitly referred to the ongoing efforts in the neighbouring colony, see for instance José Ferreira Rodrigues Figueiredo dos Santos, *Relatório do Governador da Província de Luanda referente ao ano de 1942*, Apendix 2 (Mão de Obra), pp. 8-10, in: AHU, MU, ISAU 1667.

success. While the proportion of women in the labour camps in Elisabethville had only been 24 to every 100 workers in 1925, that number had risen to 80 by 1945. Moreover, by 1945 the number of children already exceeded that of adult men and, as Bruce Fetter concluded, the "African population had developed a positive rate of natural increase" which was even higher than in the rural areas from whence they came.[230] This was as much the result of the company's incentives towards the constitution of (monogamous) families as of the comprehensive maternal and infant healthcare programmes provided by the company's medical service, which Nancy Rose Hunt has analysed.[231] While this policy served the demographic interests of the Belgian colonial state, it was also in the interest of the UMHK itself. With a large core of 'stabilized' and mostly skilled workers – who often stayed more than ten years and even reached the maximum duration of the career of eighteen years – and a fluctuating number of additional short-term contract workers, the company had effectively 'resolved' the long-standing problems of labour recruitment, endemic desertion and low productivity.[232]

In the end, the same cannot be said for Angola. Although a comprehensive analysis of the stabilization efforts in Angola cannot be presented here, the well-studied case of the *Companhia de Diamantes de Angola* (Diamang) suggests that Freitas Morna's optimism had been misplaced. Founded in 1917, Diamang was the largest private company in the colony. It was situated in the north-eastern Lunda District near the border with the Belgian Congo and had close ties with concessionary companies in the Belgian Congo, like Forminière and UMHK. If Diamang also favoured spousal accompaniment as a means to stabilize the labour force, this measure was to a large extent influenced by the positions asserted by Belgian company doctors and administrators, as Todd Cleveland and Jorge Varanda have recently shown. But while the percentage of accompanying women rose from 7.2% in 1927 to an average of 38% during the Second World War, it fell again after 1945, never reaching the levels boasted by the UMHK.[233] From the perspective of labour management, 'stabilization'

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[230] Fetter, Bruce, "Relocating Central Africa's Biological Reproduction, 1923-1963", *The International Journal of African Historical Studies* 19,3 (1986), pp. 463–475, here pp. 466-468, quote p. 467. The numbers offered by another scholar are slightly different, but reveal the same tendency. See Maurel, Auguste, *Le Congo de la colonisation belge à l'indépendance*, 1990, pp. 140–141. For a general discussion of the stabilization policy in the Belgian Congo and Northern Rhodesia, see Perrings, Charles, *Black mineworkers in Central Africa,* New York: Africana Publ., 1979, pp. 77–130.

[231] Hunt, Nancy Rose, "Le Bébé en brousse. Europen Women, African Birth Spacing and Colonial Intervention in Breast Feading in the Belgian Congo", *International Journal of African Historical Studies* 21,3 (1988), pp. 401–432, esp. pp. 412-420.

[232] Perrings, *Black Mineworkers,* p. 125.

[233] Cleveland, *Rock Solid,* pp. 50–57; Varanda, *A Bem da Nação,* pp. 197–200. As Cleveland has remarked, these percentages do not consider the marital status of the workers, however. Based on statistical data from the 1950s and 1960s, he assumes that about half of the workers' wives accompanied their husbands, see Cleveland, *Rock Solid,* pp. 56–57. On the close ties between Diamang and Forminière, see Varanda, Jorge, "Crossing Colonies

was even less successful. Only a small percentage of the *contratados* extended or renewed their contracts, despite the promise of salary increases and less demanding work and the risk of being forcibly recruited a second time once they had returned home to their villages.[234]

Cleveland and Varanda have advanced multiple reasons to explain the limited success of family migration and stabilization that alternatively place the 'blame' on the colonial state, the workers and Diamang. Indeed, these actors operated with different agendas and priorities, and while the higher percentages of women during the early 1940s might have reflected the influence of the policy shift under Freitas Morna, which was characterized by better coordination between state and company officials and possibly the use of more coercion with regard to the labourers, these synergies apparently disappeared following his resignation.

Efforts to stimulate family migration were frequently impaired by recalcitrant *chefes de posto* and *sobas* (chiefs), who feared the erosion of their tax base and the nefarious effects the migration would have on the village economy respectively. African women and their husbands, on their part, often decided against migration out of fear of sexual abuse by overseers and fellow workers or because they disapproved of the fact that women would have to work for the company as well, either as medical auxiliaries, cooks or farmers.[235] Why, Serra Frazão asked almost rhetorically, would the women and children of the workers "abandon their homelands, their fields, their houses, their other family members, their friends, all the people they had around them", if it meant that they would also give up "their life of freedom for a life of subjection to which they are not used"?[236] Ultimately, one can argue that the social benefits Diamang offered were not great enough to overcome these obstacles. Even the province governor wondered why Diamang did not offer more benefits to the women and children in order to further family resettlement.[237] Maternal and infant healthcare programmes, for instance, seem to have been established by the company only in the early 1940s, much later than in the UMHK.[238] However, an anecdote from the early 1940s cautions against seeing such programmes from the colonialist perspective only as a measure used to directly support spousal accompaniment. In his report on the administrative inspection of the colony in 1944, Nunes de Oliveira thus related that a large group of Africans from the

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and Empires. The Health Services of the Diamond Company of Angola", in: Digby, Anne; Ernst, Waltraud; Muhkarji, Projit B. (eds.), *Crossing Colonial Historiographies. Histories of Colonial and Indigenous Medicines in Transnational Perspective,* Newcastle: Cambridge Scholars, 2010, pp. 165–184. For the influence of Dr. Mottoulle, a doctor working for UMHK, see Varanda, *A Bem da Nação,* pp. 171, note 71 and p. 131, note 87.

[234] Cleveland, *Rock Solid,* pp. 213–221.

[235] *Ibid.,* pp. 50–57; Varanda, *A Bem da Nação,* pp. 197–200.

[236] Frazão, *Relatório (1939-1940)*, pp. 38-39 (quotes).

[237] Manuel da Cruz Alvura, *Relatório do Governador da Província de Malange (1945-1946)*, [1947], p. 168, in: AHU, MU, ISAU 1705.

[238] Varanda, *A Bem da Nação,* pp. 125-126; 171; 176-181.

Minungo *circunscrição* had expressed their desire to go work for Diamang and settle with their wives near the mines, but only on the condition that the women would be allowed to give birth in their own 'huts' *(palhotas)*. They opposed the act of childbirth in the company hospitals because the doctors there would not permit the presence of other women, to whom, according to local customs, the woman in labour was supposed to confess the infidelities that might have led to the pregnancy.[239]

Yet, despite – or possibly also because of – the very limited success of Diamang's stabilization policy, the company actively embraced the colonial state's vision of model villages. Exhorted by colonial officials, the company began to construct villages for its workers in the late 1920s and, although temporary constructions in wood and clay continued to host a part of the workers until well after the Second World War, the company continuously expanded the number of villages with stand-alone houses built in a row, as well as hygienic provisions, including fly-proof lidded latrines. Given the large percentage of single male workers, Diamang's proclivity to build villages is not self-evident. After vigorous and recurrent internal debates throughout the 1930s, the company eventually discarded the idea of introducing the well-known South African compound system. Compounds were thought to be cheaper and to offer better control over the work force, but village structures prevailed since they were viewed as an important asset for reducing the risk of conflict between the workers and to promote family migration and stabilization.[240]

Structurally speaking, company villages were not exact copies of 'traditional' village life. Although ethnic homogeneity among Diamang labourers was relatively dominant – 80% of the workers were Chokwe – villages were not explicitly segregated along ethnic lines.[241] Moreover, Diamang avoided recruiting 'traditional' authorities like *sobas* and 'traditional' healers, because they were regarded as potential threats to company rule and because *sobas* were deemed to be more useful in the processes of labour recruitment.[242] Nevertheless, the inhabitants used the village setting to reproduce parts of their culture. They practiced 'traditional' music, songs and dances, re-enacted ceremonies and often, the eldest in the mining villages would gather to form the council of elders in order to resolve disputes that

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[239] Oliveira, *Relatório Inspecção 1944*, pp. 222-223. According to Hunt, soliciting such confessions was not an uncommon practice in Africa – and it had been common in Europe as well, see Hunt, Nancy Rose, *A Colonial Lexicon of Birth Ritual, Medicalization, and Mobility in the Congo,* Durham: Duke University Press, 1999, p. 353; Retel-Laurentin, Anne, *Sorcellerie et ordalies. L'épreuve du poison en Afrique Noire. Essai sur le concept de négritude,* Paris: Éd. anthropos, 1974, pp. 188–193.
[240] Cleveland, *Rock Solid,* pp. 9; 167-175.
[241] *Ibid.,* pp. 10; 177-178; 193-194.
[242] *Ibid.,* p. 208.

sprung up amongst workers. Sometimes, the *sentinelas*, company guards hired to oversee the villages, would even assume the role of *soba*. As Cleveland has argued, Diamang officials usually did not interfere with and, on the contrary, even encouraged such activities, as they were believed to counter detribalization tendencies.[243]

[243] *Ibid.,* pp. 188–210, esp. pp. 207-208 .

Conclusion

Visions of hygienic, well-ordered and economically prosperous villages did not disappear from official colonial discourse after 1945. On the contrary, looking at colonial Africa in general, rural life was transformed more quickly and on a larger scale during the 'second colonial occupation' of the continent in the period following the Second World War, when rural development plans received more ample funding.[244] As Nyerere's comprehensive resettlement and villagization project in Tanzania in the late 1960s and 70s demonstrates, dreams of large-scale rural transformation continued to exert their influence on policy decisions in the post-independence period as well.[245]

In Angola, several development programmes between 1945 and 1961 endorsed the concept of villagization. The scheme of *colonatos indígenas* ('native rural settlements'), to start with, revived many of the ideas present in Vieira Machado's aborted project from 1939 and led to the creation of large settlements, comprised of several villages each, in Damba, Caconda and Vale do Logo in the late 1940s and early 1950s. The villagization idea also underpinned the so-called 'campaign for the stabilization of itinerant agriculture' *(Campanha de Estabilização da Agricultura Itinerante)*, which started in 1956 and was designed to create a 'class' of modern and 'stabilized' African farmers by teaching them how to fight erosion, to use crop rotation and to fertilize the land. It also incorporated the programme of the Angolan Commission for Rural Well-Being *(Comissão Provincial do Bem-Estar Rural)*, which was established in the same year and followed the recommendations laid out in the homonymous CCTA conferences.[246] In addition to these programmes, which still await critical appraisal from historians, companies like Diamang and Cassequel as well as some of the colony's corporative organizations, like the *Junta de Exportação de Algodão Colonial* ('Colonial Cotton Board') or the *Junta da Exportação do Café Colonial* ('Colonial Coffee Board'),

[244] On the *longue durée* of developmental thinking, see the excellent Hodge, *Triumph of the Expert*. The term 'second colonial occupation' has been coined by Low and Lonsdale, see *Ibid.,* p. 209.

[245] On Nyerere's project, see the overview in Eckert, Andreas, *Herrschen und Verwalten. Afrikanische Bürokraten, staatliche Ordnung und Politik in Tanzania, 1920 - 1970,* München: Oldenbourg, 2007, pp. 253–258. See also Scott, James C., *Seeing Like a State. How Certain Schemes to Improve the Human Condition Have Failed,* New Haven/London: Yale University Press, 1998, pp. 223–261 and Frederick Cooper's critique that Scott's analysis is undercomplex. According to Coooper, Scott overemphasizes the scientific rationality and systematic nature of this and other projects of 'high-modernist planning' and thereby misses the often ambivalent and 'unrational' practices of bureaucratic elites as well as other forms of resistance which undermined these projects, see Cooper, Frederick, *Colonialism in Question. Theory, Knowledge, History,* Berkeley: University of California Press, 2005, pp. 140–142.

[246] Soares, *Política de bem-estar rural,* pp. 11–94; Rolo, *Reordenamento rural,* pp. 1509-1511; 1517-1523. See also Comissão de Cooperação Técnica na África ao sul do Sahara, *Conferência inter-africana do bem-estar rural, Lourenço Marques, Setembro de 1953,* Lisboa: Ministério do Ultramar, 1953.

created in 1938 and 1940 respectively, began or expanded their construction of hygienic model villages.[247]

It was, however, only after the outbreak of the war for independence in 1961 that villagization programmes affected a very substantial part of the population throughout the colony, when they became part of a counterinsurgency strategy the Portuguese copied from earlier decolonization wars fought by the British and the French, notably in Malaya, Kenya and Algeria, uprooting in this way probably over a million or so rural Africans.[248] Their official purposes differed between the regions: in Central, Southern and to a lesser extent Northern Angola, the official rationale underlying villagization was mainly to conquer 'the hearts and minds' of the rural population by improving their standard of living, whereas the purpose was predominantly military in Eastern Angola. Here, non-combatant peasants where forcibly resettled in villages outside the combat zone in order to separate them from armed rebel forces, who had focused their guerrilla activities on this region.

Yet Gerald Bender has argued that, in practice, programmes were not always distinguishable and were mostly counterproductive in that they led to economic decline and poverty and therefore generated more sympathies and support for the nationalist movements, even in those regions (Centre and South) that were far away from the war zones. According to Bender, the programmes failed because they were often ill-directed, underfinanced and indiscriminately applied by (over)"zealous local administrators" to "hundreds of thousands of Africans from every type of social and economic system", including Southern Angolan pastoralists. Moreover, European settlers and agricultural companies often managed to exploit the programmes by occupying land previously held by resettled Africans, thus increasing the tensions between the different population groups and the government.[249]

More in-depth research on the resettlement and villagization programmes of the 1960s and early 1970s is certainly needed, but if one adheres to Bender's interpretation, the eventual

[247] Both Boards were established in 1938 and 1940 respectively in order to coordinate the production and trade of cotton and coffee. See, for instance, Pitcher, *Politics,* pp. 115–120. For their involvement in building hygienic model villages in Angola, see Neves, *Realizações,* pp. 68–69 and Rolo, *Reordenamento rural,* p. 1510. For Cassequel's belated efforts after World War II, see Ball, Jeremy, "Little Storybook Town. Space and Labor in a Company Town in Colonial Angola", in: Borges, Marcelo J.; Torres, Susana B. (eds.), *Company Towns. Labor, Space, and Power Relations across Time and Continents,* London: Palgrave, 2012, pp. 91–110, esp. pp. 102-106.

[248] On this connection to counterinsurgency measures in other colonies, see explicitly Bender, *Angola under the Portuguese,* p. 159. For a good analysis of the French resettlement schemes in Algeria, see Feichtinger, Moritz; Malinowski, Stephan, ""Eine Million Algerier lernen im 20. Jahrhundert zu leben". Umsiedlungslager und Zwangsmodernisierung im Algerienkrieg, 1954-1962", *Journal of Modern European History* 8,1 (2010), pp. 107–135. In their otherwise excellent article, Feichtinger and Malinowski fail to frame the Algerian settlements within the longer and transnational tradition of villagization schemes, which all colonial powers in Africa, including the French, had already begun to adopt in times of peace. For more examples, see for instance also Soares, *Política de bem-estar rural,* pp. 19–21.

[249] Bender, *Angola under the Portuguese,* pp. 156-196, quotes p. 165.

outcomes of this project of social engineering were quite distinct from the utopian reform project that had been discussed in the 1920s and 1930s.

Chapter 5

African Emigration and Colonial Anxieties of Depopulation and Denationalization

Introduction
1. Galvão, the Colonial Ministry and the Limits of Colonial Intelligence
2. Missionaries, Borders and Forms of Denationalization
3. The Administrative Occupation of Border Areas
4. Taxation, Economic Disparities and the Question of Sovereignty
5. Labour Migration and the Counter-Example of Mozambique

Introduction

In January 1947, Captain Henrique Galvão, one of three deputies representing Angola in the National Assembly in Lisbon submitted a secret report on Portugal's colonial rule in Africa to the head of Parliament.[1] The fifty-eight page report was extremely critical of the native policy Portugal had thus far pursued in its *indigenato* colonies – colonies wherein a legal distinction was made between 'citizens' and 'natives' – Angola, Mozambique and Guinea(-Bissau). According to Galvão, the colonies were suffering heavy demographic losses from high mortality rates, notably among young children and contract labourers, and an increasing flow of African emigration into the neighbouring colonies.[2] As for the causes of emigration, Galvão stated that, among other things, the neighbouring colonies offered better work conditions and higher wages to the labourers, imposed lower taxes, and set lower prices on its consumption goods. They also provided better medical care and attracted natives from Angola through the use of well-aimed propaganda and recruiting agents.[3] All three colonies were affected, but Galvão claimed that the problem of emigration was of particular gravity in Angola. He warned that "if this exodus continued at its current pace, it would, on its own, be sufficient to depopulate Angola in about thirty years."[4] Labour supply already suffered from this situation and colonial rule itself would become unsustainable if the "demographic haemorrhage" was not stemmed.[5] Moreover, in addition to the direct economic and political consequences, Portugal's prestige as a colonizing nation was at risk: "Either we solve this problem, in a quick and determined manner as this most dangerous situation demands or we will fail tragically, still in this century, and after five centuries of glory, in our mission of modern colonizers in Africa."[6]

Galvão's alarming report was certainly not the first account of native emigration in Portuguese Africa, but it was probably the most comprehensive, very probably the most dramatic and certainly became the most discussed. It was first presented in a 'secret session' of the National Assembly's Colonial Committee, after which the report was forwarded to

[1] Henrique Galvão, *Exposição do Deputado Henrique Galvão à Comissão de Colónias da Assembleia Nacional, em Janeiro de 1947*, 22.01.1947, in: AHP, Reb. 3378, Secção XXVIII, Caixa 48, n. 10, fols. 57-114. For a discussion of the contents of the report, see also Ball, Jeremy, *"The colossal lie". The Sociedade Agricola do Cassequel and Portuguese Colonial Labor Policy in Angola, 1899-1977* (Ph.D. Dissertation - University of California), 2003, pp. 52–57. For Galvão's work as deputy, see the autobiographical Galvão, Henrique, *Por Angola. Quatro anos de actividade parlamentar,* Lisboa: Edição do Autor, 1949.
[2] Galvão, *Exposição 1947,* pp. 18–24.
[3] *Ibid.,* pp. 11–18.
[4] *Ibid.,* p. 11.
[5] *Ibid.,* p. 11.
[6] *Ibid.,,* p. 1.

António Oliveira Salazar, Portugal's ruling dictator.[7] It most likely then circulated within the Colonial Ministry, given that a year later, Galvão presented the new Minister of the Colonies with a second more detailed report on emigration and depopulation, primarily with regard to Mozambique, upon the Minister's explicit request.[8] Although it was confidential, it also started to circulate publically in fragments in Portugal and abroad. Aided by a 1961 summary written in English by Galvão himself, the report became one of the key references for anti-colonialists – mainly British and American – in their attempt to demonstrate how obsolete Portuguese colonial rule was in Africa. The full text, however, was never published.[9]

That the report gained such authoritative status was to a large extent due to the prestige enjoyed by the author in Portugal and abroad.[10] Galvão was not only a prolific writer on a wide range of colonial subjects, he had, as a high-ranking official within the colonial administration, gained first-hand insight into his topics.[11] Long before his term as deputy for Angola (1945-1949), he had served in Angola as *chefe de gabinete* of the High Commissioner and as District Governor of Huíla in the late 1920s. From 1936 onwards, he was one of the leading inspectors of the High Inspection of the Colonial Administration *(Inspecção Superior da Administração Colonial – ISAC).* In this capacity, he had extensively travelled throughout

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[7] So Wheeler, Douglas L., "The Galvão Report on Forced Labor (1947) in Historical Context and Perspective. The Trouble-Shooter Who Was 'Trouble'", *Portuguese Studies Review* 16,1 (2008), pp. 115–152, here p. 139. I was unable, however, to find the report in Salazar's well-sorted personal archives, which can be consulted at the National Archives in Lisbon (Arquivo Nacionnal da Torre do Tombo, Arquivo Oliveira Salazar, henceforth ANTT, AOS).

[8] Henrique Galvão, *Estudo da emigração indígena em Moçambique pelo Inspector Superior Henrique Galvão*, 30.01.1948, in: AHD-MNE, MU/GM/GNP/RNP/0520/01619. Further research is needed with regard to the way the *Estado Novo* dealt with the report.

[9] For the English summary, see Galvão, Henrique, *Santa Maria. My Crusade for Portugal,* The World Publishing Company: Cleveland/New York, 1961, pp. 57–71. On the circulation of the report and the use made of it by anti-colonialists, see, for instance, Wheeler, Douglas, "The Forced Labour 'System' in Angola, 1903-1947. Reassessing Origins and Persistence in the Context of Colonial Consolidation, Economic Growth and Reform Failures", in: Centro de Estudos Africanos da Universidade do Porto (CEAUP) (ed.), *Trabalho Forçado Africano. Experiências Coloniais Comparadas* (Colecção Estudos africanos; 1), Porto: Campo das Letras, 2006, pp. 367–393, here pp. 387–388; Wheeler, *Galvão Report* and International Labour Office, "Report of the Commission appointed under Article 26 of the Constitution of the International Labour Organisation to examine the complaint filed by the government of Ghana concerning the observance by the government of Portugal of the Abolition of Forced Labour Convention, 1957 (No. 105)", *Official Bulletin of the International Labour Office* 45,2, supplement II (1962), pp. 1–253, here pp. 142-143, 233. According to Galvão himself, illegal copies of his report started to circulate in Portugal some time after 1947, see Galvão, *Santa Maria,* p. 73.

[10] Through his incisive publications on colonial matters, it is highly probable that Galvão already enjoyed much esteem in colonial circles outside Portugal long before his break with the regime. See, for example, the appraisal of Galvão's expertise by the German Consul in Luanda: Dr. Martin to Foreign Office, Nr. 838/38 "Die weiße Bevölkerung Angolas, 04.10.1938, in: Politisches Archiv des Auswärtigen Amtes in Berlin (PAAA), Luanda – Bündel 2, Aktenzeichen 9 (Berichte IV, 1928-1938).

[11] For Galvão's colonial career, and later anti-colonial agitation, see Montoito, Eugénio, *Henrique Galvão. Ou a dissidência de um cadete do 28 de Maio (1927-1952),* Lisboa: Centro de História da Universiade de Lisboa, 2005; Farinha, Luís, "Do Império Português à Descolonização. Henrique Galvão e o Império", *História* 21 (2000), pp. 18–28 and Wheeler, *Galvão Report*.

Angola and appraised many a report from the colony's administration.[12] As a loyal supporter of Salazar's New State *(Estado Novo)*, he organized many of the colonial expositions in Portugal and its African colonies in the 1930s. Over time, however, he became one of the regime's fiercest critics and finally, in the 1950s and 1960s, an overt opponent. He was incarcerated in 1952, escaped from prison in 1959, and was responsible for orchestrating two of the most spectacular acts of piracy ever to have been carried out against the regime in 1961. In 1963, he pleaded against Salazar and for African self-determination before the Fourth Committee of the United Nations.

In the last decade, historians have (re)discovered the original 'Galvão report' from 1947 and have begun to study its contents and the history of its reception.[13] However, little has been said about one of Galvão's central allegations, namely that the grave shortcomings of Portugal's native policy were causing an increasing number of 'natives' from Angola, Mozambique and Guinea to take refuge in neighbouring colonies and that he had warned without success the subsequent colonial ministers about it. If Galvão was right about the extent of the emigration flows, how was it possible that apparently no one else had noticed them and that the colonial ministry had not yet taken decisive action against them in order to save Angola's economy as well as the legitimacy of Portuguese rule? Undoubtedly, Douglas Wheeler, the doyen of Portuguese studies in the United States, has sought to historicize the 1947 Galvão report by situating it at the chronological end of a series of warnings on Portugal's native policy in Africa.[14] Most of these texts, however, were produced by foreign, mainly British and North-American, observers. Moreover, these texts were mainly concerned with the issue of forced labour, and some never even reached the Colonial Ministry in Lisbon. Furthermore, these texts do not mention how the colonial administration in Angola and Portugal discussed and dealt with the fundamental issues of native policy raised by Galvão.

The historiographical failure to incorporate voices from within the colonial administration is paradigmatic of the way in which twentieth-century Angolan colonial history has been written for many decades.[15] This 'blind spot' poses a profound

[12] Although his work at the ISAC was of the utmost relevance for his gradual alienation from the regime, the existing historiography has hardly taken notice of it. For Galvão's extensive inspection tours throughout Angola in 1937 and 1945 and some of his corresponding reports, see Henrique Galvão, *Relatório da Inspecção Superior aos Serviços Administrativos de Angola, vol. I*, 10.08.1938, in: ANTT, AOS/CO/UL-8E, pasta 1 and Carta-Relatório de Henrique Galvão ao Ministro das Colónias Marcello Caetano, [15.03.1945], in: ANTT, AMC, Cx. 8 – Inquéritos de Henrique Galvão, Colónias, Cartas e Relatórios, n. 1.

[13] Ball, *The Colossal Lie,* pp. 52–57; Varanda, Jorge, *"A Bem da Nação". Medical Science in a diamond company in Portuguese Angola* (Ph.D. Dissertation - University College London, Wellcome Trust Centre for the History of Medicine), 2006, pp. 84–85; Wheeler, *Forced Labour System*; Wheeler, *Galvão Report*.

[14] Wheeler, *Forced Labour System*; Wheeler, *Galvão Report*.

[15] Notable exceptions are Keese, Alexander, *Living with Ambiguity. Integrating an African Elite in French and Portuguese Africa, 1930 - 61,* Stuttgart: Steiner, 2007; Castelo, Cláudia, *Passagens para África. O Povoamento*

epistemological problem, insofar as the absence of such voices enables Galvão's portrayal of Portugal to be reified; it is the image of an ignorant, unprogressive, even brutal and irrational colonial government incapable of self-criticism (at least not before 1945) that remained utterly passive in the face of the suffering of the native population.[16]

My aim is not to go to the other extreme and produce the lusotropical opposite of this image, but rather to make it more complex by looking at the discussions on native emigration within the colonial administration. I claim that neither Lisbon nor Luanda ignored the problem of population flight: it was brought up and discussed over and over again at various levels of the colonial bureaucracy during the Interwar Period and the Second World War, and policies were conceived to stem the tide. If the emigration flow abated only in the 1950s or 1960s, it was certainly not due to a generalized indifference in the administration.[17] Rather, it was probably the result of inconsistent and insufficient policies that were often slow to be implemented and, to some extent, also ill-directed, since they did not address some fundamental issues such as forced labour, low incomes and medical assistance, or at least not at the same pace and to the same degree as those in the neighbouring colonies. Moreover, a closer look suggests that the situation might not have been as clear as Galvão suggested for the decision-makers in Luanda and Lisbon. Contemporary methods of enumeration did not allow for the volume of migration in Angola to be accurately measured, just like elsewhere in sub-Saharan Africa. From the 1920s to the 1940s, alarming reports on native emigration were alternated with reassuring accounts of re-migration.

By looking at the discussion on the causes, consequences and solutions to African emigration in Angola, I will discuss how the problem was often posed in economic terms. Emigration and economic backwardness were seen as mutually reinforcing processes. While it was feared that sustained emigration would inevitably lead to labour shortages and thus hamper the development of the colony, observers in the 1930s and 1940s increasingly saw emigration as the very expression of an existing and ever growing economic gap between Angola and its neighbours. Such a gap allowed neighbouring colonies to offer better wages and labour conditions, exact lower taxes and sell consumption goods at lower prices. But the

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de Angola e Moçambique com Naturais da Metrópole (1920-1974), Porto: Edições Afrontamento, 2007 and especially Keese, Alexander, "Searching for the Reluctant Hands. Obsession, Ambivalence and the Practice of Organising Involuntary Labour in Colonial Cuanza-Sul and Malange Districts, Angola, 1926–1945", *Journal of Imperial and Commonwealth History* 41,2 (2013), pp. 238–258.

[16] For a first critique of such a negative view, see Keese, Alexander, "'Proteger os pretos'. Havia uma mentalidade reformista na administração portuguesa na África tropical (1926-1961)", *Africana Studia* 6 (2003), pp. 97–125 and Keese, *Living with Ambiguity*. The titles are somewhat misleading, however, as Keese's focus is clearly on the post Second World War period.

[17] "The migration out of Angola only abated in the 1950s and 1960s as forced labor ended, Angolan wages improved and more plentiful and cheaper consumer goods became available." (Ball, Jeremy, "Colonial Labor in Twentieth-Century Angola", *History Compass* 3 (2005), pp. 1–9, here p. 4).

debate was not confined to just economic issues. Often, it also revolved around the notion of prestige. Not only was the emigration of portions of the African population considered a loss of prestige on the international stage – an eventuality that had to be avoided – many colonial officials pointed their finger at unbalanced 'economies of prestige' as a main determinant for the emigration of Africans in the first place. They maintained that Portuguese colonial authorities as well as their 'natural allies', the Catholic missionaries, enjoyed such low prestige amongst large parts of the native population in Angola that those who were able to compare them with administrators and missionaries in adjacent territories (or with Protestant missionaries within the colony) wished to swap their Portuguese 'colonizer' for the neighbouring one. What is interesting here is that although some voices placed the blame on the ancestral lack of patriotism or the innate laziness of Africans, most presented their willingness to change colonizers as a 'rational' decision: the neighbouring colonies simply had more to offer. Not all writings, of course, exhibited the same degree of perspicacity or self-criticism, nor did they highlight the same causes or propose the same remedies. But, basically, the Portuguese colonial administration developed two strategies to counter the tide. The first was to improve the living conditions of the African population and to enhance the Portuguese presence and prestige in border areas; the second aimed at reducing the amount of contact the Angolans had with their colonial neighbours. At the same time, I will show that the Portuguese concern, which almost reached obsessive proportions, with prestige, national pride and sovereignty also prevented decision-makers from engaging with particular solutions in the struggle against emigration.

Throughout the discussion, I will also contextualize emigration itself and the debate that developed in Angola within the larger framework of colonialism in Africa, and thus I argue against the often implicit argument of Portuguese exceptionalism. The unwanted cross-border migration of African subjects during the colonial era was not specific to Angola or Portuguese Africa. Such movements occurred frequently and often on a large scale, as African populations reacted to colonial conquest and famines, tried to escape from forced labour and tax impositions, or were attracted by better working conditions in other colonies.[18] The attraction of the South-African mines, for example, drew migratory flows from throughout the greater part of southern Africa all through the twentieth century.[19] Moreover, just like in

[18] For an overview of some massive population dislocations triggered by colonial conquest in sub-Sharan Africa, see Kreike, Emmanuel, *Re-creating Eden. Land use, environment, and society in southern Angola and northern Namibia,* Portsmouth, NH: Heinemann, 2004, pp. 6–8.

[19] Boeder has underscored the 'ripple effect' of labour migration in southern Africa, according to which labourers move to the next neighbouring countries, where they replace native workers who migrate themselves to more developed areas. See Boeder, R. B., *Silent Majority. A History of the Lomwe in Malawi,* Pretoria:

Angola, colonial states in Africa were generally unable to restrict, suppress or even monitor cross-border population movements at least until the end of the Second World War.[20] Moreover, the reaction of the Portuguese to the alleged massive emigration flows was not *per se* exceptional. Government officials in other colonies, too, were at pains to determine the exact nature and the volume of their emigration figures. They often spoke of massive population flight, 'exoduses', thus fuelling anxieties of depopulation.[21] In other words, if the Angolan case was characterized by a specificity, it certainly did not reside in the fact that cross-border population movements occurred and that the government had proved unable to prevent it altogether. The most striking, though not fundamentally unique, features of emigration in Angola seem to be the ubiquity and longevity of both the migratory currents out of the colony and the colonial discourse surrounding the phenomenon.

African Institute of South Africa, 1984, cited in Tornimbeni, Corrado, "The State, Labour Migration and the Transnational Discourse. A Historical Perspective from Mozambique", *Stichproben. Wiener Zeitschrift für kritische Afrikastudien* 8 (2005), pp. 307–328, here p. 312.

[20] On the permeability of Angolan borders for goods, and hence also for persons, see Manuel Gonçalves Monteiro, *Relatório da Inspecção aos Serviços Aduaneiros das Colónias de Angola e Moçambique (1944)*, 31.10.1945, Vol. 1, p. 78, in: AHU, MU, ISA 2878-79. For the general argument for colonial Africa, see Crush, Jonathan; Jeeves, Alan; Yudelman, David, *South Africa's Labor Empire,* Boulder: Westview Press, 1991, p. 47; Eckert, Andreas, *Kolonialismus,* Frankfurt (Main): Fischer Taschenbuch Verlag, 2006, p. 66.

[21] See, for instance, the debate about Soninke emigration in French Occidental Africa (AOF), in Manchuelle, François, *Willing migrants. Soninke labor diasporas, 1848 - 1960,* Athens, Ohio: Ohio University Press, 1997, pp. 161–178 or Cinnamon, John M., "Counting and Recounting. Dislocation, Colonial Demography, and Historical Memory in Northern Gabon", in: Ittmann, Karl; Cordell, Dennis D.; Maddox, Gregory H. (eds.), *The Demographics of Empire. The Colonial Order and the Creation of Knowledge,* Ohio: Ohio University Press, 2010, pp. 130–156, who focuses more on the relationship between internal migration in Gabon and discourses of depopulation. See also Kreike, *Re-creating Eden,* pp. 195-196, footnote 33.

1. Galvão, the Colonial Ministry and the Limits of Colonial Intelligence

In his report to the National Assembly in 1947, Henrique Galvão complained that the Colonial Ministry in Lisbon had ignored his warning reports on native emigration and depopulation for more than a decade.[22] In his responsibilities as High Inspector of the Colonial Administration (1936-49), Galvão had indeed repeatedly addressed these issues and denounced the grave shortcomings of Portugal's native policy in Africa. Almost immediately after returning from his first comprehensive inspection journey through Angola in 1937, he alerted the Minister of Colonies, Vieira Machado (1936-1944), and Salazar himself about the "massive flight" that was taking place along Angola's borders.[23] Galvão was not completely right, however, to assume that the Minister of Colonies had remained wholly inactive. Vieira Machado actually reacted promptly requesting that the Governor-General of Angola send him more information on the subject "with greatest urgency", adding that "until now, [he had] no knowledge about the fact that the natives in Angola [were] emigrating en masse".[24]

It is unclear what the Governor–General's reply was, but it seems that it then took the Colonial Ministry several years to launch a more comprehensive inquiry into the causes and possible remedies of the emigration. This did not mean that Vieira Machado was not at all concerned, however. As I will discuss further on, Machado prompted missionary societies to establish mission posts along the southern and south-eastern borders in order to prevent the local populations from emigrating. But it is very likely that, at first, he did not believe that this phenomenon had reached such proportions nor that it was investing all of the borders.

One of the reasons for his scepticism probably stemmed from his personal conflict with Henrique Galvão. Vieira Machado seems to have lost confidence in Henrique Galvão following the very critical reports of this last from 1937-1938. Possibly, the conflict even predated these occurrences – and it surely also had other dimensions, the moment Galvão reportedly informed Salazar of several cases of corruption involving Vieira Machado.[25] Galvão had first addressed the issue of large scale emigration from Angola in reports on labour recruitment for São Tomé and Príncipe, the two Portuguese-ruled cocoa producing islands in the Gulf of Guinea, which were largely dependent upon imported labour from

[22] Galvão, *Exposição 1947,* pp. 3–4.
[23] Carta Confidencial do Inspector Superior Henrique Galvão ao Ministro das Colónias, 22.12.1937, in: ANTT, AOS/CO/UL-8E, pasta 2, subpasta 1. Galvão substantiated his claims in a more detailed report two weeks later, see Inspector Superior Henrique Galvão, *Relatório sobre o recrutamento em Angola de mão de obra para S. Tomé*, 06.01.1938, pp. 4; 12, in: ANTT, AOS/CO/UL-8E, pasta 2, subpasta 2.
[24] Carta do Chefe de Gabinte do Ministro das Colónias, Antonio José Caria, ao Governador Geral de Angola, Lisboa, 23.12.1937, in: ANTT, AOS/CO/UL-8E, pasta 2, subpasta 3.
[25] Galvão, *Santa Maria,* p. 33.

Angola, and to a lesser extent, from other Portuguese colonies in Africa. He asserted that, among other reasons, the widespread fear among Angolans that they would be sent to the islands caused many to take refuge in the neighbouring colonies.[26] The report further accused the authorities in Angola of illicit recruiting methods and those in São Tomé and Príncipe of not fulfilling their labour contracts (excessively low salaries, irregular repatriation, and insufficient medical provisions for the imported workers). With such accusations, Galvão had probably not made any friends amongst the high-ranking officials in the colonies, but he had also displeased Vieira Machado by sending a copy of the report in question directly to Prime Minister *(Presidente do Conselho)* Salazar. This gesture was not precisely one of confidence.[27]

When incoming reports from the administration in São Tomé as well as those from the *Junta Central de Trabalho e Emigração*, an organism created in 1914 to control the labour flow to the cocoa islands, subsequently refuted virtually all of Galvão's accusations, the Minister of Colonies implicitly asked Salazar for his permission to remove Galvão from office: "With everything that I have sent to his Excellency, I believe that it is not unfair to conclude that either Senhor Inspector Galvão's information show a thoughtlessness incompatible with the minimum requirements of reflection for a high-ranking official or consciously ill-informed your Excellency and his Minister."[28] But Salazar apparently continued to uphold and back one of his most prominent "ideological firefighters" – later Galvão would maintain that although he was "wholly out of favour with each of the successive Ministers of Overseas Territories", he was "not dismissed from office" only because "people in government circles thought (erroneously) that [he] could depend on the support of the dictator."[29] The gloomy picture Galvão painted of the general state of affairs in Angola in another, more detailed report, a couple of months later probably received the same

[26] See footnote 23.
[27] See Vieira Machado's indignation in Carta do Ministro das Colónias ao Senhor Doutor Oliveira Salazar, Lisboa, 07.02.1938, in: ANTT, AOS/CO/UL-8E, pasta 2, subpasta 3.
[28] Carta do Ministro das Colónias Vieira Machado ao Presidente do Conselho, n. 650, Lisboa, 05.05.1938, in: ANTT, AOS/CO/UL-8E, pasta 2, subpasta 4. For the reports contradicting Galvão's allegations, see the following documents in ANTT, AOS/CO/UL-8E, pasta 2, subpasta 4: Carta 7/G (Confidencial) do Governador de São Tomé e Príncipe, Ricardo Vaz Monteiro, ao Ministério das Colónias, 15.1.1938; Informação do Curador dos Serviçais e Colonos em São Tomé e Príncipe, 12.01.1938; Parecer n. 41 referente ao rocesso n. 350 da Junta Central de Trabalho e Emigração; Carta do Governador de São Tomé e Príncipe, Ricardo Vaz Monteiro ao Ministério das Colónias, 14.03.1938. For the creation and assignments of the *Junta Central de Trabalho e Emigração*, see Caetano, Marcello, *Direito público colonial português. Segundo as lições do Professor Doutor Marcelo Caetano, coligidas por Mário Neves,* Lisboa, 1934, p. 123.
[29] Meneses, Filipe Ribeiro de, *Salazar. A Political Biography,* New York: Enigma books, 2010, pp. 125 (first quote); Galvão, *Santa Maria,* pp. 52-53 (subsequent quotes).

fate.[30] Until Vieira Machado's dismissal for corruption in 1944, Galvão would not be hired to carry out any further inspections in Angola.

This did not prevent him from resuming his campaign for a detailed inquiry into the causes and solutions to the emigration problem in Angola in the early 1940s. In various *pareceres* ('summary-reports') on reports from administrative entities in Angola that addressed the issue, Galvão urged the Minister of Colonies to investigate the question. His attempts were not without success, although he would assert the contrary in his famous 1947 report. After such a report from 25 July 1941, the Colonial Ministry requested the Governor-General of Angola to conduct "a profound inquiry into the causes of depopulation in the border regions of Angola in order to study the provisions to be taken against the exodus of the populations". An inquiry was indeed conducted.[31] Upon receiving another *parecer* dated 27 March 1944, in which Galvão criticized the insufficiency of the investigations within the colonies thus far, Minister of Colonies Vieira Machado ordered that in Angola, Mozambique and Guinea a suitable "person of confidence" should conduct a further inquiry. In Angola, this task fell to the administrative inspector Óscar Ruas, who had assisted Galvão in his administrative inspection of the colony in 1937.[32] Moreover, directly after the appointment of Marcello Caetano as new Minister of Colonies in September 1944, Galvão re-addressed some basic problems of native policy, including the depopulation of the border areas. Caetano reacted and instructed Galvão to study these issues on his already scheduled visit to the African colonies in 1945.[33] Hence, one can conclude that by the mid-1940s the issue had triggered much correspondence between metropole and colony.[34] But as Governor-General Álvaro de Freitas Morna (1942-1943) complained to Salazar in March 1943, the studies had not yet been followed by concerted action.[35]

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[30] In a letter to the next Minister of Colonies in 1945, Galvão would complain that back in 1937-38 Vieira Machado preferred to believe the optimistic reports of the Bank of Angola rather than the pessimistic reports of his Inspector, see Carta-Relatório de Henrique Galvão ao Ministro das Colónias Marcello Caetano, [15.03.1945], p. 45, in: ANTT, AMC, Cx. 8 – Inquéritos de Henrique Galvão, Colónias, Cartas e Relatórios, n. 1.

[31] See the summary of this inquiry by a senior official in the Colonial Ministry, based upon information from all five of the province governors in Angola: Amadeu de Menezes, *Informação n. 19 da 2a Secção da DGAPC – Emigração de indigenas, de Angola para territorio estrangeiro circunvizinho*, 18.02.1943, in: AHU, MU, ISAU 2243 (anexo ao Relatório do Curador de 1938). For another demand for an inquiry by Galvão, see Henrique Galvão, *Parecer da ISAC acerca da delimitação de fronteiras entre Angola e Rodézia do Norte na região do Rio Quando*, 23.08.1941, in: AHU, MU, ISAU 1698.

[32] See the correspondence in AHU, MU, DGAPC 556, proc. 21 (Inquérito acerca das causas da emigração de indígenas nas regiões de fronteira). Unfortunately, I was not able to localize Ruas' report in the archives.

[33] See Henrique Galvão, *Parecer n. 15 da ISAC*, 18.09.1944, in AHU, MU, ISAU 1725 and Caetano's handwritten recommendations on it.

[34] Nunes de Oliveira, *Relatório do Inspector Superior da Administração Colonial. Inspecção à Colónia de Angola, 1944*, 04.02.1945, p. 230, in: AHU, MU, ISAU_A2.01.002/012.00067.

[35] Carta do Governador Geral Álvaro de Freitas Morna ao Doutor Oliveira Salazar, Luanda, 22.03.1943, in: ANTT, AOS/CO/UL-8G, pasta 6.

The conflict between Minister Vieira Machado and Inspector Galvão was not the only reason why the Colonial Ministry was reluctant to further investigate the problem of emigration. A closer look at both Galvão's writings and the reports sent by the colonial administration in Angola to Lisbon in the late 1930s and early 1940s suggests that there were also other issues at stake. These reports reveal that fundamental problems existed in the production and circulation of reliable information on the nature and extent of the emigration flows.

The first of these issues lay in the fundamental instability of colonial rule and intelligence. While the Colonial Ministry depended on information from the administration in the colonies, the central government in each colony depended on the different strata of its administration. In addition to the bureaucratic apparatus and what Trutz von Trotha has called the 'internal intermediarity' of colonial rule, knowledge gathering at the most local level was dependent on African informants, merchants or missionaries, who did not always share the interests of the colonial state.[36] Clearly, Portugal had established systems of checks and balances very similar to those of other European powers in Africa, but according to Galvão, they did not function. There was, he denounced in his report from 1938, an "incredible ignorance" at all levels about what was really happening in the colony: "Luanda does not know Angola, [the provincial capital] Silva Porto does not know [the province of] Bié – and a great deal of the [local] administrations do not know the very *circunscrição* they govern."[37] In other words, state employees at all levels had failed in their duty to directly observe and learn about the territories under their command and, hence, to get to know the African populations. Galvão, a self-proclaimed 'man of action' who took great pride in his extensive travels through Angola, considered this negligence at the lowest level of the administration to be particularly troubling. He was referring to the *chefe de posto*, whom he considered the "real informer and author of the reports" that were, in the end, written by their superiors. According to Galvão, they were not always competent or diligent enough, but also often lacked adequate means of transportation to appropriately monitor their territory. Furthermore, because their superiors often failed to control their actions, the reports the *chefes de posto* wrote were often fictitious: "Faced with urgent demands for information, the requirements of the population surveys and the difficulties they struggle with, they do not refrain from sending the report ...

[36] See Trotha, Trutz von, "Was war Kolonialismus? Einige zusammenfassende Befunde zur Soziologie und Geschichte des Kolonialismus und der Kolonialherrschaft", *Saeculum. Jahrbuch für Universalgeschichte* 55 (2004), pp. 49–95, here pp. 63–64. For a more detailed presentation of this argument, see Introduction.
[37] Galvão, *Relatório Angola 1938,* p. 4 (quotes).

but they refrain from seeing what should only be reported if duly seen and counted."[38] Galvão also denounced the central administration's dependency on their lower-level employees. The Director of the Native Affairs Department, Manuel Pereira Figueira, he complained, had not yet left the area of Luanda since his arrival in Angola years before. Although full of good intentions, he was not acquainted with the life and worldviews of the multitude of African peoples in Angola, and his decision-making thus depended completely on the reports he received.[39] To this gloomy picture of the colonial administration, Galvão added in 1947 that many colonial officials were unwilling to conduct investigations and/or to "reveal the truth" – and thus were unwilling to dismantle the propagandistic image of a well functioning administration.[40] Only direct observations, he claimed, allowed one to discover the ongoing depopulation of nearly all border areas in Angola.[41]

This was, of course, exactly what he did. The creation of the High Inspection of the Colonial Administration (ISAC) in Lisbon in the mid-1930s was precisely intended to reduce the 'internal intermediarity' between the Colonial Ministry and the lower echelons of the colonial administration.[42] Through direct, *in loco* inspections of administrative services in the colonies (local administrations, province governments and services, and even departments of the central government in Luanda) as well as through the critical reading and summarization of the reports sent by these administrative services to Lisbon, the ISAC was created to inform the Minister of Colonies about basic problems of colonial rule and violations of the existing legal framework. Undoubtedly, there had been administrative inspections in earlier times, but it seems that they depended solely on the governor of the colony and that the results did not always reach Lisbon.[43] The subordination of the colonial bureaucracy to the control of the inspectors from the Colonial Office was one of the measures taken by the *Estado Novo* in the

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[38] *Ibid.*, pp. 4–5.
[39] *Ibid.,* pp. 5; 76.
[40] Galvão, *Exposição 1947,* p. 9.
[41] *Ibid.,* p. 13.
[42] Controls regarding how the colonial bureaucracy functioned had been established in the important reform of the Colonial Administration in 1933 and were further institutionalized in 1936. See Ministério das Colónias, *Decreto-lei 23.229 que aprova a Reforma Administrativa Ultramarina*, 15.11.1933, in: *Diário do Governo, Série I,* 15.11.1933, pp. 1915–1995, art. 382-406 and Ministério das Colónias, *Decreto 26.180 - Reforma do Ministério das Colónias, Diário do Governo, Série I,* 07.01.1936, pp. 9–36, art. 27-32.
[43] See, for instance, Vieira Branco, *Relatório da Inspecção à Circunscrição de Porto Alexandre ao Governador do Distrito de Mossamedes*, 10.10.1911, in: ANA, Cx. 814; Vieira Branco, *Relatório da Inspecção das Circunscrições de Mossamedes e Huila ao Governador do Distrito de Mossamedes*, 18.11.1911, in: ANA, Cx. 814. Norton de Matos had created a labour inspection service in the 1920s, see Matos, José Mendes Ribeiro Norton de, *A Província de Angola,* Porto: Edição de Maranus, 1926, p. 129.

1930s to recentralize the Colonial Empire in Lisbon after several decades of (inconsistent tendencies) toward decentralization.[44]

However, the ISAC was not entirely successful for the first ten years of its existence, and the fundamental problem of intermediarity persisted. Although it seems that a far greater number of reports from Angola reached the Colonial Ministry than before, they often arrived late and by the time they arrived were outdated, and many still never arrived.[45] Moreover, the ISAC only conducted two general inspections in Angola (1937 and 1944) instead of one every four years as was specified in its statute. Furthermore, the administrative inspection service in Angola itself, which was supposed to collaborate with the ISAC by monitoring colonial rule as well as the information management mechanisms at the lowest levels of the colonial administration, was not functioning well. By 1944, many of the *circunscrições* and municipalities had yet to be inspected for the first time, although the *Reforma Administrativa Ultramarina* (RAU), the comprehensive reform of the colonial administration of 1933, prescribed that they were to be inspected every three years.[46]

Second, beyond the problems caused by the general instability of colonial rule, the production of accurate knowledge on migration movements was hampered by the difficulties of counting the migrants. In 1945, Galvão estimated the number of 'Portuguese natives' from Angola who were living outside the colony to be one million and established the annual emigration rate at 30,000, but he believed this number was increasing geometrically.[47] In 1947, Galvão asserted that Angola and Mozambique together had been losing about 100,000 inhabitants a year over the last decade.[48] However – and Galvão was aware of this – the official statistics did not corroborate such a massive population drain. The annual population counts, conducted by the local administrators during the tax enrolment process, had exhibited

[44] See, for instance, Diniz, José de Oliveira Ferreira, "A evolução da política colonial portuguesa", *Boletim da Agência Geral das Colónias* 4,34 (1928), pp. 3–13.
[45] See the recurrent complaints about this condition by the head of the ISAC, Vieira Fernandes, to the Minister of Colonies in AHU, MU, ISAU 1699, processo 138: 'Informações ' from 17.10.1938, 29.12.1941 and 02.04.1946.
[46] Oliveira, *Relatório Inspecção 1944,* pp. 183–187. According to Nunes de Oliveira, the main reason for this was that the inspectors were used to initiating disciplinary procedures against state employees, something Galvão had already denounced in 1938, see Galvão, *Relatório Angola 1938,* p. 5. Although the next Governor-General had endorsed Galvão's criticism on this point and promised improvement, the situation apparently did not actually improve much until 1944, see Manuel da Cunha e Costa Marques Nano to the Minister of Colonies, 28.06.1939, p. 3, in: AHU, MU, GM 548.
[47] Carta-Relatório de Henrique Galvão ao Ministro das Colónias Marcello Caetano, [15.03.1945], p. 47 in: ANTT, AMC, Cx. 8 – Inquéritos de Henrique Galvão, Colónias, Cartas e Relatórios, n. 1. Caetano underlined the number of one million.
[48] Galvão, *Exposição 1947,* p. 14.

a stable, even slowly growing population over the course of the 1930s and early 1940s.[49] Moreover, these growth figures had proved much too low when the results of the first 'modern' census of 1940 were published: against the administrative enumeration of 2,615,400 natives in 1939, the census of 1940 counted 3,648,616 natives.[50] The difference was sizeable, but not *per se* unusual for the African context. Administrative enumerations in colonial Africa generally underestimated the size of the population for a number of reasons linked to the simultaneity of counting and tax collection: while adult males were undercounted because many tried to escape taxation, colonial officials were often not particularly scrupulous when it came to counting women and children.[51] Moreover, according to Galvão, local administrators often also deliberately undercounted the population to facilitate their tax collection endeavour.[52]

Still, it is likely that the census results of 1940 provided a strong supportive argument to sceptics who did not believe that the population was in decline or that emigration constituted a major problem. On the other hand, the census had clearly demonstrated the unreliability of the administrative enumeration procedures. What Galvão could not know in 1947, however, was that the census of 1950 would also contradict his prediction of the imminent depopulation of Angola. It acknowledged an overall 9.7% growth of the native population between 1940 and 1950.[53] Even in the border *circunscrições*, there was an increase of 5.8%, though this was significantly lower than the average growth rate of the colony. Only the *circunscrições* of Cassai-Sul and Dilolo, which were both positioned along the border with Katanga, registered significant population decreases of 22.5% and 20.9% respectively. Other border *circunscrições*, conversely, showed significant population increases, amongst which São Salvador do Congo, Cuango, Chitato and Baixo Cubango.[54]

[49] See, for a summary of the total population numbers between 1925 and 1938 Colónia de Angola - Direcção dos Serviços de Economia - Repartição de Estatística Geral (ed.), *Censo Geral da População, 1940*, 12 vols, Luanda: Imprensa Nacional, 1941-1947, vol. I, p. 30. For the period 1936-1944, see *Mapa da população indígena da colónia, 1935-1944*, in: Repartiçao Central dos Negocios Indigenas da Colónia de Angola, *Mão de Obra – Elementos Estatisticos (1945)*, in: AHU, MU, ISAU 1661.

[50] For the census figures, see Colónia de Angola, *Censo Geral da População (1940)*, vol. I, pp. 118-119.

[51] On this, see Chapter 3.

[52] For Angola, see, for instance, Galvão, *Relatório Angola 1938,* pp. 5; 76. For other colonies, see, for instance, Manchuelle, *Willing migrants,* p. 147.

[53] The 'uncivilized' population, which comprised almost all 'blacks' and about half of the 'mestiço' population, increased 9.7%, or rather from 3,648,616 to 4,001,217 in 1950. For 1940, see footnote 50, for 1950 Repartição Técnica de Estatística Geral da Província de Angola (ed.), *II Recenseamento Geral da População, 1950*, 5 vols, Luanda: Imprensa Nacional, 1953-1956, Vol. I, p. 108.

[54] My calculations are based on Colónia de Angola, *Censo Geral da População (1940)*, vol. I, pp. 118-133 and Repartição Técnica de Estatística Geral da Província de Angola, *II Recenseamento Geral da População (1950)*, vol. I, pp. 108-125.

Galvão was not the only one who did not believe in the fiction of accurate population statistics.[55] Many province governors in the 1930s and 1940s considered administrative counts unreliable as well.[56] Yet, in the absence of a functional civil registry and given the limited scope of medical demography, these were the only comprehensive population statistics available before 1940.[57] Province governors were supposed to elaborate upon the demographic evolution of their province in their annual reports, hence they had no other choice than to make sense of the numbers they received from their subordinate administrators.

Still, some of them openly defied these numbers. The Governor of the south-eastern Province of Bié, António de Almeida, for example, strongly criticized the insufficient explanations he had received from his local administrators regarding the rapid decrease of the province's population from ca. 547,000 in 1936 to ca. 507,000 in 1938.[58] In some of the *circunscrições* (Dilolo, Alto Zambeze, Bundas) along the border with the Belgian Congo and Northern Rhodesia, numbers had fallen significantly, but the local reports (explicitly or implicitly) denied emigration as the main cause. They maintained that people, especially adult men, did indeed leave the colony for work in the mines of Northern Rhodesia and the Belgian Congo, but that they usually returned at the end of their contracts. In the absence of other possible causes for the population decrease, Almeida concluded that inaccurate counting was most likely to be blamed. Still, he announced that he would personally inspect his province to better understand the statistics.

In spite of their critical attitude towards population statistics, others did not reject them as instruments of knowledge entirely. The annual reports of the Governor of the north-eastern Malange Province are illustrative of the ambivalence of this stance. In his report for 1941-1942, Governor Manuel da Cruz Alvura condemned the deficient nature, notably the underestimates, of the population statistics. A few years later, however, he felt no compunction to refrain from using the same kind of statistics in order to 'prove' that the size of the population in the Lunda District – of the two districts in his province Lunda was the one that shared its border with the Belgian Congo – had fluctuated, but had "not suffered the severe and worrying decreases that are so much discussed."[59]

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[55] Galvão had already criticized the fictitious nature of the administrative population statistics in his inspection report of 1938, see Galvão, *Relatório Angola 1938,* p. 11.
[56] See, for instance, Eurico Eduardo Rodrigues Nogueira, *Relatório do Governo da Província de Benguela (1935-1936)*, May 1937, pp. 122-123, in: AHU, MU, ISAU 1727; Manuel da Cruz Alvura, *Relatório do Governo da Província de Malange (1941-1942)*, 31.12.1942, pp. 319-320, in: AHU, MU, ISAU 1663.2.
[57] On medical demography, see Chapter 3.
[58] For this paragraph, see António de Almeida, *Relatório do Governo da Província de Bié (1938)*, 31.12.1938, Vol. II, pp. 425-436, in: AHU, MU, ISAU 1663.1.
[59] Manuel da Cruz Alvura, *Relatório do Governador da Província de Malange (1945-1946)*, [1947], pp. 164; 186-187, in: AHU, MU, ISAU 1705.

Inaccurate methods of enumeration were not the only obstacle in the appraisal of the volume of this phenomenon. Province governors often received unclear and contradictory information regarding the motivations for the departures and were hence unable to make a distinction between temporary and permanent emigration. To give an example, two contemporaneous migration flows seem to have characterized the Malange Province in the late 1930s and 1940s: one was predominantly comprised of temporary male labourers, while the other was characterized by permanent family resettlement in neighbouring colonies. The distinction between these forms of (e)migration was important in that it would enable the administration to predict future population developments as well as improve its ability to develop appropriate countermeasures. However, the boundaries between temporary and permanent emigration – often equated with labour and 'protest' migration – were rarely clean-cut, and in fact they escaped easy categorization.[60] Some reports referred to emigration as a gradual process, in which adult men who had crossed the border looking for better working and living conditions continued to pay taxes in their village of origin until, after a couple of years, their family joined them and they permanently settled in the neighbouring colony.[61] Other workers did come back though, and even 'permanent' resettlement was not always permanent. Many reports, from the 1920s to the 1940s, refer to the return of whole families, villages or tribes that had once left the colony. According to Galvão, these returns and new inbound migration effectively counterbalanced emigration flows until the mid-1930s, when these inbound flows became less significant and were largely outnumbered by unprecedented levels of outbound migration.[62]

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[60] See, for instance, Asiwaju, A. I., "Migrations as Revolt. The Example of the Ivory Coast and Upper Volta before 1945", *Journal of African History* 17,4 (1976), pp. 577–594 and Musambachime, M. C., "Protest Migrations in Mweru-Luapula, 1900-1940", *African Studies* 47,1 (1988), pp. 19–34 and the discussion further on in the text.

[61] See, for instance, Manuel da Cruz Alvura, *Relatório do Governador da Província de Malange (1944)*, 31.05.1944, p. 188, in: AHU, MU, ISAU 1663; Machado [de Faria e Maia], Carlos Roma, *Na fronteira sul de Angola. Desde a Missão Luso-Alemã de 1914 até à delimitação da fronteira, medição das águas do rio Cunene em 1927 e continuação da delimitação até ao rio Cubango, em 1928, incluindo o Convénio do Cabo sôbre a mesma delimitação e aproveitamento das águas do rio Cunene, em 1926 (Artigos de Jornais),* Lisboa, 1941, p. 145 and Rodrigues, Jaime Raúl Sepúlveda, *Angola, districto do Congo. Relatório feito pelo governador, relativo ao período do seu govêrno, 1930* (Colecção de relatórios, estudos e documentos coloniais; 21), Lisboa: Agência Geral das Colónias, [1930], p. 24.

[62] Galvão, *Exposição 1947,* pp. 11–12.

2. Missionaries, Borders and Forms of Denationalization

In the late 1920s and 1930s, Portuguese administrators in the border regions pointed to the existence of mission posts, both Catholic and Protestant, that had been built in the neighbouring colonies along the common border, as one of the main causes of native emigration. Not only did they attract Angolan natives by providing better education and medical assistance, some were also accused of actively recruiting Angolan natives for the mines abroad.[63] This ‘missionary threat’ appears in reports from all over the colony, but the situation in the south-eastern Province of Bié appears to have been particularly acute. António de Almeida, the Governor of that province, was certainly not the first to call attention to this problem, but in several of his mid-1930s annual reports he included a very suggestive map upon which Bié appeared to be surrounded and assaulted by a multitude of foreign missions, Catholic and Protestant alike (See Map 5.1).[64] Like his colleague from the south-western Huíla Province, Almeida was convinced that at least some of these mission posts had been deliberately established to draw the Angolan population over the border – and this not without success.[65] He maintained that they not only recruited male adults for the mines, but also children for their mission schools. Carlos Roma Machado – one of the leading colonial engineers in Angola in the first decades of the twentieth century who had headed several demarcation missions in the border region with Namibia between 1916 and 1928 – denounced that missionaries from Namibia had crossed the border to convince, often successfully, the Cuamatos and Cuanhamas people in southern Angola to have their daughters educated in their mission posts. Many, he added, did not return home, but were sent further south as maids.[66]

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[63] See, for instance, Bento Roma, *Relatório da Intendência do Cubango, Vol. I*, 10.07.1929, p. 36, in: AHU, MU, GM 599; António de Almeida, *Relatório do Governador da Província de Bié (1935-1936)*, 31.12.1936, vol. I, p. 77, in: AHU, MU, ISAU 1727; A. Lopes Mateus, *Relatório do Governador Geral de Angola, primeiro trimestre de 1935*, Abril 1935, pp. 15–16, in: AHU, L 5725.

[64] *Mapa indicando as Missões nacionais e estrangeiras existentes dentro da Província e as que estão estabelecidas em território estrangeiro ao longo da nossa fronteira*, in: António de Almeida, *Relatório do Governador da Província de Bié (1935-1936)*, 31.12.1936, p. 69, in: AHU, MU, ISAU 1727. An almost identical map can be found in his report of the previous year, see António de Almeida, *Relatório do Governador da Província de Bié (1934-1935)*, 31.12.1935, p. 85, in AHU, MU, GM 2894.

[65] Eurico Eduardo Rodrigues Nogueira, *Relatório do Governo da Província da Huíla (1940)*, June 1942, p. 100, in AHU, MU, ISAU 1667.2.

[66] See, for instance, Carlos Roma Machado’s articles in the daily journal *O Século* on 14 March 1929 and 30 March 1930, reprinted in Machado [de Faria e Maia], *Na fronteira sul,* pp. 139-141 and 145-148. See also Fontoura, Álvaro da, "Missões religiosas e ensino indígena", *III Congresso Colonial Nacional de 8 a 15 de Maio de 1930. Actas das Sessões e Teses,* Lisboa: Tip. e Pap. Carmona, 1934, here p. 11.

Map 5.1 – Map of the Province of Bié with Mission Stations

(Source: António de Almeida, *Relatório do Governador da Província de Bié (1935-1936)*, 31.12.1936, p. 69, in: AHU, MU, ISAU 1727)

Missionaries of the Congregation of the Holy Ghost, the most important – and until the 1930s even only male – Catholic congregation in Angola, agreed with this interpretation. According to Monsignor Keiling, the superior of the vast Cubango Mission Province in southern and south-eastern Angola, the Protestant border missions in Northern Rhodesia only

served one purpose, as he wrote to the *Maison-Mère* in Paris in 1929: “I have found out that all these Protestant mission posts have not done a great deal with regard to evangelization; they serve another purpose, the clandestine emigration to the English Barotseland, and I would not be afraid to fight against them.”[67] Not all Spiritans (or Fathers of the Holy Ghost) used such strong words, but they generally confirmed that the presence of border missions caused many to emigrate, especially young people.[68] On earlier occasions, Keiling himself had already deplored the fact that many Cuanhama boys were attracted by these missions; these same boys would later came back to look for young girls to marry, thus precipitating the gradual displacement of all the young people across the border.[69] When the Spiritans finally opened a mission post in Cuamato (west of Cuanhama) in 1940, its superior José Maria Felgueiras estimated that probably half of the population had already crossed the border “due to religious motives”.[70]

Convinced that religious missions constituted a powerful attraction that was capable of preventing the African population from wishing to leave the colony, many colonial officials proposed that the ‘missionary policy’ – or what they considered as such – of neighbouring colonies be replicated, and hence wished to promote the establishment of Portuguese mission stations in border regions.[71] A chain of “purely national” Catholic missions, as one administrator put it, should form a defensive “barrier” against the “pernicious influence” of the foreign missions and thus keep the population within the colony.[72] From the mid-1920s on, local administrators, district governors and, at times, even the Governor-General or the Minister of Colonies, exerted relentless pressure on the Fathers of the Holy Ghost to establish mission posts in sensitive border areas, notably in the south and east.[73] From the mid-1930s on, they did the same with the Benedictines of Singeverga.[74] In return, they offered ample

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[67] Keiling to Superior-General, 12.01.1929, in Archives Générales de la Congrégation du Saint-Esprit (Chevilly-Larue, henceforth AGCSSp), 3L1.17a3.
[68] See, for instance, Carlos Mittelberger to Superior-General, 15.08.1932, in AGCSSp, 3L1.17a3.
[69] Keiling to Superior-General, 27.09.1927, in AGCSSp, 3L1.17a2.
[70] Eurico Eduardo Rodrigues Nogueira, *Relatório do Governo da Província da Huíla (1940), June 1942*, p. 101-2, in AHU, MU, ISAU 1667.2.
[71] See, for instance, António Gonçalves, *Relatório anual de 1926-1927 da Circunscrição de Fronteira do Chitato (Distrito da Lunda)*, 30.09.1927, in: ANA, Cx. 907; Galvão, Henrique, *Huíla. Relatório do Governo,* Famalicão: Tipografia Minerva, 1929, p. 163. See also Machado, Ernesto, *No Sul de Angola,* Lisboa: Agência Geral do Ultramar, 1956, pp. 399–402.
[72] Quotes from António Gonçalves, *Relatório anual de 1927-1928 da Circunscrição de Fronteira do Chitato (Distrito da Lunda)*, 30.09.1928, in: ANA, Cx. 907.
[73] See, for instance, Keiling to Superior-General, 27 September 1927, 15 December 1927 and 25 May 1928, in AGCSSp, 3L1.17a2 and Mittelberger, 15 August 1932 and Keiling to Superior-General, 2 July 1931 in AGCSSp, 3L1.17a3. For further examples, see, for instance, António Gonçalves, *Relatório anual de 1926-1927 da Circunscrição de Fronteira do Chitato (Distrito da Lunda)*, 30.09.1927, in: ANA, Cx. 907; Manuel Pereira Figueira, *Relatorio Curador 1938*, p. 30-32, in AHU, MU, ISAU 2243.
[74] The Benedictines of Singeverga (Portugal) were put in charge of the south-eastern district of Moxico in 1933 and thus became the second exclusively male Catholic congregation in Angola. See Keiling an Mgr et TRP,

material support, notably housing facilities in former administrative posts, state farms *(granjas)* or 'lay missions'.

This overt support for religious missions constituted a break with the anticlerical position held by portions of the political elite during the First Republic (1910-1926). José de Oliveira Ferreira Diniz, for example, Director of the Native Affairs Department in Angola in the 1910s and early 1920s as well as a freemason**,** was particularly critical of the deeds performed by the missionaries. He claimed that their pursuit to destroy local beliefs stood in direct contrast with one of the basic imperatives of modern colonization, i.e. the "respect for customs and traditions". Missionary policy would undermine the structures of African societies, ultimately bringing them to collapse and therefore producing detribalized subjects.[75] With other republicans in both metropole and colony, Diniz supported the experiment of 'lay missions' *(missões laicas)* in the colonies (1917-1926). After their education at the newly established Institute of Colonial Missions in Portugal, non-religious 'civilizing agents' were sent to the colonies to civilize the native population through technical, moral and hygienic education and through the diffusion of the Portuguese language.[76] These lay missions were not meant to replace the religious ones, at least not in the short-term, but were intended as a valid alternative.[77] Since the history of the lay missions in Angola has not yet been written, it is unclear to what extent they were accepted, but they clearly received much support in the early 1920s from High Commissioner Norton de Matos, another leading freemason.[78]

In 1926, the First Republic fell, and the lay missions followed suit shortly thereafter. In retrospect, they were portrayed as a very expensive experiment that had proved highly ineffective in winning over the minds of the native population.[79] The lay missionaries had not been well selected nor had they been well trained, according to a former settler. They also had

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06.05.1933, in AGCSSp, 3L1.17a3 and António de Almeida, *Relatório do Governador da Província de Bié (1935-1936)*, 31.12.1936, pp. 70-71, in: AHU, MU, ISAU 1727.

[75] "Actas das sessões", in: *II Congresso Colonial Nacional de 6 a 10 de Maio de 1924. Teses e Actas das Sessões,* Lisboa, 1924, pp. 1–294, here pp. 241–242; Diniz, José de Oliveira Ferreira, *A missão civilisadora do estado em Angola,* Lisboa: Centro Tipograpfico Colonial, 1926, pp. 83ff. On the subject of detribalization, see also Chapter 4.

[76] Jerónimo, Miguel, "Os missionários do Alfabeto nas Colónias Portuguesas", in: Curto, Diogo Ramada (ed.), *Estudos de Sociologia da Leitura em Portugal no Século XX,* Lisboa: Fundação Calouste Gulbenkian; Fundação para a Ciência e Tecnologia, 2006, pp. 29–67, here pp. 59–62; Madeira, Ana Isabel, "Popular Education and Republican Ideals. The Portuguese Lay Missions in Colonial Africa, 1917-1927", *Paedagogica Historica* 47,1-2 (2011), pp. 123–138.

[77] Madeira, *Popular Education*, p. 127.

[78] See *Decreto 85*, 20.12.1921, in: Secretaria de Colonização e Negócios Indígenas (Província de Angola), *Legislação Provincial,* Loanda: Imprensa Nacional de Angola, 1921, pp. 25–29 and Matos, *A Província de Angola,* pp. 96-97; 117-126, which included a list of all existing lay missions in 1923.

[79] Pinto, Júlio Ferreira, *Angola. Notas e comentários dum colono, Rev. e pref. pelo Ferreira do Amaral,* Lisboa: Oficinas da secção de publicidade do Museo comercial anexo ao Inst. superior de comércio de Lisboa, 1926, pp. 159–160. According to Teixeira, the *missões civilizadaores laicas* had cost 3.5 Million escudos between 1917 and 1926, see Teixeira, Alberto de Almeida, *Angola intangivel (notas e comentários),* Porto: Oficinas Gráf. da Sociedade de Papeleria, 1934, p. 607.

not exhibited the necessary "unselfishness, self-denial and stoicism with which the Catholic missionaries [had] dedicated themselves, with heart and soul, to the task of civilizing through catechism and professional education in Africa."[80] Critics almost unanimously identified the mental disposition of the lay missionaries as the main reason for the failure of the experiment. "Civil servants with pension rights", as Galvão referred to them, necessarily lacked the "spirit of self-denial and real notion of sacrifice" that was so very needed in the interior of Angola.[81] Unlike the Catholic missionaries and their heroic "works of love", the lay missions were incapable of coping with the primitive state of savagery in which many natives still lived (nor with the moral depravation of many whites), Galvão claimed.[82] In the opinion of Ernesto Machado, head of the military staff in Angola, the very foundations upon which the lay missions were built – their laity – lay at the heart of the problem. The natives, he claimed, were "profoundly superstitious" people and were consequently attracted by the mystic aspects of Christian rites. Lay missions therefore ran counter to the innate character of the natives.[83]

The anti-clericalism and the lay mission movement of the First Republic were formative experiences for state-church relations after 1926. Obviously, the colonial state had not fought or expelled the Catholic missions in Angola as was feared when the anti-clerical legislation was passed at the beginning of the First Republic. Despite some temporary conflicts in the first few years, often at the local level, the relations 'on the ground' between the missions and the colonial state in Angola did not suffer the same profound alterations as those between church and state in the metropole.[84] In fact, with the disappearance of the lay missions, the civilizing and nationalizing programme of these last was delegated to the Catholic missionaries.[85] In 1926, the Colonial Ministry ordered the fundamental reorganization of the relationship between state and church. It aimed to incorporate missionaries as civilizing and nationalizing agents of the colonial state, and in exchange for

[80] Pinto, *Angola,* p. 160.
[81] Galvão, *Huíla,* p. 162 (quotes). See also António Gonçalves, *Relatório anual de 1927-1928 da Circunscrição de Fronteira do Chitato (Distrito da Lunda)*, 30.09.1928, in: ANA, Cx. 907, and Galvão, Henrique, "Discurso proferido, no Porto, pelo sr. Capitão Henrique Galvão, ilustre director-técnico da Exposição Colonial", *Missões de Angola e Congo* 14,7 (1934), pp. 124a-124e.
[82] *Ibid.,* pp. 124b.
[83] Machado, *No Sul de Angola,* pp. 399–402.
[84] Correia, Joaquim Alves, *Civilizando Angola e Congo. Os missionários do Espírito Santo no padroado espiritual português,* Braga: Tipografia Sousa Cruz, 1922, pp. 73-74; 88-93. For the 'religious war' in Portugal during the First Republic, see, for instance, Moura, Maria Lúcia de Brito, *A "guerra religiosa" na I República,* 2nd revised and augmented ed., Lisboa: Universidade Católica Portguesa, 2010 [2004]; Carvalho, David Luna de, *Os levantes da República. Resistência à laicização e movimentos populares de repertório tradicional na 1a República,* Porto: Edições Afrontamento, 2011.
[85] For this argument, see Jerónimo, *Missionários do Alfabeto,* pp. 59–62.

this, it would allocate more financial support to them.[86] Moreover, unlike their lay competitors before them, Catholic missionaries were now portrayed in the general colonial discourse as the perfect colonizers.

In spite of the new ties between state and church, the project of colonial mimesis at Angola's borders initially met with little success. Until the late 1930s, only one mission post was effectively opened at an important border location, in Omupanda, where a lay mission had previously functioned.[87] One of the reasons was certainly that which the mission superiors Keiling (in Cubango) and Bonnefoux (in south-western Cunene) repeatedly communicated to the colonial administration, i.e. that they did not have sufficient personnel to staff new mission posts.[88] Indeed, the missionaries of the Holy Ghost in southern Angola were profoundly frustrated due to their lack of personnel. Their correspondence with the Mother House in Paris is replete with requests for more missionaries.[89] These reinforcements were supposed to come from the Portuguese branch of the Congregation but they did not, since in Portugal there had been a chronic lack of vocations from the late nineteenth century (which would continue until practically decolonization).[90] It was, therefore, with regret that Father Mittelberger, the superior of the Omupanda mission, acknowledged in 1932 that the lack of personnel impeded the expansion of his station. "The Father Oblates of Mary [Immaculate], our neighbours in the south," he stated "wonder why we don't multiply our missions. In our place, they say, they would already have split up Omupanda in three or four new missions along the border, which they all hoped to make prosperous."[91] Ten years later, the Governor of Huíla was still hoping for such a development.[92]

However, there was also another reason that impeded the expansion of new missions. While government and missionaries might have agreed that religion was one of the causes of emigration, they did not share the same vision on the necessity and the means with which to

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[86] Ministério das Colónias, *Decreto 12.485 que promulga o Estatuto Orgânico das Missões Católicas Portuguesas de África e Timor*, 13.10.1926, in: *Diário do Governo, Série I,* 13.10.1926, pp. 1536–1543.
[87] See Keiling to Superior-General, 27 Sept. 1927, 15 Dec 1927 and 26 July 1928, in: AGCSSp, 3L1.17a2.
[88] See, for instance, Keiling to Superior-General, 04.08.1932, AGCSSp, 3L1.17a3; Galvão, *Huíla,* p. 163; Bento Roma, Relatório da Intendência do Cubango, Vol. I, 10.07.1929, pp. 36-37, in: AHU, MU, GM 599; Manuel Pereira Figueira, *Relatório Curador 1938*, p. 30-32, in: AHU, MU, ISAU 2243.
[89] See, for instance, Keiling to Superior-General, 6 May 1933, reproduced in Brásio, António (ed.), *Spiritana Monumenta Historica - Series Africana I, Angola, Vol. 5 (1904-1967),* Pittsburgh; Leuven: Duquesne University Press; Editions E. Nauwelaerts, 1971, pp. 607–611.
[90] See, for instance, Rapport du R.P. Pinho, visiteur des missions d'Angola et Congo (Octobre 1931-Mars 1932), in: AGCSSp, 3L1.18.2bis. For the general picture, see, for instance, Péclard, Didier, "« Eu sou americano ». Dynamiques du champ missionnaire dans le planalto central angolais au XXe siècle", *Lusotopie* (1998), pp. 357–376, here p. 367.
[91] Mittelberger to Superior-General, 15.08.1932, in: AGCSSp, 3L1.17a3.
[92] Eurico Eduardo Rodrigues Nogueira, *Relatorio do Governo da Provincia da Huila, referente ao ano de 1940*, June 1942, p. 99, in AHU, MU, ISAU 1667.2.

stop it. Keiling, for example, was particularly reluctant to give in to government demands for the establishment of new posts in what he considered to be remote and sparsely populated areas such as the *Baixo Cubango*, the vast district located on Angola's south-eastern border, simply for the sake of emigration control. While, to the intendent of Cubango, he justified his refusal with the lack of personnel, he highlighted another reason to the *supérieur général* of his congregation in Paris: "That region is a desert," he pointed out, "there are not even 2,000 souls in it; it is at the end of the world without communication with our other missions. I think that when it comes to establishing a mission, we must above all ascertain that there is a population, that there are souls to save, and not only consider political purposes."[93] Overall, the Holy Ghost Fathers were sympathetic to the Portuguese requests for missionary expansion into new areas, but they were not willing to fully subordinate themselves to the Portuguese *raison d'état* by backing administrative occupation indiscriminately. In addition to the chronic lack of personnel, the reluctance of the missionaries to settle in certain border areas was a consequence of the fact that state and church adhered to different logics of occupation. The administrative occupation in Angola obeyed, at least in theory, the imperative of comprehensive territorial control, pushing the colonial state to evenly distribute administrative personnel throughout the territory.[94] The Congregation of the Holy Ghost, on the other hand, was not bound by such a goal. The Congregation preferred to apply its scarce human and material resources to those locations they considered to be most promising and most strategic – that is, fertile land with hygienic living conditions near a large population that was well-disposed towards mission work, and the presence of other mission posts within a 'reasonable' distance.[95] Accordingly, the Congregation found enough missionaries to open a host of new branches, which met their own requirements, in the colony's interior during the late 1920s and 1930s.[96] It was not entirely without reason that Carlos Tavares Afonso dos Santos, Governor of Huíla in 1935, after praising the general loyalty of the Spiritans to the Portuguese cause and their beneficial influence on the African population, also expressed his discontent with the locations of their mission posts. He accused them of being too concerned with the material

[93] Compare Bento Roma, *Relatório da Intendência do Cubango, Vol. I*, 10.07.1929, p. 37, in: AHU, MU, GM 599 with Keiling to the Superior-General, 01 May 1929, in: AGCSSp, 3L1.17a3.
[94] For the dominant model of administrative occupation in Angola, see de Matos, *A Província de Angola,* pp. 81–86.
[95] See, for instance, "Missão nova na regiao do Cubango", *Missões de Angola e Congo* 10,1 (1930), p. 7; "Ecos das missões", *Missões de Angola e Congo* 10,9 (1930), p. 188; Brásio, *Spiritana - Angola, Vol. 5,* pp. 607-611; 632-633; Bonnefoux to Superior-General, 19 Oct 1927, in: AGCSSp, 3L1.14a8; Rapport du R.P. Pinho, visiteur des missions d'Angola et Congo (Octobre 1931-Mars 1932), in: AGCSSp, 3L1.18.2bis.
[96] Brásio, *Spiritana - Angola, Vol. 5* enumerates many of them.

interests of the Mother House, and for this reason they established their stations "not always where it would be necessary, but always where the land is fertile and the income secure."[97]

Furthermore, when it came to Catholic border missions in the surrounding colonies, missionaries and colonial officials took a different stance. With respect to their pernicious influence, colonial administrators did not make a distinction between Catholic and Protestant missions, since, from the state's perspective, both were a population drain on Angola. For the Fathers of the Holy Ghost, conversely, other Catholic missions did not pose any threat; on the contrary, they were viewed more as collaborators. One of the arguments Keiling invoked against the foundation of a mission post in the *Baixo Cubango* was precisely the presence of two (German) Catholic mission stations nearby, to which he had even handed over the jurisdiction of that area.[98]

It was only after almost fifteen years of missionary expansion and upon pressure from the Minister of Colonies Francisco Vieira Machado (1936-1944) that the Congregation of the Holy Ghost finally established a mission post in the Cubango area in 1940.[99] During this period, the number of both Spiritan mission stations and missionaries had almost doubled to 50 and 124 respectively.[100] This new station, situated at the border post of Cuangar, however, did not prove viable for the Fathers, one of the reasons being, according to them, the scarcity of the population. It was closed only two years later and, after some hesitation, the missionaries opened a station in Capico, more than 200km to the north of Cuangar, and hence much further away from the border.[101] Although it was short-lived, the Baixo Cubango mission was part of a broader strategy of missionary expansion into southern and south-eastern border areas, and was actively promoted by the Minister of Colonies. Upon his explicit recommendation, border mission stations were also opened in far-eastern Cuando (1939), along the border with Northern Rhodesia, and in the Cuamato area (1940), a border

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[97] Carlos Tavares Afonso dos Santos, *Relatório do Governo da Provincia da Huíla (1935)*, p. 27, in: AHU, MU, ISAU 1727. Under his pseudonym of Carlos Selvagem, Captain dos Santos, who was also a famous playwright, would later publish a series of monographs on the Portuguese Empire with Galvão. After a journey through Angola, the Portuguese protestant Bishop Eduardo Moreira issued a similar criticism of the profit-oriented craft workshops of the Catholic mission in Huíla, see Moreira, Eduardo, *Open letter to the bishop of Angola and the Congo. Reprinted from World Dominion, April, 1935,* London/New York: World Dominion Press, 1935, p. 7.

[98] Keiling to Superior-General, 1 May 1929, in: AGCSSp, 3L1.17a3.

[99] Brásio, *Spiritana - Angola, Vol. 5,* pp. 676–677; Junqueira, Daniel, "Pelo Sul de Angola", *Missões de Angola e Congo* 20 (1940), pp. 5-9; 41-44; 73-77; 103-108, here p. 75.

[100] Compare Melo, A. Brandão de, *Angola. Monographie historique, géographique et économique de la colonie destinée à l'Exposition Coloniale Internationale de Paris de 1931,* Luanda: Imprimerie Nationale, 1931, p. 43 and addenda between p. 42 and 43 with *Panorama missionaire de l'Angola* [1940], in Brásio, *Spiritana - Angola, Vol. 5,* pp. 747–757 and Missões de Angola e Congo 20 (1940), pp. 14 and 315. On this expansion, see also António Lopes Mateus, *Relatório do Governador Geral da Colónia de Angola (1936)*, p. 21, in: AHU, MU, ISAC 546.

[101] Costa, Cândido Ferreira da, *Cem anos dos missionários do Espírito Santo em Angola, 1866-1966,* Nova Lisboa: Livr. Sampedro Ed., 1970, pp. 312–315. The decision to give up the mission station was criticized by Oliveira, *Relatório Inspecção 1944,* p. 232.

territory west of Omupanda.[102] It was Vieira Machado's explicit aspiration to use missionaries as the vanguard of Portuguese colonization in these areas, in an attempt to counterbalance the injurious influence of the Protestant missions on the other side of the border and to prevent the African population from emigrating. To help the missionaries to overcome their reluctance (and their eternal complaints about the lack of funding), Vieira Machado provided additional subsidies for each of the three foundations, thus sparking the envy of the Archbishop of Luanda, who subsequently called for the establishment of similar strategic mission posts at the northern border, which "from a strictly national standpoint", were much needed and were naturally dependent on similar additional state funding.[103] Overall, Vieira Machado's project met with limited success. During his visit to Angola in 1942, he firmly encouraged the Bishop of Silva Porto to establish more mission posts in south-eastern Angola, but to no avail.[104]

The idea that foreign mission posts were 'stealing' 'Portuguese' natives was not new. The border debate mirrored how, for decades, Portuguese officials had thought of the foreign Protestant missions within Angola itself. Since their arrival to Angola in the late nineteenth century, the Protestant missions were often accused of having a subversive and denationalizing effect on the native population. On the one hand, Portuguese colonial officials and settlers pointed to the difference in denomination, denouncing the spread of Protestantism as an assault against the profound Catholic identity of Portugal and its Empire.[105] On the other hand, also the nationality of the Protestant missionaries themselves was considered a much graver danger. At least until the Second World War, all Protestant missions in Angola were of non-Portuguese origin and therefore were staffed with non-Portuguese nationals, mainly from Great Britain, the US, Canada and Switzerland.[106] At the heart of the accusations that were levelled against the Protestant missions lay the assumption that these last did not cleave to the

[102] On the establishment of the Cuando mission by the Benedictines of Singeverga, see, for instance, D. António Ildefonso dos Santos Silva, *Relatório da Diocese de Silva Porto referente ao ano de 1942*, 27.02.1943, p. 10 and Vieira Machado's *despacho* ('decision') on that report from 20.10.1943, p. 1, both in AHU, MU, DGEns 2344. For the Cuamato mission, see, for instance, Brásio, *Spiritana - Angola, Vol. 5,* pp. 672–673; Costa, *Cem Anos,* pp. 404–405; Junqueira, Daniel, "Relatório das Missões do Vicariato do Huambo relativo a 1939, enviado ao Snr. D. Moysés", *Missões de Angola e Congo* 20 (1940), pp. 133-136; 168-173; 195-200, here p. 170 and Junqueira, *Pelo sul,* p. 75.

[103] Brásio, *Spiritana - Angola, Vol. 5,* pp. 672-673; 676-677 and Moysés, *Relatório da Arquidiocese de Luanda referente ao ano de 1942*, 30.03.1943, pp. 5-6, in: AHU, MU, DGEdu 598.

[104] See Vieira Machado, *Despacho sobre o relatatório da Diocese de Silva Porto referente ao ano de 1942*, 20.10.1943, p. 1, in AHU, MU, DGEns 2344.

[105] See, for instance, Tucker, John T. (ed.), *Angola. The Land of the Blacksmith Prince,* London; New York; Toronto: World Dominion Press, 1933, p. 110; Moreira, Eduardo, *General Report of the Rev. Eduardo Moreira's Journey in the Portuguese African Colonies, 20th January to 23rd November 1934,* London/New York: World Dominion Press, [1935], p. 10.

[106] For an overview of the protestant missions in Angola until 1933, see Tucker, *Angola,* pp. 137–141. For a general history of the twentieth century, Henderson, Lawrence W., *The Church in Angola. A river of many currents,* Cleveland, Ohio: Pilgrim Press, 1992.

Portuguese imperial project because of their nationality. It was believed that they did not share the Portuguese vision of the gradual transformation of the native population into Portuguese subjects through the diffusion of the Portuguese language and customs, and that their actions, unconsciously or deliberately, rather resulted in the contrary, in leading the natives away from (their future integration into) the Portuguese nation.[107] Or as Eduardo Moreira, the much-respected President of the Evangelical Alliance of Portugal, put it: "Denationalization [...] the principal ground of the anti-missionary campaign [...] is based on the premise that the natives are Portuguese nationals, or candidates for Portuguese nationality through the diploma of *assimilados*, and that foreign missionaries, being unable to impart what they themselves do not possess, must therefore be regarded with suspicion."[108]

The topos of denationalization emerged in the late nineteenth century, when there was a large influx of foreign Protestant missionaries in both Angola and Mozambique. The dissemination of the idea coincided with widespread fears in Portugal that the country's weak economic and political position would lead to the loss of its colonies.[109] The foreign missionaries were mistrusted and viewed as potential Trojan Horses, a perception that gained momentum in the early twentieth century, when British and American Protestant missionaries were accused of having fomented anti-Portuguese rebellions in Bailundo (1902) and the Congo (1913).[110] Animosity peaked again in 1925, when the American professor of Sociology Edward Ross submitted a very critical report on native labour policy in Portuguese Africa to the Temporary Slavery Commission of the League of Nations, based on his observations during field work in Angola and Mozambique. A Portuguese inquiry into Ross's sources in

[107] See, for instance, Manuel Pereira Figueira, *Relatório do Curador Geral dos Indígenas da Colónia de Angola (1937)*, 15.05.1938, p. 41-42, in AHU, MU, ISAU 2243.
[108] Moreira, *General Report,* pp. 12–13.
[109] See, for instance, Ferreira, António Matos, "Correntes cristãs na definição do espaço colonial português", in: Bethencourt, Francisco; Chaudhuri, Kirti (eds.), *Do Brasil para África (1808-1930) (*História da Expansão Portuguesa; 4), Lisboa: Temas & Debates, 2000, pp. 425–443, here pp. 434–435. For a short overview of some of the more important of these protestant missions, see Birmingham, David, "Angola e a Igreja", in: Birmingham, David, *Portugal e África,* edited by and translated by Arlindo Barbeitos, Lisboa: Vega 2003, pp. 94–113, here pp. 106–110. On Portugal's weak position and the fear it would lose its colonies in the late nineteenth century, see Freeland, Alan, ""The Sick Man of the West". A Late Nineteenth-Century Diagnosis of Portugal", in: Earle, T. F.; Griffin, Nigel (eds.), *Portuguese, Brazilian, and African Studies. Studies Presented to Clive Willis on his retirement,* Warminster: Aris & Phillips Ltd, 1995, pp. 205–216. For its impact on colonialism in Angola, see Freudenthal, Aida, "Voz de Angola em tempo de ultimato", *Estudos Afro-Asiáticos* 23,1 (2001), pp. 135–169.
[110] Birmingham, David, "Merchants and Missionaries in Angola", *Lusotopie* (1998), pp. 345–355, here pp. 354–355; Wheeler, Douglas L.; Pélissier, René, *Angola,* London: Pall Mall Press, 1971, pp. 76–81. For the revolts in general, see Wheeler, Douglas; Christensen, C. Diane, "To rise with one mind. The Bailundo war of 1902", in: Heimer, Franz-Wilhelm (ed.), *Social Change in Angola,* München: Weltforum Verlag, 1973, pp. 53–92 and Vos, Jelmer, *The Kingdom of Kongo and Its Borderlands, 1880-1915* (Ph.D. Dissertation - School of Oriental and African Studies), 2005, pp. 216–248. For a general overview of the relationship between church and state in late nineteenth and early twentieth century Angola, see Ferreira, *Correntes cristãs* and Freudenthal, Aida, "Angola", in: Marques, A. H. de Oliveira (ed.), *O Império Africano, 1890 - 1930* (Nova História da Expansão Portuguesa; 11), Lisboa: Estampa, 2001, pp. 259–467, here pp. 426–429.

Angola accused him of having relied too heavily on the false and misleading information given by American missionaries.[111] After these occurrences, mistrust persisted and would be revived once more in the wake of the outbreak of the anti-colonial war in 1961.[112]

However, and here it becomes obvious that nationality and not denomination was the crucial issue, Catholic missionaries of foreign origin often faced the same sorts of accusations. In 1904, a lengthy debate was carried out in the National Assembly in Lisbon – and simultaneously in the Portuguese press – on the fact that most of the Holy Ghost Fathers in Angola were not Portuguese and thus had a denationalizing effect on the population.[113] Later, especially German or German speaking Fathers of the Holy Ghost became the objects of mistrust, but also for other reasons. During the German administration of South West Africa (until 1915), but also in the Interwar Period, German missionaries, like the German settlers in southern Angola, were generally suspected of preparing the terrain for an expansionist and revanchist German state.[114] At times, the entry of new German Fathers of the Holy Ghost to Angola was restricted, those present did not receive any subsidies from the Portuguese state, and in 1937 they were even threatened with expulsion by the Minister of Colonies Vieira Machado.[115] Overall, the state policy towards German, and foreign missionaries in general, was inconsistent.

From the 1920s onwards, the official policy of subsequent governments in Lisbon (and Luanda) aimed to 'nationalize' the colonial clergy. The idea that only in exceptional cases non-Portuguese Catholic missionaries were to be sent to the colonies, was firmly established in the most important legal texts on Catholic missions in Portugal's colonies: the *Estatuto*

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[111] See Ross, Edward Alsworth, *Report on Employment of Native Labor in Portuguese Africa,* New York: The Abbot Press, 1925 and the lengthy defence on the part of the colonial government in Angola: Santos, Oliveira, *Reply To The Accusations Addressed To The League Of Nations By Mr. Edward A. Ross Against The Portuguese In Angola,* Lisboa: Sociedade de Geografia de Lisboa, 1930 [1926]. On the Ross Report and the Portuguese reaction to it, see Ball, *The Colossal Lie,* pp. 41–52 and especially Jerónimo, Miguel Bandeira, *Livros Brancos, Almas Negras. A 'missão civilizadora' do colonialismo português, c. 1870-1930,* Lisboa: Imprensa de Ciências Sociais, 2010, pp. 27-30; 226-249.

[112] See Schubert, Benedict, *Der Krieg und die Kirchen. Macht, Ohnmacht und Hoffnung in Angola, 1961-1991,* Luzern: Edition Exodus, 1997; Henderson, *Church in Angola,* pp. 261–294.

[113] "As missões do Espírito Santo perante a Câmara dos Pares", *Portugal em África* 11,123 (1904), pp. 141–148.

[114] On pre-First World War German economic imperialism towards the Portuguese colonies and the secret negotiations on the repartition of the Portuguese colonies between Germany and Great Britain in 1913, see Tschapek, Rolf Peter, *Bausteine eines zukünftigen deutschen Mittelafrika. Deutscher Imperialismus und die portugiesischen Kolonien,* Stuttgart: Steiner, 2000. On the Interwar Period, see Linne, Karsten, *Deutschland jenseits des Äquators? Die NS-Kolonialplanungen für Afrika,* Berlin: Links, 2008.

[115] See, for instance, the discussion of the inconsistent Portuguese policy toward German missionaries in the letters of Father Bonnefoux, the superior of the Cunene mission area, written18 January, 20 June and 6 December 1921 and 14 March 1922 to the Superior-General in Paris, in: AGCSSp, 3L1.14a8. For another example, which concerned the Germans and Dutch alike, see also, Keiling to the Superior-General, 2 February, 1937, in: AGCSSp, 3L1.17a4. On the problem of subsidies, see, for instance, Bischofsberger, 20.02.1927, in: AGCSSp, 3L1.14a8. For threats of expulsion, see the letter of Mgr. Pinho to Father Feltin, 13 June 1937, and the letter of Father Feltin to the Superior-General in Paris, 25 June 1937, in: AGCSSp, 3L1.17a4.

Orgânico das Missões Católicas Portuguesas de África e Timor from 1926 and, fifteen years later, the Concordat and the Missionary Accord concluded between the Holy See and Portugal in 1940, as well as the Missionary Statute of 1941.[116] To the despair of the Director of the Religious Missions in Angola, Manuel Alves da Cunha, however, Portugal's output of Catholic missionaries remained so far below even the minimum requirements that Catholic congregations had to continue to send numerous non-nationals, notably French and Dutch to the colony.[117] During the 1930s, only 35 of 86 missionaries of the Holy Ghost Fathers were Portuguese. The Concordat of 1940 did not fundamentally change the situation.[118] In 1946, the Holy Ghost Congregation still had only 64 Portuguese to 94 non-Portuguese missionaries in Angola. Considering all Catholic congregations together, the number of Portuguese missionaries (102) just equalled that of the non-Portuguese.[119] But the Concordat ensured the dominance of Portuguese priests in the hierarchy. Missionary divisions disappeared or were subordinated to the dioceses, which had to be led, without exception, by Portuguese nationals.[120]

Yet, this did not eradicate fears of denationalization. Immediately after the Second World War, the Holy See's project to send 100 missionaries from different congregations and nationalities to Angola elicited a strong reaction from Marcello Caetano, the Minister of Colonies (1944-1947).[121] He established that, among the Catholic missionaries of each diocese, the number of non-Portuguese could not exceed three quarters of the total number of Portuguese. Caetano grounded his decision in the responsibility missionaries had in the education of the African population. How were missionaries supposed to teach African

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[116] These texts all stated that missionaries destined for the Portuguese colonies should normally come from Portugal. Only when they were not numerous enough, the Bishops and the heads of the missionary districts (*vigários* and *prefeitos apostólicos*) were allowed to engage the missionary personnel of other nationalities, but only after previous approval by the Holy See and the Portuguese Government. For the Portuguese Government, one of the conditions for approval was that they were fluent in spoken and written Portuguese. See Ministério das Colónias, *Decreto 12.485,* preamble and art. 10 and 14; *Concordata entre a Santa Sé e a República Portuguesa*, 07.05.1940, in: *Diário do Governo, Série I,* 10.07.1940, pp. 756–763, art. 28; *Acordo missionário entre a Santa Sé e a República Portuguesa*, 07.05.1940, in: *Diário do Governo, Série I,* 10.07.1940, pp. 763–767, art. 2, and with the most detailed stipulations: *Decreto-Lei n. 31.207 que promulga o Estatuto Missionário*, 05.04.1941, in: *Diário do Governo, Série I,* 05.04.1941, pp. 319–325, art. 15-17.

[117] See, for instance, Manuel Alves da Cunha [Director das missões religiosas] to Director dos Serviços e Negócios Indígenas, Luanda, 22.05.1931, in: AHU, MU, DGEdu_RCM_P57,Cx045, pasta 4 (Angola), subpasta 2.

[118] Péclard, Didier, "Religion and Politics in Angola. The Church, the Colonial State and the Emergence of Angolan Nationalism, 1940-1961", *Journal of Religion in Africa* 28,2 (1998), pp. 160–186, here p. 168. For the numbers, see Gabriel, Manuel Nunes, *Angola, cinco séculos de cristianismo,* Queluz: Literal, 1978, p. 435. According to Gabriel, only one quarter (71 out of 284) of all Spiritan missionaries sent to Angola between 1880 and 1940 were Portuguese.

[119] *Relatório geral do movimento missionário do império português*, included in Mons. Humberto Mozzoni to Salazar, 11.12.194[6], in ANTT, AOS/CO/UL-1D, pasta 18.

[120] *Acordo missionário (1940)*, art. 2 and *Decreto-Lei n. 31.207,* art. 9.

[121] Marcello Caetano, *Nota acerca das restrições postas à entrada de missionáios católicos estrangeiros nas colónias portuguesas*, 14.12.1946, and other documents in ANTT, AOS/CO/UL-1D, pasta 18.

children to speak, read and write Portuguese, if they themselves had not mastered the language, he asked.

As I will show, however, most of the debate over denationalization prior to 1940 focused on the Protestant missions. My claim is that the persistent doubts cast on the loyalty of the Protestants to the Portuguese imperial project echoed profound anxieties regarding Portugal's position as a colonizing power on the international stage, but also the self-critical awareness that the state and the Catholic church lacked control over the African population and, especially, lacked the means with which to capture their hearts and minds. I will also argue that the mistrust of the Protestants was nurtured by a strong feeling of inferiority amongst Portuguese colonial officials and Catholic missionaries. I claim that these psychological dispositions toward the Protestant missions in Angola also coloured the attitude toward the perceived 'danger' of foreign missions at the borders, and vice versa. Both debates were intimately connected and therefore must be analysed as two sides of the same coin.

Complaints of inferiority were based on both quantitative and qualitative arguments. On the one hand, in the 1920s and 1930s colonial officials and missionaries alike often lamented that due to the Protestant 'wave of invasion', Catholic missionaries were largely outnumbered by their Protestant rivals.[122] Certainly, Álvaro da Fontoura, professor at the Colonial University *(Escola Superior Colonial)* and later also Member of the Imperial Council *(Concelho do Império Colonial)*, exaggerated the imbalance when he claimed at the First Congress of the União Nacional in 1934 that, in Angola, there were only 42 Catholic missions as opposed to the 122 Protestant ones.[123] Around the same period, the Protestants themselves only counted a total of 52, from eleven different mission congregations.[124] But Fontoura's exaggeration was symptomatic. It is difficult to compare the number of 'missionaries' between both denominations, since the scope of the term 'missionary' differed between them, but even if the definitions of the respective actors are used, the picture was not so grim : around the mid-1930s, 239 Protestant missionaries rivalled 119 Catholic missionaries, 91 sisters and 113 lay auxiliaries, and a total of 2,854 Protestant 'national workers' versus the 2,750 Catholic 'native catechists'.[125]

[122] See Melo, *Angola,* pp. 43–45; Correia, Joaquim Alves, "Onda que invade. As missões protestantes em Angola", *Missões de Angola e Congo* 14,1 (1934), pp. 12–13.
[123] Fontoura, Álvaro da, "Missões religiosas nacionais e estrangeiras", in: União Nacional (ed.), *Primeiro Congresso da União Nacional, Lisboa 26 a 28 Maio 1934. Discursos, teses e comunicações,* vol. IV, Lisboa: Edição da União Nacional, 1935, pp. 335–410, here pp. 360–361. For an unclear reason, Fontoura had ascribed 86 mission posts to the Baptist Missionary Society, when it only had three in Angola, see Tucker, *Angola,* p. 139.
[124] Tucker, *Angola,* pp. 137–141; Moreira, *General Report,* p. 5.
[125] For Protestants, see the numbers in Tucker, *Angola,* pp. 137–141 and Moreira, *General Report,* p. 20. For Catholics, see the numbers given by the Director of Missions in Angola in Cunha, Manuel Alves da, "Missões

Although Catholic missions were clearly in a position of numerical inferiority in some parts of the colony, notably in the south-eastern Province of Bié, this disparity in itself cannot justify the intense anxieties that the Protestant influence generated.[126] Fears of material and even intellectual inferiority greatly contributed to these anxieties. Protestant missions were considered to have much greater resources, which naturally enabled them to provide more substantial medical assistance to the native populations, but also to provide better education, higher salaries and European style clothes to their catechists. Many identified these two elements – better medical assistance and well-educated, zealous catechists – as the eye-catching advantages of the Protestants over their Catholic counterparts and as the key factors for the success Protestant proselytism enjoyed in the colony. Africans were believed to be very sensitive to these issues and thus to be more attracted to the Protestant missions.[127] In the interior of the colony, where state doctors were still scarce in the Interwar Period, Portuguese civil servants and settlers were certainly less critical of these medical services from which they also benefited. In the discourse of higher-ranking officials, however, the superiority of Protestant medical assistance was portrayed as a real danger, since it diminished Portugal's prestige in the eyes of the native population. Governor Lopes Mateus, for example, wanted Catholic missions to emulate the Protestant example and to provide medical assistance "that does not diminish us in the eyes of the natives, when they compare it to what the Protestant organisms grant."[128] With respect to the Protestant catechists, Keiling described the power of attraction, with which these intermediaries were vested, in the following way: "As they [the Protestant missions] are very rich, their catechists, which are dressed in European style and

Católicas", in: Mouta, Fernando (ed.), *Generalidades sobre Angola. Para o 1.° Cruzeiro de Férias às Colónias Portuguesas,* Luanda: Imprensa Nacional, 1935, pp. 65–78, here pp. 73–74.

[126] See, for instance, Correia, *Onda que invade*; Fontoura, *Missões religiosas (1935),* p. 361 and the telling maps of south-eastern Angola included in the reports of the Governor of Bié, which displayed the ubiquity of the 'enemy' at the borders but also within (see footnote 64).

[127] See, for instance, Manuel Pereira Figueira, *Relatório do Curador Geral dos Indígenas da Colónia de Angola (1937)*, 15.05.1938, p. 43-44, in AHU, MU, ISAU 2243. On the issue of medical assistance, see, for instance, Daniel Gomes Junqueira, Préfet Apostolique du Cubango en Angola, *Rapport Quinquennal pour la S.C. de la Propagande*, 25.01.1941, p. 18, in: AGCSSp, 3L1.18.6; Eurico Eduardo Rodrigues Nogueira, *Relatório do Governo da Província da Huíla (1940)*, June 1942, p. 103-106, in AHU, MU, ISAU 1667.2. On the education and clothes of the protestant catechists, see, for instance, Francisco dos Santos Serra Frazão, *Relatorio da Curadoria Geral dos Indigenas, referente aos anos de 1939 e 1940, apresentado pelo chefe do expediente da repartiçao central, no impedimento do respectivo Chefe e Curador Geral*, 25.06.1941, pp. 29–30, in: AHU, MU, ISAU 1725; A. Soromenho, *Relatório do Governador de Distrito da Lunda (1931)*, p. 247, in: AHU, MU, GM 601.

[128] António Lopes Mateus, *Relatório do Governador Geral da Colónia de Angola (1936)*, p. 24, in: AHU, MU, ISAC 546. Similarly: Francisco Vieira Machado, *Despacho sobre o relatatório da Diocese de Silva Porto referente ao ano de 1942*, 20.10.1943, p. 5, in AHU, MU, DGEns 2344. On protestant and Catholic medical assistance, see Chapter 1 and 3.

ride on bicycles, look down at ours from up on high, and as they particularly help the Blacks to install and dress themselves, their influence is immense."[129]

The greater appeal of the Protestant missions was not only explained through the prestige of the catechists, but also exemplified by the better preparation and living conditions of the missionaries themselves. In his already cited conference paper, Fontoura highlighted that Protestant, and foreign missionaries in general, were generally better educated and better prepared for life and work in the colonies.[130] Even more interestingly, colonial officials in Angola invoked the superior lifestyle of the Protestant missionaries as a crucial factor in the Africans' decision-making process. Thus, for the experienced colonial administrator Artur Ernesto de Castro Soromenho, denationalization was the outcome of the contrast between the comfortably installed, well-fed and hygienic Protestant missionaries and the poor living conditions and poor bodily hygiene of their Catholic counterparts. "Perspicacious as they were", the natives would most certainly notice the difference betwixt the two and, given the choice, would opt for the more prestigious Protestants.[131]

This 'native gaze' played a crucial role in the recurrent accusations of denationalization brought against the Protestants. As I will illustrate with further examples, the metaphorical eyes of the natives reflected Portuguese anxieties about the country's position as a colonizing power in the world and its shortcomings 'on the ground', which the presence of the 'richer' and 'more progressive' Protestants brought to the foreground. The colonizers feared that what the colonized people might see and hear was not advantageous for them; they feared that the Portuguese and their colonizing efforts would be seen as inferior and therefore be discredited and that this would ultimately lead to the destabilization of colonial rule. As the interim Governor of Bié stated in 1931: "Just the resources they [the Protestant missions] have are enough to humiliate us in the eyes of the natives".[132] Thus, for many, the problem with the Protestant missionaries was not just a question of their loyalty to the Portuguese cause. Their mere presence intrinsically 'denationalized' the native population because it caused the Portuguese to lose prestige in the eyes of the natives. The natives would

[129] Keiling to the Propaganda Fide, 04.10.1919, in: AGCSSp, 3L1.11a2. Others also wrote about the protestant catechists' feeling of superiority, see, for instance, A. Soromenho, *Relatorio do Governador de Distrito da Lunda (1931)*, p. 247, in: AHU, MU, GM 601. For a general discussion of the role and position of intermediaries in colonial rule, see Introduction.

[130] Fontoura, *Missões religiosas (1935),* pp. 394–398. Fontoura used this diagnosis to appeal for more Portugese Catholic missionaries with university degrees and specific colonial education.

[131] A. Soromenho, *Relatorio do Governador de Distrito da Lunda (1931)*, pp. 246-247, in: AHU, MU, GM 601.

[132] António Gouveia da Silva, *Relatório do Encarregado do Governo do Distrito do Bié, ano de 1931*, 19.02.1932, p. 15, in: AHU, MU, AGC 2336.

inevitably notice the differences or, as one observer put forward, even interpret the mere presence of Protestants in Angola as a Portuguese dependency on foreign powers.[133]

The fear of the loss of prestige was particularly palpable in the stories that circulated in and between colony and metropole about how Protestant missionaries, usually the Americans, *deliberately* tried to humiliate the Portuguese in front of the African people. In one of the most widespread stories, American missionaries were accused of comparing America with a big stone and Portugal with an egg to their pupils. The missionaries would then let the stone fall and crush the egg, and thus instigate great bouts of laughter in the audience. For the Portuguese who retold this story, for example in periodicals or at colonial conferences in the metropole, it was the ultimate proof of the widespread assumption that Protestant missionaries sought to "diminish Portugal, by dignifying the nation they represented in the eyes of the natives."[134] Numerous variations of this story circulated. Sometimes, the comparison was made between a stone and a small heap of clay, which would dissolve at the (first) rain.[135] Or, in an allusion to the difference in size between the two countries, the comparison would be made between a pumpkin and a nut, between an orange and a grain of corn or even between a keg of beer and a single glass of it.[136] In a different story, which was largely commented upon in Lisbon newspapers, a British evangelical missionary was even believed to have taught his pupils that the Portuguese had been the ones who had killed Jesus Christ.[137] A salient characteristic of these stories, which proliferated in the Interwar Period, is that they were extremely vague: neither the name of the Protestant missionary nor the exact date and place in which they were originally recounted were ever mentioned. Unlike the very traceable, albeit not always well-founded, complaints about the numerical and qualitative superiority of the Protestant missions, these stories did not refer to palpable and remediable shortcomings in colonial policy. They expressed a general sense of anxiety with regard to Portugal's position in the world. Again, the central feature of these stories was the gaze of the African pupils and their laughter at Portugal's inferiority.

The success of the 'comparison story' however does not hide the fact that many colonial practitioners did not believe the systematic, deliberate actions of disloyalty on the part of the Protestant missionaries or that they simply did not consider the problem in terms of

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[133] Alves Correia in *Actas das Sessões do II Congresso Colonial Nacional (1924)*, pp. 243–244.

[134] Fontoura, *Missões religiosas (1935),* pp. 361–362.

[135] Romas Machado in *Actas das Sessões do II Congresso Colonial Nacional (1924),* p. 239.

[136] Moreira, *Open letter,* p. 9; Figueiredo, J. M., "No seminário das missões em Fraião - Braga", *Missões de Angola e Congo* 10,5 (1930), pp. 108–110, here p. 108. For further variations, see also Teixeira, *Angola intangivel,* p. 608; Molar, Serafim, "Missões Católicas e Missões Protestantes. Um simples paralelo", *Missões de Angola e Congo* 13,11 (1933), pp. 283–284; Fontoura, *Missões religiosas,* p. 10.

[137] Moreira, *Open letter,* pp. 10–11.

loyalty versus disloyalty.[138] They did not necessarily dissent – and generally they did not – from the large consensus regarding the denationalizing effect of Protestant missions, as had been asserted by leading Portuguese colonialists in the 1920s and 1930s, but for them, the problem had much deeper roots. The inevitably 'un-Portuguese' behaviour of the foreign missionaries was at fault. As António de Almeida, Governor of Bié, worded this idea in 1935: "Foreigners, even those with the best intentions, denationalize, without noticing it [...]. Anglo-Saxons (English or North-Americans, which are the majority of those who work in Bié), which differ from us through language, race, religion, inclinations, customs and traditions, will inevitably mould the raw black material [produto escuro] in their image and resemblance and will thus make him [the African] very different from us, everything else would not be logical. Hence, they denationalize our Africans [pretos]".[139]

Here, 'denationalization' referred to a second layer of meaning, or a second step in a process in which the mere 'physical loss' of native Africans to the Protestants constituted only the first. This second step was concerned with processes of internalization, of subject-making. Almeida's view on denationalization reveals a top-down perspective, in which subject-making is framed as a process of diffusion (and education), rather than of colonial mimesis or mimicry on the part of the 'colonized'.[140] However, both processes were not mutually exclusive, and either way, through the regular contact between Protestant missionaries and their pupils, the latter would take on identitary traits from the former, and thus become civilized, but not become like the Portuguese. Implicitly, Almeida's words echoed the assimilationist ideology prevalent in Portuguese colonialism of the late nineteenth and twentieth century, which asserted that the ultimate goal of the colonial enterprise was to turn Africans into Portuguese citizens. Within the logic of this ideology, 'Protestantized' and 'foreignized' Africans would be lost to the future nation. Opponents of the Protestant missions underscored their nationalist criticism by claiming that the alienation of many Africans was already palpable in their self-designation. When asked about their nationality,

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[138] See, for instance, Manuel Pereira Figueira, *Relatório do Curador Geral dos Indígenas da Colónia de Angola (1937)*, 15.05.1938, p. 45, in: AHU, MU, ISAU 2243; Frazão, *Relatório (1939-1940),* pp. 48–51.

[139] António de Almeida, *Relatório da Província de Bié, referido ao ano economico de 1934-1935*, vol. I, p. 77, in: AHU, MU, GM 2894. Almeida expressed this idea already in an earlier report, see António de Almeida, *Relatório do Governador do Distrito do Moxico (1931)*, Febr. 1932, p. 58, in: AHU, MU, GM 600.

[140] For a similar top-down perspective, see José Vicente Caldeira do Cazal Ribeiro [governador do distrito do Congo] to Chefe da Repartição do Gabinete do Governo Geral de Angola, 28.01.1932, in: AHU, MU, DGEdu_RCM_P57,Cx045, pasta 4 (Angola), subpasta 2. On colonial mimesis and mimicry, see Bhabha, Homi, "Of Mimicry and Man. The Ambivalence of Colonial Discourse", *October* 28 (Discipleship: A Special Issue on Psychoanalysis) (1984), pp. 125–133 and Ferguson's incisive critique of some 'overinterpretations' in Ferguson, James, "Of mimicry and membership. Africans and the 'New World Society'", *Cultural Anthropology* 17,4 (2002), pp. 551–569.

many Africans would define themselves as Americans or English.[141] Although people like Moreira and Serra Frazão maintained that these Africans were only expressing their religious affiliation with American or English missions, this 'story' was a dominant theme in colonial writing in the Interwar Period, and even after.[142]

International conventions that guaranteed the free circulation of Christian missionaries in African colonies impeded Portugal from expelling all Protestant missions from its colonies or from denying them access from the outset. Restrictions could only be applied "for the maintenance of public security and order" or for constitutional reasons.[143] The Portuguese government remained committed to these conventions irrespective of political regime changes.[144] They also seem to have been generally respected in Angola, although, in a few cases, Protestant missionaries were prosecuted or even expelled on the grounds stipulated in the conventions. In 1931, for example, Governor-General Eduardo Ferreira Viana closed a mission station of the (English) Angola Evangelical Mission in Ambrizete giving the reason that there had been an "incompatibility with the interests of national sovereignty and public order of the region".[145]

Because of these international obligations, colonial decision-makers in Portugal and Angola adopted other strategies to counter the denationalizing effects of the Protestant missions. Generally, they sought to foster the development of the Catholic Church, by giving

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[141] See, for instance, António de Almeida, *Relatorio da Província do Bié, referido ao ano economico de 1934-1935*, vol. I, p. 77, in AHU, MU, GM 2894; *Actas das Sessões do II Congresso Colonial Nacional (1924)*, p. 239; Ruas, *Relatorio administrativo 1936*, in: AHU, MU, ISAU 1665, pp. 1-2; José Vicente Caldeira do Cazal Ribeiro [governador do distrito do Congo] to Chefe da Repartição do Gabinete do Governo Geral de Angola, Maquela do Zombo, 28.01.1932, in: AHU, MU, DGEdu_RCM_P57, Cx. 045, pasta 4 (Angola), subpasta 2.

[142] For this critique, see Moreira, *Open letter,* p. 3; Frazão, *Relatório (1939-1940),* p. 51. For a later period: Péclard, *Eu sou americano*.

[143] For the relevant passages of these texts, Tucker, *Angola,* pp. 159–160 and Bossa, José Silvestre Ferreira, "A função pública colonial", in: União Nacional (ed.), *Primeiro Congresso da União Nacional, Lisboa 26 a 28 Maio 1934. Discursos, teses e comunicações,* vol. 4, Lisboa: Edição da União Nacional, 1935, pp. 161–199, here p. 168. Quote from the Convention of Saint-Germain-en-Laye (1919), art. XI.

[144] Compare Alto Comissariado da República em Angola, *Decreto 77 – Regulamento das missões religiosas*, 09.12.1921, in: Secretaria de Colonização e Negócios Indígenas (Província de Angola), *Legislação provincial (1921),* pp. 65–68 and art. 23 of the Colonial Act from 1930: "The State shall ensure to all its overseas territories liberty of conscience and the free exercise of the various religions, subject to the restrictions necessitated by the rights and interests of the sovereignty of Portugal and the maintenance of public order, and so long as they are in harmony with international treaties and conventions." See Ministério das Colónias, *Decreto 18.570 que aprova o Acto Colonial*, 08.07.1930, in: *Diário do Governo, Série I,* 08.07.1930, pp. 1307–1312, art. 23 (translation by Tucker, *Angola,* p. 164). See also the discussion on the Colonial Act in the *Conselho Superior das Colónias*, see Conselho Superior das Colónias, *Parecer n. 331 acerca do Acto Colonial*, 29.05.1930, in: *Diário do Governo, Série I,* pp. 1312–1319.

[145] The Belgian government showed great interest in this case, since Protestant missions in the Belgian Congo were also protected under the Convention of Germain-en-Laye. See, for instance, the reports on the case from Belgian diplomats in Lobito (Angola) and Lisbon: Paul Lamotte, consul de Belgique à Lobito, à Monsieur Hymans, Ministre des Affaires Etrangères, 29.07.1932 and Baron de Lichtervelde, Ministre de Belgique au Portugal, à Monsieur Hymans, Ministre des Affaires Etrangères, 23.12.1931, both in AA, Box 3238, Folder 1351 (Missions en Angola).

large subsidies to the missionaries and exempting them as well as their catechists from tax obligations.[146] Simultaneously, they developed special surveillance and containment policies to reduce the influence of the Protestants.

In the Interwar Period, the colonial government increasingly tried to expand its control over the largely autonomous Protestant missions. Colonial surveillance focused on language as a (de)nationalization factor. In 1910, Paiva Couceiro had already drawn attention to the absence of Portuguese language courses in Protestant missions, but his call for action in this domain was not systematically met until after the First World War.[147] In 1921, High Commissioner Norton de Matos forbade all religious missions from teaching indigenous languages or from using textbooks in any other language than Portuguese. The legal use of indigenous languages was restricted to the spoken sphere, namely, for catechism or for beginner's courses in the Portuguese language.[148] These measures targeted both European and African languages and must be understood within the context of the general Portuguese language policies that were passed after the First World War dictating that vernacular languages were to be replaced with Portuguese.[149] While the decree did not differentiate between the two Christian denominations, it was mainly Protestants who were suspected of being unwilling to use Portuguese, and not completely without reason.[150] In 1928, a decree was passed to compel foreign missions to offer a Portuguese language course taught by a Portuguese citizen.[151] Local administrators implemented these decrees with varying degrees of strictness or leniency, but sometimes the language stipulations created real obstacles for missionary work, as is documented for example by the Baptist Missionary Society in the Portuguese Congo (Northern Angola) in the 1920s and 1930s.[152] Many were supportive of stricter control and implementation. During his inspection tour of the Protestant missions in Bié, Óscar Ruas noted that the legal stipulations concerning language teaching were not

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[146] See, for instance, Soremekun, Fola, *A History of the American Board Missions in Angola, 1880-1940* (Ph.D. Dissertation - Northwestern University), 1965, p. 232.

[147] Couceiro, Paiva, *Angola. Dois anos de governo. Junho de 1907-Julho de 1909. Historia e Comentarios, Com Prefácio de Norton de Matos,* Lisboa: Edições Gama, 1948 [1910], p. 247. See also Tucker, *Angola,* pp. 111–112.

[148] Alto Comissariado da República em Angola, *Decreto 77 – Regulamento das missões religiosas*, art. 2-3. For the background of this decree, see Matos, *A Província de Angola,* pp. 95–96.

[149] On this assimilationist tendency in Portuguese colonial policy, see Tucker, *Angola,* pp. 111–113. In 1940, the colonial official Granado defended the belief for which the Portuguese had to "work as hard as possible to make disappear the native languages, and for this, should even elaborate a patient, but obstinate plan", see Granado, António Coxito, *Mucandas ou Cartas de Angola. Vulgarização Popular Colonial Angolana. Usos, Costumes, Lendas, Etnografia comparada, Etc.,* Luanda: Imprensa Baroeth, 1940, p. 56.

[150] See, for instance, Soremekun, *American Board Missions,* pp. 178–184; Grenfell, Frederick James, *The history of the Baptist church in Angola and its influence on the life and culture of the Kongo and Zombo people, 1879-1940* (MA Thesis - University of Leeds, Department of Theology and Religious Studies), 1995, pp. 101–110.

[151] Tucker, *Angola,* p. 113, and for the text of Decree 755 from 28 March 1928, p. 177.

[152] Grenfell, *The history of the Baptist church,* pp. 101–119.

always enforced. His call for more rigorous control over the selection and nomination of Portuguese teachers was discussed and eventually endorsed by the Colonial Ministry.[153]

Much as it had done in the border regions, the Portuguese government also tried to engage the Catholic missionaries in a spatial strategy of containment. Álvaro de Fontoura concluded his contribution to the Third National Colonial Congress in 1930 with a call for Catholic missions to prioritize areas of strong Protestant presence, before settling in other more densely populated or more 'backward' regions.[154] Political pressure and material support would ideally induce the Congregation of the Holy Ghost to spread into areas occupied or coveted by Protestants.[155] The patriotic action of the Catholic missions, exercised in strategic points of the colony, so many stated, would effectively block and 'neutralize' the Protestant influence.[156]

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[153] Óscar Ruas, *Relatório do Inspector Administrativo sobre uma visita a algumas Missões Protestantes e estabelecimentos de Assistência Indigena na Provincia do Bié*, 23.12.1936, in: AHU, MU, ISAU 1665. For the subsequent discussion on this issue within the colonial ministry, see the letters in the same dossier. For other calls for stricter control, see, for instance, Raúl Pires, *Relatório da Inspecção à Provincia da Huíla (1934)*, 30.12.1934, p. 105, in: AHU, MU, ISAU 1665 and Teixeira, *Angola intangivel,* p. 609.

[154] Fontoura, *Missões religiosas,* p. 58.

[155] See, for instance, the government interference in the establishment of the mission post of Sendi (Quipungo), documented in the letters Father Bonnefoux, the superior of the south-western Cunene Mission Province, sent to the Superior-General in Paris, on 8 and 22 January and 22 April 1927 and the letter from Father Kauffer to the Superior-General from 7 May 1927, in: AGCSSp, 3L1.14a8. On the same case, see also Steinmetz, Padre João, "Fundaçao da missão do Sendi-Huila", *Missões de Angola e Congo* 13,1 (1933), pp. 11–13 and more generally Costa, *Cem Anos,* pp. 396–397; Brásio, *Spiritana - Angola, Vol. 5,* pp. 557–558.

[156] See, for instance, Julio Garcês de Lencastre, *Relatorio do Governador da Provincia de Luanda, 1934-1935*, p. 26, in AHU, MU, ISAU 2246; José Sousa e Faro [Governador Geral de Angola] to Minister of Colonies, Luanda, 03.06.1931 and José Vicente Caldeira do Cazal Ribeiro [governador do distrito do Congo] to Chefe da Repartição do Gabinete do Governo Geral de Angola, Maquela do Zombo, 28.01.1932, both in: AHU, MU, DGEdu_RCM_P57,Cx045, pasta 4 (Angola), subpasta 2.

3. The Administrative Occupation of Border Areas

Anxieties amongst the Portuguese in Angola over their country's representation and prestige abroad were not restricted to the realm of Christian missions. Longstanding complaints about the low education level and inadequate material living conditions of colonial administrators reached particular levels of intensity in the border areas. Border areas were places *par excellence* that enabled the direct comparison between adjacent colonial systems, and many observers feared that, in such a direct confrontation, Portuguese colonial administrators represented the colonial state in a disadvantageous manner.

It is likely that they were primarily preoccupied with the effects this 'poor representation' would have on Portugal's prestige as a colonizing power in the neighbour states and in the world, but this was not their only concern. In some cases, they also established a causal relation between this and the emigration of Angolan natives. The following examples illustrate how, between the two World Wars, colonial officials blamed the weakness of the Portuguese presence in border areas for the population flight.

The Neutral Zone between Angola and South West Africa, functional between 1915 and 1928, was probably the area in which the most direct contact and comparisons occurred. Following a long and unresolved dispute with Germany over the location of the intercolonial border and pending its definitive delimitation, the Neutral Zone was established between Angola and South Africa, Namibia's new ruler, in 1915.[157] This strip of territory, roughly 450 km long and 11km wide, was administrated by a Portuguese and a South-African 'Resident'. The Neutral Zone, however, rapidly became a thorn in the side of the Portuguese administration. On the one hand, they claimed that they had been dispossessed of their historical and "incontestable rights" over the entire Zone.[158] On the other, they criticized that many Angolan natives had taken refuge there in order to avoid labour and tax obligations and bemoaned that the South African government did not take any action to curtail this emigration flow and on the contrary even encouraged it.[159] The Portuguese government wanted to

[157] On the history of the Neutral Zone from a South-African perspective, see Vigne, Randolphe, "The Moveable Frontier. The Namibia-Angola Boundary Demarcation, 1926-1928", in: Hayes, Patricia; Sylvester, Jeremy; Wallace, Marion; Hartmann, Wolfram (eds.), *Namibia under South African Rule. Mobility and Containment, 1915-46,* Athens/Oxford/Windhoek: Ohio University Press/James Currey/Out of Africa, 1998, pp. 289–304. For a Portuguese view by one of the members of the delegation to the Cape Conference in 1926 and of the subsequent border delimitation missions of 1916, 1920 and 1926-1928, see Machado [de Faria e Maia], *Na fronteira sul*. Roma Machado wrote extensively about Angola's southern borders in the Portuguese press and Portuguese journals.

[158] See, for instance, Machado [de Faria e Maia], *Na fronteira sul,* pp. 55–62.

[159] Kreike, *Re-creating Eden,* pp. 67; 74. In 1917, Major Andrade reached an agreement with Captain Brownlee, the military magistrate of Grootfontein, to curtail this emigration flow. A list of all residents of the Neutral Zone was to be drawn up and after that, resettlement was only to be allowed with the mutual consent of both colonial

eliminate the Neutral Zone as quickly as possible.[160] This could not be done, however, before a joint commission had delineated the exact course of the border. Despite Portuguese pressure, the issue continued to pend until the Cape Agreement of 1926 and the definitive border demarcation between 1926-1928.

Between 1915 and 1928, administrative reports expressed great concern over the effects of the Neutral Zone on Portugal's prestige abroad. In a confidential report of his mission to South Angola, the head of the (military) General-staff *(chefe do Estado Maior)* in Angola, Ernesto Machado, gave a fierce account of Portuguese native policy in the Neutral Zone.[161] In his summary and reassessment of the arguments brought forward by various Portuguese Residents, he criticized that the Neutral Zone was a "hideout" for all those Angolan "idlers, criminals and vagabonds" who did not want to pay taxes or be recruited for labour services. In addition to this already well-known argument, he maintained the Neutral Zone was detrimental to Portugal's prestige for yet another reason.

While the South African Resident possessed many horses and carriages as his means of transportation, the Portuguese Resident was forced to travel on an old and weak horse. In addition, Machado complained, the South African Resident killed 80 to 100 oxen *(bois)* per year and distributed the meat amongst his employees and everyone in the near vicinity, whereas his Portuguese counterpart was not even allowed to kill oxen at all. As a consequence, the Portuguese Residents attempted to avoid direct comparison. On public holidays, for example, in which the South Africans used to slaughter several oxen, the Portuguese Residents would leave the Neutral Zone, pretending to visit family or friends. For Machado, the discrepancy between the Portuguese and South Africans in the means of representation available to them was not only humiliating and embarrassing, but it also discredited the Portuguese in the eyes of the natives and South Africans alike. The natives surely would notice the difference between the "poor" Portuguese "who did not eat meat" and

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powers. The administrator of South West Africa, however, did not ratify the agreement, and it never entered into effect. See Eckl, Andreas E, *Herrschaft, Macht und Einfluß. Koloniale Interaktionen am Kavango (Nord-Namibia) von 1891 bis 1921,* Köln: Köppe, 2004, pp. 294–308 and Fisch, Maria, *Die südafrikanische Militärverwaltung (1915 - 1920) und die frühe Mandatszeit (1920 - 1936) in der Kavango-Region/Namibia,* Köln: Köppe, 2004, pp. 77–79. For accusations against the South African authorities, see Dias, Gastão Sousa, "A Fronteira do Sul de Angola", *Boletim da Agência Geral das Colónias* 4,31 (1928), pp. 15–25; Machado [de Faria e Maia], *Na fronteira sul,* pp. 111–112.

[160] In the words of Norton de Matos, the Neutral Zone caused "great embarrassment" for the Portuguese administration and he pleaded several times for its "immediate disappearance". See High Commissioner Norton de Matos to the Minister of Colonies, Lisbon, 10.02.1921 and High Commissioner Norton de Matos to the Minister of Colonies, Loanda, 28.03.1922, in AHU, MU, DGAPC 590, DGCO-RAST-Proc. 265D (Fronteira Sul de Angola – Sua demarcação).

[161] For the following, see *A Zona neutra e a residência de Namakunde*, anexo a Ernesto Machado, *Relatorio da minha missão especial no Sul de Angola em Janeiro-Fevereiro de 1925 (ao Governador Geral Antero Tavares de Carvalho)*, [1925], in: AHU, DGAPC 590, DGCO-RAST-Proc. 265E.

the ostensible grandeur of their South African colleagues. In the battle to convince the Africans to settle in either Portuguese or South African territory, this was clearly a major disadvantage. In his recommendations, Machado urged the Governor-General to settle the border dispute and eradicate the Neutral Zone as quickly as possible and, in the meanwhile, to increase the official 'representation fund' *(fundo de representação).*

The issue was resolved upon the extinction of the Neutral Zone in 1928, but this did not eradicate the problem at its root. In the Interwar Period, similar accounts of unequal material conditions between the Portuguese administrators and their neighbours continued to appear at other points along the border. Almost invariably, these stories were imbued with strong sentiments of shame. In 1942, for example, the head of the Native Affairs Department (1941-42), José Ribeiro da Cruz, related how, back in 1933, when he administered the border *circunscrição* of Camaxilo in northern Angola, he went to an appointment with the administrator of Kahemba, in the Belgian Congo.[162] While he had to ask well in advance for a temporary shelter of grass to be constructed for him, the Belgian administrator simply arrived with a tent and a foldout desk and pitched them in no time whatsoever. Cruz experienced this blatant difference in the quality of the equipment and comfort, as well as the flagrant display of this discrepancy in front of the local native people, as having been so disgraceful that he allegedly never repeated such meetings again, although, as he admitted, it would have often been useful to talk to the Belgian authorities.

Both of these stories express the desire of administrative personnel to eschew direct confrontations in order to preserve Portugal's prestige, but this was by no means a generalized attitude amongst administrators in the border regions. When Henrique Galvão and his colleague Óscar Ruas inspected Angola in 1937, they toured extensively through the Cuando-Cubango Region at Angola's south-eastern border. They claimed that a part of the region had not been visited by any white person for decades and that it was much more populated than generally assumed. However, the people living there were only the remainder of a much larger population that had moved, in its majority, across the border. Civil servants and missionaries on the other side of the border provided medical assistance and agricultural aid, and the Africans could sell their products and buy consumption goods.[163] These, however, were not the only causes of emigration that Galvão and Ruas spoke of. On the southern border with Namibia, Galvão and Ruas found one of the few administrative posts (Mucusso)

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[162] José Ribeiro da Cruz, *Relatório do Chefe dos Serviços, interino, da Repartição Central dos Negócios Indígenas, ano de 1941*, [1942], pp. 16–17, in: AHU, MU, ISAU 1725.

[163] Galvão, *Relatório Angola 1938*, pp. 86-108 (Diário da viagem do Chiume ao Cuangar). Galvão seems to have copied this diary entry from Ruas' account, see Inspector Administrativo Oscar Freire de Vasconcelos Ruas, *Relatório da Inspecção Administrativa de Angola*, 30.12.1937, pp. 70-96, in: AHU, MU, ISAU 1665.

unoccupied; the other (Luiana) governed by a *chefe de posto* who had gone almost mad because of the long period of isolation he had had to endure; and the third, in Dirico, was occupied by an administrator who lived in the poorest conditions.[164] His housing, they observed, was nothing more than "a ruin of adobe which makes one envy the habitation of many natives from the Alto Zambeze".[165] Moreover, he did not have any sure means of transportation, had not been able to pay the native policemen for months and depended upon the benevolent aid of German missionaries and South African authorities from the other side of the Cubango river for everything.[166] The way in which Galvão and Ruas depicted the situation of this isolated colonial administrator in his "territory at the end of the world" fundamentally differed from the usual images used in colonial propaganda as well as from their own travel narrative.[167] Portuguese propaganda of the 1930s frequently presented the dangers and deprivations at the fringes of the empire as preludes to heroic achievements.[168] The inspectors, themselves, had described their journey through no man's land, plagued by fatigue, danger and other kinds of deprivations, according to the the long heroic tradition of colonial explorers.[169] With respect to the border posts, however, Galvão and Ruas did not transform the obvious vulnerabilities into a story of heroism – of how, despite all problems, the local officials managed to deal with the situation in a way reminiscent of Portugal's imperial greatness. The *chefes de posto* were not exalted as the "nation's forgotten heroes", but pitied as poor fellows trying to survive in a hostile environment.[170] As Ruas put it, the *chefe de posto* of Dirico "divides his time between two concerns: the [European] food that never arrives and the lion that comes around almost every day".[171] Their miserable living conditions caused the greatest dishonour to Portugal. Galvão and his colleague effectively described the few scattered posts as being "more detrimental than useful, as they only serve[d]

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[164] Inspector Administrativo Oscar Freire de Vasconcelos Ruas, *Relatório da Inspecção Administrativa de Angola*, 30.12.1937, pp. 53-56, in: AHU, MU, ISAU 1665.
[165] Galvão, *Relatório Angola 1938,* p. 86.
[166] *Ibid.*, pp. 85-86. As District Governor of Huíla, Galvão had already pointed out some of the fundamental problems of the Cubango area in 1929, see Galvão, *Huíla,* pp. 240–256.
[167] Galvão, *Huíla,* p. 242 (quote).
[168] See Roque, Ricardo, *The Razor's Edge. Portuguese Imperial Vulnerability in Colonial Moxico, Angola,* in: Penvenne, Jeanne Marie (ed.), *Colonial Encounters between Africa and Portugal* = The International Journal of African Historical Studies 36,1 (2003), pp. 105–124. Ricardo Roque analysed two stories that were published in the propagandistic *Cadernos Coloniais* series in the late 1930s in wich anxieties of vulnerability in East Angolan Moxico were turned into stories of sacrifice and imperial greatness.
[169] Galvão, *Relatório Angola 1938*, pp. 86-108.
[170] Roque, *Razor's Edge,* p. 117. For an idealized description of the archetype of the intelligent, active and morally upright *chefe de posto*, see Archer, Maria, *Singularidades de um país distante* (Cadernos Coloniais; 11), Lisboa: Editorial Cosmos, 1936, pp. 25–28.
[171] Inspector Administrativo Oscar Freire de Vasconcelos Ruas, *Relatório da Inspecção Administrativa de Angola*, 30.12.1937, p. 94 in: AHU, MU, ISAU 1665. Being forced to eat non-European food was another example of loss of prestige.

to exhibit deficiencies that made us loose our prestige".[172] They feared that this situation brought ridicule down on Portugal in the eyes of its foreign competitors, but also in the eyes of the native population, who supposedly saw this weakness as a further reason to leave the colony.[173]

Material insufficiencies and inequalities were only one, and probably the most visible facet of the problem of representation at the borders. Another related problem, which was frequently invoked as a cause for native emigration, was that border district posts were often vacant or held by the most incapable administrators.[174] Galvão and Ruas used as an extreme example the administrator of Cuando, who had exacted the cruellest acts of violence – including crucifixions – upon the native population. Before his actions were exposed and put a stop to in 1936, many had already taken refuge across the border.[175] The problem of vacancies, however, was not restricted to the border areas; it was the consequence of an administrative system that promoted a rotation regime that was too short which allowed rotations too easily, as well as of the acute shortage in the number of civil servants due to poor wages and adverse career possibilities in the 1930s. The problem was particularly pressing in border *circunscrições*, especially in the east. This area was amongst the least popular because of its distance from the rich and densely populated coastal and central highland areas. This situation was further aggravated by high living costs, reduced comfort levels, and the psychical burden of isolation.[176] The central government in Luanda, Galvão complained, did not care much about filling such posts and these jobs remained vacant for ages.[177]

But if one were to believe Governor General Lopes Mateus (1935-1939), it was not so easy to get administrators to go to such remote border areas and to keep them there. At the beginning of his term, Lopes Mateus expressed great concern about the situation, but when he effectively tried to ensure the continuous presence of administrators in border districts in

[172] See also Galvão, *Relatório Angola 1938,* p. 85. In 1929, the indendent of Cubango had already expressed similar concerns, see telegram Francisco de Seixas Gomes to Governor of Huíla, 28.11.1929, reprinted in Galvão, *Huíla,* pp. 245–246.
[173] Galvão, *Relatório Angola 1938,* p. 71. According to Galvão, a foreigner who travelled across the colony stated that "the Portuguese were great builders of ruins" (*Ibid.*, p. 72).
[174] See, for instance, Bento Roma, *Relatório da Intendência do Cubango, Vol. I*, 10.07.1929, p. 28, in: AHU, MU, GM 599; Galvão, *Relatório Angola 1938,* pp. 63–64.
[175] See Galvão, *Relatório Angola 1938,* p. 78; Inspector Superior Henrique Galvão, *Relatório sobre o recrutamento em Angola de mão de obra para S. Tomé*, 06.01.1938, p. 12, in: ANTT, AOS/CO/UL-8E, pasta 2, subpasta 2; Inspector Administrativo Oscar Freire de Vasconcelos Ruas, *Relatório da Inspecção Administrativa de Angola*, 30.12.1937, p. 51, in: AHU, MU, ISAU 1665.
[176] See, for instance, Galvão, *Relatório Angola 1938,* pp. 63–64 for an enumeration of the disadvantages. On p. 65, Galvão included a nominal list of those *circunscrições* in which the isolation bonus was to be reintroduced, with the respective percentages. The list comprised mainly border *circunscrições*, also a few isolated areas in the interior, but, interestingly, not the border areas nearest to the coast.
[177] Galvão, *Relatório Angola 1938,* p. 77. For Galvão, the deficient distribution of personnel was caused by excessive centralization and the circumstance that the responsible director in Luanda was particularly incompetent. Galvão wanted the province governors to be responsible for the distribution of personnel.

1935, he met with covert resistance to his policy on the part of the men that had been designated to go. They arrived late or not at all, invented all kinds of excuses notably diseases, and, if they arrived, many just went to live in the closest town.[178] Moreover, with the abolition of the 'isolation bonus' *(bonus de isolamento)* around 1930 – an additional sum for filling a position in such a remote area – the colonial government had lost an important incentive. The bonus was suppressed not for fundamental reasons (although there had been a certain overuse and therefore abuse of the fund). It was just one of the many expenditure cuts of the early 1930s that were intended to balance the budget and, hence, ensure complete self-sufficiency: this was the iron law that reigned over the relationship between metropole and colony in the Portuguese Empire under Salazar.[179] Governor General Lopes Mateus as well as leading administrative inspectors (Ruas, Galvão, Nunes de Oliveira) pleaded for the reestablishment of the fund in order to attract better administrators to the border regions, but to no avail.[180] In addition to the financial constraints, this was caused by the opposition of people like Governor-General Marques Nano (1939-1941), who advocated a rotation system or other measures such as better transport possibilities, access to radio and press and longer holidays.[181] It was only in 1945 that the new Minister of Colonies, Marcello Caetano, re-established the isolation bonus, after having personally visited the colony.[182]

Although prominent colonial officials in Angola had at last begun to call for a more careful selection of the administrative personnel for border areas in the late 1920s, their

[178] António Lopes Mateus, *Relatório da Colónia de Angola (1936)*, 14.08.1937, pp. 14-17, in: AHU, MU, ISAC 546. See also the report of the administrator of the Cuando *circunscrição* for the year 1931-32, transcribed in the confidential letter from the interim Governor-General, Eduardo Ferreira Viana, to the Minister of Colonies, 08.12.1932, in: AHU, MU, DGOCd-RAST 377.

[179] See Ministério das Colónias, *Decreto n. 23.940 que regula os vencimentos dos funcionários ou empregados públicos, civis e militares, em serviço na Colónia de Angola*, 31.05.1934, in: *Diário do Governo,* 31.05.1934, pp. 697–722 and Galvão, *Relatório Angola 1938,* p. 63. On the issue of the balanced budget, see section 4.

[180] See, for instance, Mateus, *Relatório 1. trim 1935,* p. 7; Conselho de Governadores de Angola, *Relatório e Propostas, Reunião extraordinária realizada nos idas 7 a 11 de Maio de 1935*, pp. 14-15, in: AHU, MU, ISAU 1730; Henrique Galvão, *Parecer sobre o relatório anual do Governador Geral de Angola (1935)*, 27.08.1936, p. 2 in: AHU, MU, ISAU 62; Galvão, *Relatório Angola 1938,* pp. 63–66; Inspector Administrativo Oscar Freire de Vasconcelos Ruas, *Relatório da Inspecção Administrativa de Angola*, 30.12.1937, pp. 57-58, in: AHU, MU, ISAU 1665; Amadeu de Menezes, *Informação n. 19 da 2a Secção da DGAPC – Emigração de indigenas, de Angola para territorio estrangeiro circunvizinho*, 18.02.1943, p. 8, in: AHU, MU, ISAU 2243 (anexo ao Relatório do Curador de 1938); Oliveira, *Relatório Inspecção 1944*.

[181] For the rotation system, see Victor de Carmelo Meleiro and Francisco Lopes Roseira, *Subsídios para a reforma dos vencimentos dos funcionários da Colónia de Angola*, Luanda, 10.09.1938, p. 16, in: AHU, MU, GM 540. For the other alternatives see Manuel da Cunha e Costa Marques Nano to the Minister of Colonies, 28.06.1939, p. 13, in: AHU, MU, GM 548.

[182] See telegrama do Ministro das Colónias (n°162 Esp), 29.10.1945, in: ANTT, AOS/CO/UL-1D, pasta 16. See also Ministério do Ultramar, *Decreto n. 40.708 que aprova o Estatuto do Funcionalismo Ultramarino*, 31.07.1956, in: *Diário do Governo, Série I ,* 31.07.1956, pp. 1129–1176, here art. 168.

demands throughout the 1930s were still not systematically met.[183] On the contrary, shortly after his inauguration as Governor-General, Lopes Mateus admitted that there had been a systematic policy of sending the 'least protected' and the least capable to the most distant and isolated places of the colony, and therefore to the borders.[184] He admitted that such a policy could only have adverse effects in the face of the accrued responsibility administrators were given in such areas, both because of the isolation and because of the proximity to the border. As described above, his attempts to remedy the situation did not meet with success. Nor did Galvão's recommendations in his inspection report of 1938, which basically suggested the same course of action.[185] A passage in an annual report of 1944 suggests that Lopes Mateus' and Galvão's opinion on this matter had not led to a policy change. There, the Governor of Malange not only strongly criticized the policy of appointing the "least good" instead of the best officials in border areas, he also attributed this policy to the widespread misconceptions that border areas were easier to govern and less demanding and that "more active elements" should not be assigned to isolated positions.[186]

[183] See, for instance, Bento Roma, *Relatório da Intendência do Cubango*, 10.07.1929, Vol. I, p. 28 in: AHU, MU, GM 599. See also Henrique Galvão, *Parecer sobre o relatório anual do Governador Geral de Angola (1935)*, 27.08.1936, p. 2 in: AHU, MU, ISAU 62.
[184] Mateus, *Relatório 1. trim 1935,* p. 7; Conselho de Governadores de Angola, *Relatorio e Propostas, Reunião extraordinária realizada nos idas 7 a 11 de Maio de 1935*, p. 14, in: AHU, MU, ISAU 1730.
[185] Galvão, *Relatório Angola 1938,* pp. 63–66.
[186] Manuel da Cruz Alvura, *Relatório do Governador da Província de Malange (1944)*, 31.05.1944, p. 6 and 190, in: AHU, MU, ISAU 1663.

4. Taxation, Economic Disparities and the Question of Sovereignty

Taxation of the native African population had been part of Portuguese colonial policy in Angola since its inception in the seventeenth century, but until the beginning of the twentieth century, its forms varied greatly, collection was highly irregular and the territory covered was fairly limited.[187] It was only following the important pacification campaigns in the 1910s that the hut tax *(imposto de cubata)* – established in 1907 and transformed into an individual or 'head' tax in 1920 – was gradually extended to the internationally recognized borders, thus eventually incorporating the entire population.[188] While it is most likely that temporary or permanent migration to areas beyond Portuguese control had always existed as a strategy to avoid taxation, both the extent and perceptions of the border-crossing tax evasion phenomenon changed dramatically in the first decades of the twentieth century. In Portuguese Angola as well as in many other colonies, the often ruthless imposition of novel taxes triggered important emigratory movements that frequently mobilized whole villages, not to mention other reactions such as violent revolts and temporary hiding in remote or less accessible areas.[189] 'Protest migrations', as Asiwaju has called those forms of migration that occur in reaction to specific policy measures such as taxation, forced labour recruitment, conscription and other repressive regulations that weighed upon the daily life of the Africans, were often not permanent. People returned after a period of years when conditions had improved (or grown worse in the place where they had resettled) or simply moved back and forth across the border at the approach of the administrator to escape tax obligations on both sides.[190] The flexible use Africans made of the virtually unpatrollable intercolonial borders (and policy differences between the colonial powers) ran counter to colonial strategies of

[187] In the second half of the nineteenth century, direct native taxation was even abolished – and subsequently re-established – several times due to recurrent abuses and general difficulties with its implementation. For a chronology, see Diniz, José de Oliveira Ferreira, "Da política indígena em Angola. Os impostos indígenas", *Boletim da Agência Geral das Colónias* 5,47 (1929), pp. 136–165. See also Heintze, Beatrix, "Die angolanischen Vasallentribute im 17. Jahrhundert", in: Heintze, Beatrix, *Studien zur Geschichte Angolas im 16. und 17. Jahrhundert. Ein Lesebuch,* Köln: Rüdiger Köppe Verlag 1996, pp. 193–211.

[188] Ministério da Marinha e Ultramar, *Decreto criando na provincia de Angola um imposto sobre habitações denomido 'cubatas'*, 13.09.1906, in: *Diário do Governo,* 18.09.1906; Governo Geral de Angola, *Regulamento do recenseamento e cobrança do imposto indígena. Aprovado por portaria provincial n.° 30-A de 22 de Janeiro de 1920,* Loanda: Imprensa Nacional, 1920.

[189] For burdensome taxation as a main cause for migration from the French Ivory Coast to the British Gold Coast, see Asiwaju, *Migrations*, notably pp. 584-585. For tax migration between Northern Rhodesia and the Belgian Congo as well as a broad spectrum of 'protest migrations' in southern Africa, see Musambachime, *Protest Migrations*, esp. pp. 19-20; 30-32 and Macola, Giacomo, *The Kingdom of Kazembe. History and politics in North-Eastern Zambia and Katanga to 1950*, Münster, Hamburg: LIT, 2002, pp. 198–202. For 'tax revolts' in Angola, see, for instance, Pélissier, René, *História das campanhas de Angola. Resistência e Revoltas (1845-1941)*, 2 vols, Lisboa: Editorial Estampa, 1986 [1977], vol. I, pp. 231; 297; 339 and Freudenthal, *Angola,* p. 275.

[190] See, for instance, Musambachime, *Protest Migrations,* pp. 20; 31-32.

economic ‘development’, which were dependent upon the availability of a large work force, and, in some cases, instilled anxieties of depopulation.

In many colonies, critics imputed particular waves of emigration, among other things, to excessive taxation, but the extent to which this argument was used in Portuguese Africa is striking. In all three Portuguese colonies on the African mainland, the idea that taxation was a main determinant for emigration was constantly repeated and remained very influential well into the 1940s.[191] My claim with regard to Angola is that this view bore elements of political realism and self-criticism, but also contained exaggerations that obscured other fundamental causes of emigration. Moreover, the colonial administration only hesitantly and partially developed a strategy based on tax reductions in the border districts. This hesitancy thus contributed to prolonging both tax emigration and the argument.

In the Interwar Period, reports from the colonial administration frequently blamed the difference in taxation between Angola and its neighbouring colonies as one of the main causes for native emigration. Many administrators maintained that the natives living in the border regions of the Belgian Congo, Northern Rhodesia or South West Africa were not subject to tax payments or only to rates that were much lower than on the Portuguese side.[192] In addition, they often accused their colonial neighbours of exempting Angolans from tax payments when they crossed over to settle. They viewed tax exemption as part of a deliberate policy created by Angola’s neighbours and based on economic incentives in order to attract native Angolans to their territories. Ivo de Cerqueira, the head of the Native Affairs Department from 1930 to early 1932, for example, pointed to the “well-timed concession of exemptions and privileges, the offering of high salaries, etc.” in South West Africa and Northern Rhodesia.[193] One Portuguese citizen who had lived for twenty years in Katanga maintained that in the Belgian Congo, the administrative authorities of the border posts had

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[191] For Guiné, see Havik, Philip J., "Ilhas Desertas. Impostos, comércio, trabalho forçado e o êxodo das Ilhas Bijagós (1925-1935)", in: Centro de Estudos Africanos da Universidade do Porto (CEAUP) (ed.), *Trabalho Forçado Africano. Articulações com o poder político,* Porto: Campo das Letras, 2007, pp. 171–189 and Havik, Philip J., "Tributos e impostos. A crise mundial, o Estado Novo e a política fiscal na Guiné", *Economia e Sociologia* 85 (2008), pp. 29–55. For Moçambique, see Santos, Maciel, *An "Obsessive Idea". Native Taxation in Northern Mozambique (1926-1945), Working Paper,* Porto: Centro de Estudos Africanos, 2007, p. 11.

[192] From border areas, see, for instance, Casimiro Marques, *Relatório anual da Circunscrição Civil de Camaxilo, Distrito da Lunda, referente ao ano económico de 1926 a 1927*, 10.08.1927, in: ANA Cx. 907; Augusto Casimiro, *Relatório apresentado pelo ex-governador do distrito do Congo, Capitão Augusto Casimiro (1923-1926)*, 11.12.1928, p. 5, in: AHU, MU, AGC 47A; Bento Roma, *Relatório da Intendência do Cubango, Vol. I*, 10.07.1929, pp. 24-28, in: AHU, MU, GM 599; António de Almeida, *Relatório do Governo do Distrito do Moxico (1931)*, Febr. 1932, pp. 30-31, in: AHU, MU, GM 600; Cruz, *Relatório (1941),* p. 54 and also Santos, *Obsessive idea,* p. 18 footnote 41.

[193] Direcção dos Serviços e Negócios Indígenas [Ivo Benjamin de Cerqueira], *Organisação social indigena. Seu estado actual - usos e costumes*, 1930, p. VII, in: AHU, MU, AGC 2336.

received “confidential instructions” to attract natives from the surrounding colonies. They were promised “land to settle, fields and seeds to cultivate” and exemption from tax payments in the first few years after they had settled.[194]

There was certainly a great deal of truth to these complaints, even if they also contained a partial misreading of the tax policies in the adjacent colonies. In South West Africa, for example, the generalized absence of direct taxation was less a deliberate policy of attraction than the consequence of a self-perceived weakness. For many years, the South African administration in Windhoek believed that it was not strong enough to implement taxation in its outlying northern territories beyond the police zone without risking armed revolts.[195] In contrast to the Portuguese in Angola, both the Germans and their South African successors had not really occupied Ovamboland or the Okavango Region east of it. It was only in the wake of the devastating ‘Famine of the Dams’ (1929-1930) that Windhoek effectively introduced taxation in Ovamboland.[196] In the north-eastern Okavango Region, the first taxation of men of working age took place in 1937.[197] Also in the southern border areas of the Belgian Congo, the capitation tax may well have been considerably lower than in adjacent Angola. Belgian administrators there frequently reported that the difference in taxes was indeed a major reason for which Angolans chose to resettle in the Belgian Congo.[198] It still remains to be studied, however, how much the Belgian administration actually systematically carried out a concerted policy of tax competition, as José Ribeiro da Cruz contended. This former administrator of north-eastern Camaxilo (1932-1938) and Director of the Native Affairs Department in 1941-1942 stated that in the Belgian Congo native taxation was particularly low in border areas, while it was much higher the further one went toward the interior. Overall, native tax policies in the Belgian Congo did not differ fundamentally from those in Angola. Also in the Belgian Congo, the native tax was not just a “symbol of sovereignty”, as Serra Frazão wrongly assumed, but an essential source of revenue for the

[194] Memorial da Sociedade Pro-Angola [ca. 1934], p. 4, in: AHU, MU, GM 2813.
[195] Hayes, Patricia, "The 'Famine of the Dams'. Gender, Labour & Politics in Colonial Ovamboland, 1929-1930", in: Hayes, Patricia; Sylvester, Jeremy; Wallace, Marion; Hartmann, Wolfram (eds.), *Namibia under South African Rule. Mobility and Containment, 1915-46,* Athens/Oxford/Windhoek: Ohio University Press/James Currey/Out of Africa, 1998, pp. 117–146, here p. 123.
[196] Hayes, *Famine of the Dams,* p. 141; Kreike, *Re-creating Eden,* pp. 67–68.
[197] Fisch, *Südafrikanische Militärverwaltung,* p. 209.
[198] See, for instance, the following annual reports on native policy in border districts along the border between the Congo and Angola: Rapports annuels du Territoire de Kahemba (prov. de Léopoldville) de 1935, p. 33; de 1936, p. 19 and 1946, p. 7-8, in: AA, RA/AIMO 102 and rapport annuel AIMO du Territoire de Malonga (prov. de Elisabethville) de 1932, p. 46, in: AA, RA/AIMO 137.

colony's budget and a means with which to coerce the Congolese population into wage labour.[199]

Still, the argument over differences in tax was symptomatic for much of the writing on (the shortcomings of) Portuguese native policy in the Interwar Period. First, it partly exteriorized the culpability for the emigratory flow, by ascribing it to the 'unfair' policies of neighbouring colonies. This fitted into the widespread rhetoric of a colony 'under attack': Colonial administrators and proselytizing missionaries across the border, Protestant priests within Angola, and, as I will still show further in this chapter, illegal labour recruiters had all supposedly joined forces to seduce, abduct and denationalize Portugal's native Angolan population.

Second, the argument on the differences in taxation, which sometimes thrived on the racist stereotype of the work-shy African who was willing to emigrate to indulge his laziness, obscured the fundamental issue that the level of taxation in Angola might in itself have been unreasonably high. Many inhabitants, also in the border areas as Kreike has shown for southern Angola, had difficulties managing to pay their taxes. When these, from the 1920s onwards, could no longer be paid in grain or cattle, but only in cash (or cash crops), it was not uncommon to find situations in which people were forced to sell their livestock, often on the spot and at very low prices, in order to meet their tax requirements.[200] Tax rates were not always reduced to compensate for poor harvests or crop failures, causing adult men to leave the colony, alone or with their families, in order to escape many months of forced labour, the punishment usually reserved for tax defaulters.[201] Wage labourers were not always better off. Theoretically, minimum wages were bound to the tax level: the Native Labour Code *(Código do Trabalho Indígena)* of 1928 stipulated that, depending on the kind of labour, monthly wages were to amount to 25% to 40% of the annual tax liabilities. But many private employers, at times even the prosperous mining company Diamang, did not adhere to this

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[199] Serra Frazão, *Reabilitação dos Negros. Estudo crítico sobre diversos aspectos de Angola*, 1942, p. 237, in: AHU, T 215. On the Belgian Congo, see Seibert, Julia, "More Continuity than Change? New Forms of Unfree Labor in the Belgian Congo, 1908-1930", in: van der Linden, Marcel (ed.), *Humanitarian Intervention and Changing Labor Relations. The Long-Term Consequences of the Abolition of the Slave Trade,* Leiden/Boston: Brill, 2011, pp. 369–386, here p. 384 and Rapport Annuel du Service des Affaires Indigènes et de la Main-d'Oeuvre 1935, p. 51, in: AA, RA/AIMO 2.

[200] Kreike, *Re-creating Eden,* pp. 62–65. See the regulations in Governo Geral de Angola, *Regulamento do recenseamento (1920)*, art. 40-41 and 46.

[201] See, for instance, Ross, *Report on employment,* p. 24; Frazão, *Reabilitação,* pp. 236–237. Again, such a policy was not typical of just Angola. Also in the Belgian Congo, tax defaulters were put to work on public infrastructure works or forced into wage labour contracts with private enterprises, see, for instance, *Rapport Annuel de la Direction Générale des Affaires Indigènes et de la Main-d'Oeuvre*, 1932, p. 83 in: AA, RA/AIMO2 and Seibert, *Continuity,* p. 384. On the imprisonment of tax defaulters in Northern Rhodesia, see, for instance, Macola, *Kingdom of Kazembe,* p. 204.

stipulation.[202] In addition, tax collection itself was often a violent process in which *chefes de posto* and *cipaios* (African policemen) resorted to unlawful extractions, arbitrary exactions and hostage taking.[203] With the release of the famous Ross Report, the central administration was made painfully aware of the problem. It did not officially endorse such practices and often instituted disciplinary processes, but for a long time the actions of the central administration were not decisive enough to eradicate such abuses.[204] Still in 1937, the director of the Native Affairs Department found it necessary to warn that "the administrator who, to collect taxes, captures [their] wives, forces [them] to sell livestock at poor prices and makes the natives sell the very products they need for their diet, is a bad official. He has indeed collected the taxes, but he has also destroyed the native economy and caused hunger in the village".[205]

Third, the obsessive focus that was placed on taxation also testified to the growing dominance of economic explanations for the emigration flows. While symbolic issues of representation and the power of attraction of Catholic missionaries were still debated, analyses carried out in the late 1930s and 1940s within the colonial administration increasingly focused on economic disparities.

On the whole, the 'debate' on taxation and economic disparities revealed a fair amount of self-reflection upon the shortcomings of native policy, which contrasted sharply with the official discourse of (both the First Republic and) the *Estado Novo*, and was generally to be found in all published, hence censored, works. In contrast to the exaltation of Portugal's particularly intimate relationship with 'its' native populations in Africa – which was based on its longstanding humanistic experiences – many a colonial administrator in Angola, albeit not all, identified pressing problems and advanced possible solutions for them. However, and this was also typical of the first half of the twentieth century, the colonial administration of

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[202] Ministério das Colónias, *Decreto 16.199, aprovando o Código do Trabalho dos Indígenas nas colónias portuguesas de Africa, Diário do Governo, Série I,* 06.12.1928, pp. 2243–2284, here art. 197. For infractions see, for instance, Raimundo Serrão, *Relatório do governador da Huíla, Março-Abril 1934*, 30.04.1934, p. 19, in: AHU, MU, DGCO-RAST 377; Raúl Pires, *Relatório da Inspecção à Província da Huíla em 1934*, 30.12.1934, in: AHU, MU, ISAU 1665 and, for Diamang, Oliveira, *Relatório Inspecção 1944,* pp. 204–208.

[203] Kreike, *Re-creating Eden,* pp. 62–65. For the endemic violence of tax collection in Portuguese Africa, see also Havik, *Ilhas Desertas* and Ross, *Report on employment*.

[204] See, for instance, the disciplinary process used against the administrator of Bailundo in 1935-36: Armando Pinto Correia, *Inspecção Administrativa – Relatório dum inquérito e processo disciplinar instaurado no Concelho do Bailundo (26-IX-935 a 21-1-1936)*, 23.01.1936, pp. 2-4, in: AHU, MU, GM 2805. For abuses related to native taxation, see also Padre Antonio Nunes Alberto, *Memorandum reservado e confidencial ao Ministro das Colónias e Finanças*, 30.11.1934, in: AHU, MU, GM 2827. Disciplinary processes against administrators abounded for all kinds of reasons, but even in serious cases they were mostly not removed from the colonial service, but transferred to other places. See Galvão, *Relatório Angola 1938,* pp. 66; 78 and the 86 page annex *Cadastro disciplinar de funcionários do quadro dos serviços administrativos da Colónia de Angola*. For a similar view, see Havik, *Ilhas Desertas,* pp. 187–188. On the Ross Report, see Chapter 2.

[205] Manuel Pereira Figueira, *Relatório do Curador Geral dos Indígenas da Colónia de Angola*, 30.06.1937, p. 9, in: AHU, MU, ISAU 2243.

Angola was particularly slow (or more accurately, reluctant) to convert its knowledge into fundamental policy changes. As I have shown in the chapters on sleeping sickness and natality, the time gap between the identification of a problem and the actuation of policies intended to resolve it often took many years, even decades. In the current case, as I will show, the colonial state's hesitance was caused by an amalgam of financial and ideological constraints, path dependence as well as conflicts of interest between different groups within the colonial society and between the colony and metropole.

As I have argued above, many saw the adoption of a novel tax system, characterized by transparent and (at the borders) strongly reduced tax rates equalling those of the colonial neighbours, as an important step towards ending population flight.[206] At times, the colonial government in Angola was not unsympathetic to this argument. In fact, it did not depend on the consent of the metropole to implement such a policy. Within the imperial framework, Angola enjoyed complete autonomy with regard to the nature and the level of native taxation. At least until the end of the Second World War, it was the Governor-General who established the tax rates in Angola, as well as the exemption or tax reduction for certain groups or areas.[207] Under High Commissioner Norton de Matos (1921-1923), the district governors received a fair amount of autonomy in this matter so that tax rates could more rapidly be adapted to changing local circumstances, but the system was recentralized in Luanda in 1931 to improve the coordination of tax collection efforts.[208] The regulations of 1931 stipulated that the Governor-General was to fix the tax rates on an annual basis, in collaboration with the Native Affairs Department, and after hearing the district governors, who in turn were supposed to listen to the proposals of the local administrators, especially those in the border regions.[209] As before, the declared aim of this indented consultation system was to keep tax

[206] In addition to the references in footnote 192, see also Gomes, Justino de Barros, *Preparação do ambiente moral e social para a fixação dos indígenas,* Lisboa: Tipografia Cristovão Augusto Rodrigues, 1936; Augusto Mario Borges de Sousa, *Relatório do Governador interino da Provínica de Malanje (29 de abril a 31 de dezembro de 1940)*, 30.06.1941, pp. 5-6, in: AHU, MU, ISAU 1667; Manuel da Cruz Alvura, *Relatório do Governador da Província de Malange (1944)*, 31.05.1944, pp. 188-189, in: AHU, MU, ISAU 1663. With regard to the claim of transparency through a single contribution instead of a variety of additional taxes to the capitation tax, see Galvão, *Relatório Angola 1938,* p. 79; Sousa, *Relatório Malanje 1940*, pp. 19-20 and de Oliveira, *Relatório Inspecção 1944,* pp. 214–218.

[207] See the subsequent legislation in Ministério da Marinha e Ultramar, *Decreto criando na provincia de Angola um imposto sobre habitações denomido 'cubatas' (1906)*; Governo Geral de Angola, *Regulamento do recenseamento (1920)*, art. 5-9; Colónia de Angola, *Regulamento do recenseamento e cobrança do imposto indígena. Aprovado por Diploma Legislativo n.° 237, de 26 de Maio de 1931,* Luanda: Imprensa Nacional, 1931-1932; Ministério das Colónias, *Decreto-lei 23.228 que promulga a Carta Orgância do Império Colonial Português*, 15.11.1933, in: *Diário do Governo, Série I,* 15.11.1933, pp. 1891–1915, here art. 170. See also Oliveira, *Relatório Inspecção 1944,* p. 214. On tax autonomy in Guiné, see Havik, *Ilhas Desertas,* p. 186.

[208] Matos, *A Província de Angola,* p. 276.

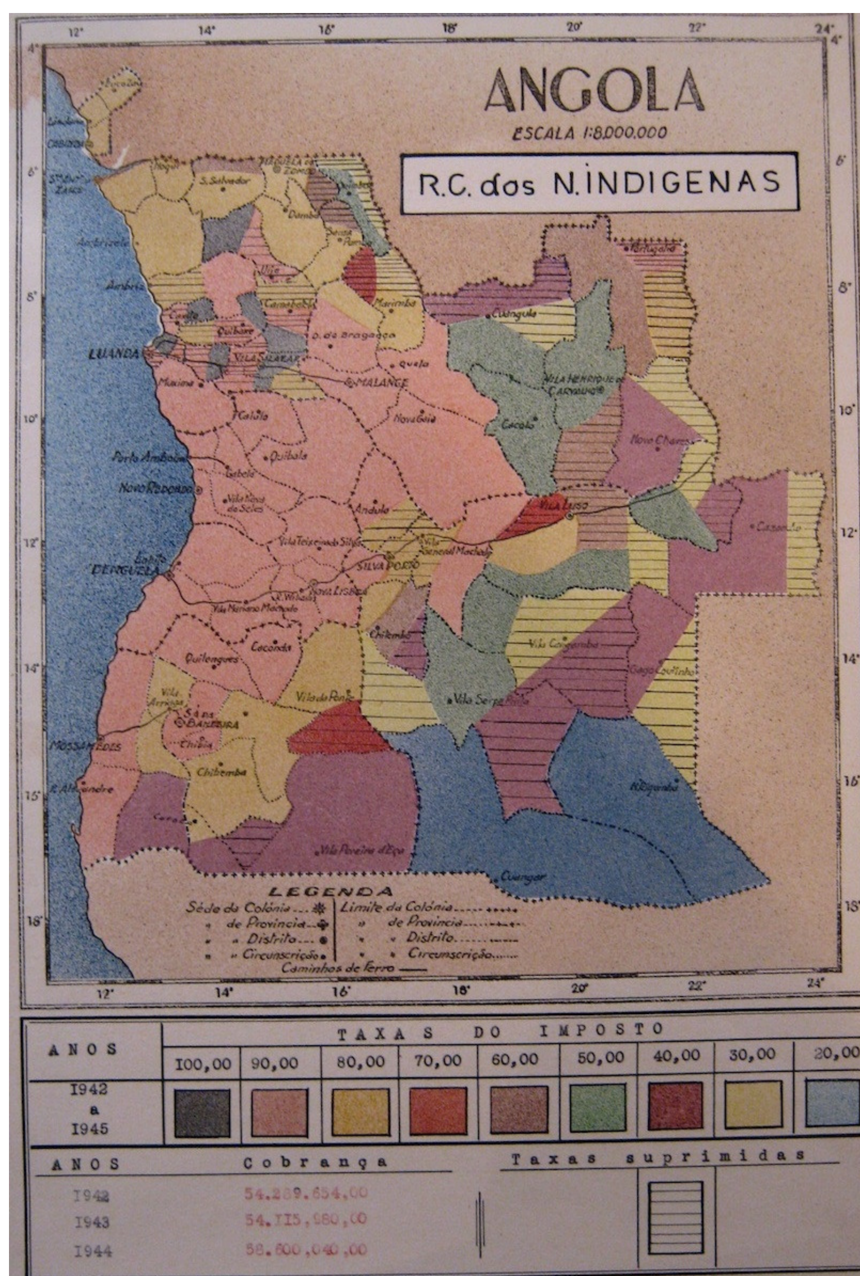
[209] Colónia de Angola, *Regulamento do recenseamento e cobrança do imposto indígena (1931),* art. 4.

rates compatible with the (estimated) incomes of the native population, which varied considerably over time and space.

Readjustments were not infrequent and had already led to a great variation in the tax rates in Angola before 1931. Border regions in particular benefited from the lowest rates. In 1929-1930, for example, the native inhabitants of the border circumscriptions Baixo Cunene, Alto Zambeze and Dilolo and of the border intendancy *(intendência da fronteira)* of Cubango, all of which were situated along the southern and eastern borders, paid only 20 or 25 angolares (Ags), whereas the standard rate in the colony, which had been applied in all of the central districts but also along the north-western and south-western border, was 80 Ags.[210] Such discrepancies between certain border regions and the central districts, each on one end of the taxation continuum, persisted throughout the period under scrutiny here, as a multi-coloured tax rate map from 1945 clearly shows (See Map 5.2).

[210] Galvão, Henrique, *Informação económica sôbre Angola. Organizada por Henrique Galvão, Director das Feiras de Amostras Coloniais,* Lisboa, 1933, pp. 22–23.

Map 5.2 – Taxation Levels in Angola (1945)



(Source: Repartiçao Central dos Negocios Indigenas da Colónia de Angola, *Mão de Obra – Elementos Estatisticos (1945)*, in: AHU, MU, ISAU 1661.)

In general, readjustments reflected changes in local economic conditions (e.g. prices of agricultural products or crop failures), but they did not necessarily do so and certainly not directly, as they were the outcome of complex processes of negotiation between the natives and their local administrators, as well as between the latter and the upper echelons of the

colonial administration.[211] Especially in the border areas, native groups sought to use Portuguese concerns over inter-colonial tax differences as a means to pressure local administrations into (further) reducing the taxes; they threatened to settle in the neighbouring colony unless the condition of lowered taxes was met.[212] The success of their demands, however, depended on the local administrator's ability to convince his superiors and the central administration of the veracity of their demands. José Ribeiro da Cruz, for example, repeatedly failed in his attempts to do so in 1935.[213]

The examples above make it clear that, to a certain extent, the colonial administration in Angola did engage with a flexible tax policy as a way to influence migratory flows. Yet taxes probably remained higher than in most, if not all, surrounding colonies, thus foiling the ultimate aspiration of tax equality.[214] How can one explain why the colonial administration in Angola did not make further reductions?

In the first decades of the twentieth century, the colony's finances had become increasingly dependent upon the native tax income. When the hut tax was introduced in 1907, the Colonial Ministry highlighted three sources of legitimacy. Native taxation was presented as a financial compensation for the expenses incurred in policing the territory and the development of the occupied areas; as a political symbol for the recognition of Portuguese sovereignty on the part of the Angolans; and as an instrument of civilization, which would create regular habits of labour amongst the native population and induce many of them to accept wage labour in European undertakings.[215] The political and civilizational arguments did not entirely disappear, as the debate about the recalcitrant Mucubais between the late 1920s and early 1940s demonstrates so well.[216] But as the native tax income rose, these arguments were gradually supplanted in their importance by the financial argument.[217] In the early 1920s, native taxation became an important source of income, and Norton de Matos firmly counted on this quickly growing source of revenue, seeing it as an investment in the

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[211] For a detailed example, see Colónia de Angola, Relatório da Repartição Central dos Negócios Indígenas para 1943, Luanda 1948, pp. 186-200, in: AHU, MU, ISAU 1661.
[212] For examples of the bargaining power of the Africans, see Galvão, *Huíla,* p. 138 and Cruz, *Relatório (1941),* pp. 180–181.
[213] Cruz, *Relatório (1941),* pp. 54–55.
[214] According to Kreike, taxes in southern Angola were still three times as high as those in South West African Ovamboland in 1947, see Kreike, *Re-creating Eden,* p. 68.
[215] See Ministério da Marinha e Ultramar, *Decreto criando na provincia de Angola um imposto sobre habitações denomido 'cubatas' (1906).* See also Couceiro, *Angola [1948],* pp. 229–231.
[216] See, for instance, Oliveira Santos, *Relatório sobre a questão demografica do Districto de Mossamedes*, 18.12.1928, in: AHM, 2a Div., 2a Secç., Cx. 62, n. 29; Abel de A. Sotto-Mayor, *Operações militares de polícia para repressão das tribos mucubas insubmissas na colónia de Angola em 1941-41. "Breve Notícia"*, Nov. 1943, in: Sociedade de Geografia de Lisboa, Cx. 94, n° 35 and Pélissier, René, *Les Campagnes coloniales du Portugal. 1844-1941,* Paris: Pygmalion, 2004, pp. 308–311.
[217] See, for instance, the complaints written in Galvão, *Huíla,* p. 137 and Frazão, *Reabilitação,* p. 237.

future development of the colony.[218] His departure for the metropole in 1923 and the fall of the First Republic three years later did not affect the importance that was attributed to native taxation as an essential source of income for the colony, but its application changed. The financial politics of the *Estado Novo* turned native taxation into a major financial constraint, not for investment purposes, but for budget consolidation.

After having successfully eliminated Portugal's budget deficit in little more than a year as the Minister of Finance in 1928-1929, António Oliveira Salazar, also Minister of Colonies in the first half of 1930, sought to apply the same model of financial austerity to the colonies. His aim was not only to make the empire as a whole self-sufficient, as others had tried before him, but to achieve balanced budgets in every single colony. To control the implementation of this policy, which also restricted the possibility to obtain credit from the metropole, he placed the budgets of the colonies under the strict control of the Colonial Ministry.[219] Outstanding individuals such as Cunha Leal, a member of the parliament and the director of the Bank of Angola in the late 1920s, and Paiva Couceiro, former Governor-General of Angola (1907-1909), denounced the absolute primacy Salazar gave to budgetary equilibrium in the strongest terms. The implications of this policy, such as tremendous spending cuts and a lack of investment, they claimed, would (or already had) cause(d) the ruin of Angola. Such directives could only come from someone who viewed the colonies as "a cancer, a nightmare", from a person "who never dedicated his efforts to the overseas territories and [did] not have the slightest experience in this area."[220] Salazar did not accept this criticism – Cunha Leal was dismissed from his job as Director of the Bank of Angola and Paiva Couceiro was exiled to Angola – and his "no budget deficit"-policy became the official credo of the *Estado Novo* in Angola.[221] Intensifed by the effects of the world economic crisis and the consequent economic rollbacks of the 1930s, this policy gave rise to at least two decades of financial austerity. Large cuts on spending may well have been the most visible aspect of this policy, but it also placed constant pressure on the income side.[222] Certainly, due

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[218] Matos, *A província de Angola,* pp. 184–185.
[219] Havik, *Tributos,* pp. 33–34. For Salazar's budget reforms in Portugal, see Meneses, *Salazar,* pp. 46–52.
[220] Leal, Francisco Cunha, *Oliveira Salazar, Filomeno da Câmara e o Império Colonial Português,* Edição Propria: Lisboa, 1930, p. 31; Couceiro, Henrique de Paiva, "Carta a António de Oliveira Salazar, 31.10.1937", *Os Monárquicos e o Ultramar,* Lisboa: Biblioteca do Pensamento Político, 1971, pp. 12–18. For a later critique of Salazar's obsession with financial austerity and its consequences, see Galvão, Henrique; Selvagem, Carlos, *Império ultramarino português. Monografia do Império, III Volume: Angola,* Lisboa: Empresa Nacional de Publicidade, 1952, pp. 262–272 and, more recently, Torres, Adelino, "Angola. Conflitos políticos e sistema social (1928-1930)", *Revista de Estudos Afro-Asiáticos* 32 (1997), pp. 163–183. On Cunha Leal, see Farinha, Luís Manuel, *Cunha Leal, Deputado e Ministro da República. Um Notável Rebelde* (Colecção Parlamento; 25), Alfragide Portugal: Editora Texto, 2009. On Couceiro, see Valente, Vasco Pulido, *Um Herói Português. Henrique Paiva Couceiro (1861 - 1944),* 2nd ed., Lisboa: Aletheia, 2006.
[221] Havik, *Tributos,* pp. 33–34.
[222] On spending cuts, see, for instance, Galvão/Selvagem, *Império ultramarino,* p. 268.

to the world economic crisis, native tax revenue fell about 30% in absolute terms between 1928-29 and 1934-35, when it hit bottom, and only re-gained its pre-crisis level (of 1928-29) in 1943.[223] This did not mean, however, that the authorities were less eager to exact taxes from the native population. On the contrary, the primacy of balancing the budget in times of economic crisis and falling revenues, most likely coupled with the demands of the suffering European population to force the native population to participate in covering the costs of the crisis, led to even greater pressure on the African tax payers and, as may be assumed, to less willingness on the part of the administration to reduce tax rates.[224]

Yet the interesting point is that regardless of this focus on taxation, the colony's budget grew progressively less dependent on native tax revenue over the course of the 1930s and 1940s. While the average share of native tax accounted for about 25% of the colony's total income between 1923-24 and 1931-32 (and at some points peaked at 30%), these percentages started to fall in 1932, dropping to about 20% in 1939 and less than 10% at the end of the 1940s.[225]

Hence there were more than purely budgetary reasons for the refusal to further reduce (or even suppress) tax rates in border regions. The vicissitudes of a project that aimed to end tax migration through the conclusion of bilateral treaties with the neighbouring colonies illustrates that other issues were at stake as well. In the late 1930s, the central administration in Luanda proposed to establish a common tax zone on both sides of the border that would reach inland as far as 100 to 150 km.[226] In that zone, it would only be possible to change tax rates via mutual consent of the two parties. This was a radical project to put an end to tax emigration. Governor General António Lopes Mateus (1935-1939) backed it, but the plan was probably never submitted to any of the surrounding colonies, since the Imperial Council in

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[223] António Lopes Mateus, *Relatório do Governador Geral da Colónia de Angola do terceiro trimestre de 1935*, 1935, in: AHU, L 7092; Colónia de Angola - Repartição Técnica de Estatística Geral (ed.), *Anuário Estatístico de Angola, ano de 1939,* Luanda: Imprensa Nacional, 1941, pp. 472–473.

[224] For the strong pressure placed on African tax payers in the 1930s, see Havik, *Tributos,* p. 50 and also the complaints in *Imposto Indígena*, in: A Província de Angola, 14.04.1931, p. 2.

[225] Colónia de Angola - Repartição Técnica de Estatística Geral (ed.), *Anuário Estatístico de Angola, ano de 1933,* Luanda: Imprensa Nacional, 1935, pp. 209; 212-213; Colónia de Angola - Repartição Técnica de Estatística Geral, *Anuário Estatístico 1939,* pp. 464; 472-473; Colónia de Angola - Direcção dos Serviços de Economia - Repartição de Estatística Geral, *Anuário Estatístico de Angola, anos de 1940 a 1943,* Luanda: Imprensa Nacional, 1944, pp. 555-556; 566; Colónia de Angola - Repartição Técnica de Estatística Geral, *Anuário Estatístico, 1944 a 1947,* Luanda: Imprensa Nacional, 1949, pp. 467–468; Colónia de Angola - Repartição Técnica de Estatística Geral, *Anuário Estatístico, ano XVIII (1950-1951),* Luanda: Imprensa Nacional, 1952, pp. 581-582; 608.

[226] For the following, see Conselho do Império Colonial, *Parecer 37 (Projecto de convenção adicional à Convenção de Extradição de 27 de abril de 1888, entre o nosso governo e o estado independente do Congo)*, 28.03.1938, in: AHU, MU, CIC, Livro Pareceres 2a Secção 1938. For the Minister's dispatch from 25.02.1939, see Chefe da Repartição dos Negócios Políticos e de Administração Civil da DGAPC do Ministério das Colónias à Secretaria do Conselho do Império Colonial, 08.05.1939, in: AHU, MU, CIC, Cx. 3 Processos Consulta 2a Secção, 1936-1941, Processo 41.

Lisbon voted against it, as did the Minister of Colonies. Two reasons were given for their refusal: first, the treaty would infringe too much upon Portugal's sovereignty; second, it would not solve the problem, but only spark emigration from the regions beyond the common zone, where the taxation rates would be much higher. The danger of an increase in internal tax migration was a compelling enough argument and had already been brought up by several high-ranking officials in Angola in the years before.[227] It would indeed be difficult, albeit not impossible, to prevent such migrations from happening and unfolding their destabilizing effects were strong tax reductions to be granted to the border zones. The former argument, however, is more revealing, as it addresses the ideological framework that underpinned Portugal's native policy during the first decades of the *Estado Novo*.

Sovereignty was a serious concern for the country's colonial elites, who feared the loss of their colonies or the encroaching influence of foreign actors. One of the strategies to defend the integrity of the empire was to highlight the alleged civilizing and humanistic character of Portugal's native policy, which was increasingly framed within the exceptionalist discourse of lusotropicalism.[228] Within this mental framework, it became increasingly taboo to openly adapt the colony's policy to that of its neighbours. The following reaction of the Governor of Malange to the recommendations made by his administrators is illustrative of this frame of mind. While these last advocated orienting or basing their policies on various aspects of the Belgian native policy, including tax levels, the Governor stubbornly refused to allow "that our administration subordinate its norms and its goals to the conditions of native life in the Belgian Congo." Angola's policy had to be guided by its own resources and its own way of colonization rather than to be oriented by that of its neighbours.[229]

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[227] Galvão, *Huíla,* p. 139; Governador de Malange (Lopes Alves) at the Conselho de Governadores de Angola, *Relatório e Propostas, Reunião extraordinária realizada nos idas 7 a 11 de Maio de 1935*, pp. 9-10 and proposta 17 (08.05.1935), in AHU, MU, ISAU 1730.

[228] On lusotropicalism, see Castelo, Cláudia, *"O modo português de estar no mundo". O luso-tropicalismo e a ideologia colonial portuguesa (1933-1961),* Porto: Edições Afrontamento, 1998.

[229] Manuel da Cruz Alvura, *Relatório do Governador da Província de Malange (1944)*, 31.05.1944, pp. 189-190, in: AHU, MU, ISAU 1663.

5. Labour Migration and the Counter-Example of Mozambique

One of the more intriguing questions is why the colonial state in Angola did not establish conventions with its neighbouring colonies to get more control over migration. Mozambique, the other Portuguese colony in southern Africa, had signed such agreements with both South Africa and Southern Rhodesia and was able, at least to a certain extent, to monitor labour migration and to draw profit from it.[230]

Beginning in the late nineteenth century and all through the twentieth, when the gold mines in the Witwatersrand began to attract tens of thousands of Mozambican labourers , the colonial government in Mozambique never tried to prevent this labour migration altogether, nor did it set up substantial restrictions. Certainly, this would have been an absolutely impossible task given the permeability of the borders and the striking social and economic disparities between the two territories. One such disparity regarded the forced labour recruitment (*shibalo*) in Mozambique, the driving force behind the migratory movement toward South Africa, this last of which did not have such a provision. Yet, many colonial officials and landowners criticized the massive labour migration, claiming that it deprived the colony, temporarily if not permanently, of tens of thousands of vigorous young men needed for the development of its own domestic economy.[231] However, in the face of Mozambique's burgeoning economic dependence on South Africa and persisting doubts about Mozambique's capacity to absorb its own labour force, the Portuguese opted consistently for a strategy of surveillance and taxation, rather than one of prohibition of labour migration. A series of agreements with the Chamber of Mines in Transvaal (where the Witwatersrand was located), and later – from 1913 on – with Southern Rhodesia were supposed to benefit all parties. They instituted official recruitment schemes run by strongly monopolistic recruiting agencies (the Witwatersrand Native Labour Association (WNLA) and the Rhodesian Native Labour Bureau (RNLB)).[232] They provided the mines and farms in South Africa and Rhodesia with cheap and

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[230] Historiography has given ample attention to this labour migration movement, see, for instance, Katzenellenbogen, Simon E., *South Africa and southern Mozambique. Labour, railways and trade in the making of a relationship,* Manchester: Manchester University Press, 1982; Harries, Patrick, *Work, Culture and Identity. Migrant Laborers in Mozambique and South Africa, c. 1860 - 1910,* Johannesburg: Witwatersrand University Press, 1994; Newitt, Malyn, *A history of Mozambique,* London: Hurst, 1995, pp. 482–516 and Tornimbeni, *State*. For another example of 'transnational' labour migration, between South Africa and South West Africa under German rule, see Lindner, Ulrike, "Transnational movements between colonial empires. Migrant workers from the British Cape Colony in the German diamond town of Luderitzbucht", *European Review of History* 16,5 (2009), pp. 679–695.

[231] For such critical voices, see, for instance, Katzenellenbogen, *South Africa,* pp. 102-103; 149-151.

[232] For the labour agreements with South Africa, from which the *modus vivendi* of 1901 and the Mozambique-Transvaal Convention of 1909, renegotiated in 1928, were the most important, see *Ibid.*; Harries, *Work, Culture*

easily controllable labour, enabled the workers to have better wages than in Mozambique, and ensured important tax incomes to the colonial state in Mozambique. Upon Portuguese demand, the conventions contained clauses against both clandestine and permanent migration: the repatriation of workers at the end of their contracts; a system of deferred payment (labourers would get part of their salary once they had returned to Mozambique); the introduction of a complex pass system; and, what Patrick Harries has called the "lynchpin" of the system, the establishment of a Portuguese 'curator' or 'protector of natives'. These conventions were signed in Johannesburg in 1897 and in Salisbury (today, Harare) in 1913.[233] The curator was created to enforce the fulfilment of the individual labour contracts, which included the protection of Mozambican workers against abuses, but also, and most importantly, to monitor the whole labour emigration system. Curators had to ensure its profitability by extracting "various registration and endorsement fees" from the workers and to suppress as much as possible clandestine and permanent emigration through the exertion of bureaucratic control over Mozambican labour on the Rand.[234]

These arrangements were not entirely impervious, however. Many Mozambicans successfully circumvented the official emigration schemes and therefore the taxes and restrictions that these entailed (regarding the choice of mine, the period of work, etc.). Because of the existence of supportive structures in Mozambique, the complicity of some state officials, the connivance of authorities and employers in the neighbouring colonies, and the curators' insufficient power of control, clandestine and permanent emigration to South Africa and especially to Southern Rhodesia, where the conventions had never had a big impact, continued to flourish throughout the colonial era.[235] Just like in Angola, the colonial bureaucracy became increasingly concerned with the problem of clandestine emigration in the 1930s and 1940s. Anxieties regarding depopulation culminated in a host of reports on

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and Identity, pp. 24; 111; 138; 170 and Newitt, *History of Mozambique,* pp. 491–498. For the regulation of migrant labour to Southern Rhodesia, see Newitt, *History of Mozambique,* pp. 503–516.

[233] Within the Portuguese colonies, the recruitment and protection of African labourers was also organized by a *curador geral*. The term goes back to the abolition of slavery in the mid-nineteenth century, when the function of curator (port. *curador*) was created to oversee freed slaves. See Coghe, Samuël, "The Problem of Freedom in a Mid Nineteenth-Century Atlantic Slave Society. The Liberated Africans of the Anglo-Portuguese Mixed Commission in Luanda (1844–1870)", *Slavery and Abolition* 33,3 (2012), pp. 479–500. For the protracted negotiations on the introduction of deferred payments, see Katzenellenbogen, *South Africa,* pp. 112–117.

[234] Katzenellenbogen, *South Africa,* pp. 40-41; 50; Harries, *Work, Culture and Identity,* pp. 138 (quote); 179.

[235] See, for instance, Katzenellenbogen, *South Africa,* pp. 108–111; Newitt, *History of Mozambique,* pp. 503–510; Tornimbeni, *State,* pp. 319–320. On the rationalities and mechanisms of 'clandestine' emigration around 1945, see also Henrique Galvão to Minister of Colonies Marcello Caetano (Informaçã sobre a emigração clandestina de indígenas no Pafúrian), 28.08.1945, in: ANTT, AMC, Cx. 8, Inquéritos de Henrique Galvão/Indígenas, Emigração Clandestina de Indígenas em Moçambique, n.° 1.

emigration around 1945.[236] Yet, this did not substantially influence the policy towards the official labour migration schemes, which had managed to legalize at least part of the migration flow and to generate important tax revenues.[237]

In Angola, on the other hand, the Portuguese adopted a different strategy. Of course, in comparison to Mozambique, labour migration into neighbouring colonies was not nearly as important numerically until the mid-1920s, or at least it was not noticed as much, but it did exist. Northern Angolans, for example, went to the Belgian Congo to work on the construction sites of the Congo railway or in the mines of Katanga. Between 1917 and 1921, Robert Williams & Company even recruited some 3,500 Angolans for the copper mines of the Union Minière du Haut Katanga under an official concession from the Angolan government.[238] After dissensions with the recruiting agency, however, the Portuguese did not renew the concession, a decision that can also be explained with the growing labour demand for the newly established Angolan Diamond Company (Diamang) in north-eastern Angola.[239] Putting a stop to the recruitment was not a casual decision, but a preview of the labour migration policy that would be adopted by subsequent governments in Angola. Upon his return to Angola as High Commissioner in 1921, Norton de Matos prohibited the (labour) emigration of Angolans across the board. In practice, he allowed exceptions for the construction of railways near the Angolan border, but maintained the ban on recruitment for the Katanga mines on the basis that this type of labour migration had a tendency to assume a permanent character.[240] However, when reports on clandestine (labour) emigration toward the

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[236] Newitt, *History of Mozambique,* pp. 510–516. Additionally, see also Galvão, *Exposição 1947*; Galvão, *Estudo da emigração (1948).*

[237] By the early twentieth century, the collection of native hut tax in southern Mozambique, and hence the financing of the colonial state, depended to a large measure on the income brought or sent back from the mines by migrant labourers, see Harries, *Work, Culture and Identity,* pp. 170–175. From 1928 – with a short interruption between 1934 and 1940 – the deferred wages constituted an important source of revenue from the migration scheme. South Africa paid the wages in gold at market price directly to the Mozambican government, which then transferred them, but only at the official gold rate, to the workers once they returned to Mozambique, see Katzenellenbogen, *South Africa,* pp. 144; 153.

[238] On the rationalities and modalities of this labour recruitment scheme, see Perrings, Charles, "'Good Lawyers but Poor Workers'. Recruited Angolan Labour in the Copper Mines of Katanga, 1917-1921", *Journal of African History* 18,2 (1977), pp. 237–259. On Robert Williams, co-founder of the Union Minière in 1906 and concessionaire of the Benguela railway between Lobito and the Katanga mines, see Katzenellenbogen, Simon Ellis, *Railways and the copper mines of Katanga,* Oxford: Clarendon Press, 1973.

[239] Perrings, *Good Lawyers*, pp. 244–245.

[240] See *Decreto n. 73*, 17.12.1921, in: Secretaria de Colonização e Negócios Indígenas (Província de Angola), *Legislação provincial (1921),* pp. 21–23; Matos, *A Província de Angola,* pp. 246–247; Perrings, *Good Lawyers,* p. 257. For Norton's different appraisal of railway and mine labour, see Governor Rutten to High Commissioner Norton de Matos, Boma, 09.07.1923 and Norton de Matos to Rutten, 02.09.1923, in: AA, Affaires Étrangères II (A32), Box 3238, Folder 1359 as well as Machado [de Faria e Maia], Carlos Roma, "O trabalho dos indígenas portugueses nas colónias visinhas. Seu engajamento e emigração clandestinos - Modos de os evitar - Seu controle oficial", *III Congresso Colonial Nacional de 8 a 15 de Maio de 1930. Actas das Sessões e Teses,* Lisboa: Tip. e Pap. Carmona, 1934, here p. 23. In 1922, Norton de Matos still prohibited the recruitment of

Belgian Congo, Northern Rhodesia and Namibia grew increasingly frequent in the late 1920s, the wholesale prohibition of labour emigration was called into question, and the issue of establishing conventions with all surrounding colonies was raised. At the Third National Colonial Congress in Lisbon in 1930, Roma Machado called for the establishment of a commission to examine the fundamental question of whether Angola should adopt an official migration regime similar to that which was used in Mozambique – i.e. with conventions and the creation of *curadorias* in the neighbouring colonies as a means to control labour conditions and monitor the repatriation of the natives at the end of their contracts – or whether it should continue to deny official labour emigration and instead enhance border patrols.[241] The issue of labour conventions was also being pondered in the colony, where leading officials such as Bento Roma, in charge of the Intendancy of Baixo Cubango (1929) and future Governor-General, opposed it.[242]

It remains unclear whether the commission championed by Roma Machado at the Colonial Congress was ever established. With the advent of the world economic crisis in the early 1930s, labour emigration from Angola temporarily became a less pressing issue, as mines in South West Africa, Rhodesia and the Belgian Congo curtailed their production and strongly reduced or even halted all recruitment. The number of Angolans officially employed in the mines of South West Africa, for example, dropped systematically from the monthly average of 2,204 in 1929 to a mere 37 in 1934.[243] When the labour migration issue resurfaced together with the economic recovery in the second half of the 1930s, leading organs in the Colonial Ministry took a clear stance, strongly advocating a closed border policy for Angola.[244]

In 1937, the formerly unknown 'Recruiting Society' *(Sociedade de Recrutamento)* petitioned the colonial government in Angola to conclude a *modus vivendi* with the neighbouring colonies and Transvaal, modelled on the existing labour migration scheme

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Angolan labourers for the Matadi-Léopoldville railway, see AHU, MU, AGC 2241, processo 27 (Pedido do Coronel Paulis para recrutar indígenas, 1921-22).

241 Machado [de Faria e Maia], *O trabalho dos indígenas*, esp. pp. 12-13; 20; 24-26.

242 See, for instance, Bento Roma, *Relatório da Intendência do Cubango, Vol. I*, 10.07.1929, p. 26, in: AHU, MU, GM 599.

243 For the numerical evolution of the official employment of Angolan natives in South West African mines between 1926 and 1937, see the annual "Report presented by the Government of the Union of South Africa to the Council of the League of Nations concerning the administration of South West Africa", for the year 1930, p. 96; for the year 1934, p. 108 and for the year 1937 p. 135. For the reduction of the labour force in the copper mines of Katanga and Northern Rhodesia, see Perrings, Charles, *Black mineworkers in Central Africa,* New York: Africana Publ., 1979, pp. 99–109 and Macola, *Kingdom of Kazembe,* pp. 217–218.

244 For the economic recovery of the mining industry, see, for instance, Larmer, Miles, *Mineworkers in Zambia. Labour and political change in post-colonial Africa*, London: Tauris Academic Studies, 2007, pp. 30–31.

between the latter and Mozambique.[245] The Recruiting Society demanded the same extensive recruitment provisions as those that had been granted to the WNLA in Mozambique and, in return, offered the Angolan government a part of the scheduled profits. It underscored the advantages of such a solution, claiming that the clandestine emigration of tens of thousands of Angolan natives from the poor and underdeveloped border territories in the south and the east could not practically be brought to a stop and that until now, the government had got no benefits at all from this exodus. The Society's request divided the government in Luanda. While the Civil Administration Department (Direcção dos Serviços de Administração Civil – DSAC) opposed the proposal, arguing that the colony was in great need of labour itself and that it was better to prevent emigration by developing the border zones, Governor-General Lopes Mateus was extremely sceptical about the real possibilities of upgrading the border zones. Under the current circumstances, he considered a *modus vivendi* the lesser of the two evils. However, as Governor-General, he did not have the authority to conclude such an international agreement, and therefore the question was deferred to the Colonial Ministry in Lisbon. Whilst the issue was pending in the metropole, the idea of an official labour emigration scheme also received the support of Francisco Serra Frazão, the interim Director of the Native Affairs Department, and one of the more arduous defenders of the natives' rights: "On this topic I must say that there is the urgent need to conclude a treaty with the neighbouring colonies. There have been discussions, but it seems to me that the case has not yet been studied well, to our own detriment. I know that there is no abundance of people in this colony, so that we would have to cede them to the neighbouring colonies, but, if they go there, even without us knowing, why don't we make sure, then, that, if they go, they go in concordance with the law."[246] The Colonial Ministry, however, turned a deaf ear to such arguments of practicability. In 1939, the proposal was rejected by the *Junta Central de Trabalho e Emigração*, a distinguished consultative organ in imperial labour issues.[247] In 1942, the Council of the Colonial Empire *(Conselho do Império Colonial)*, the most important consultative institution of the Colonial Ministry, also took a firm stand against the plan. For both advisory boards, a *modus vivendi* that allowed individuals or societies to recruit Angolan labourers for non-Portuguese colonies was out of the question. It would only denationalize the Angolan workers and further raise the emigration figures at the very moment when Angola

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[245] For the following, see the detailed Parecer n. 18 da nova 3a secção do Conselho do Império Colonial (Regulamentaçao da Emigraçao de Angola para as colónias visinhas e Estabelecimento de um 'modus-vivendi' com as mesmas), in: AHU, MU, CIC, Livro dos Pareceres de 1942.

[246] Frazão, *Relatório (1939-1940),* p. 43.

[247] See Parecer n. 42 da Junta Central de Trabalho e Emigração, 12.04.1939, in: AHU, MU 729 and the corresponding debate in Acta da Sessão 83 (23.11.1938) and 85 (12.04.1939), in: AHU, MU, DGAPC 996, proc. 20 (Junta Central de Trabalho e Emigraçao).

needed its entire labour force to supply its own burgeoning economy as well as the cocoa islands. The five members of the Council who examined this question (Lopo Vaz de Sampayo e Mello, Marcello Caetano, Vicente Ferreira, Álvaro de Fontoura and António Leite de Magalhães), all leading figures of Portuguese colonial thinking in the 1930s and 1940s, were unanimous in their decision that the Mozambican model was not to be applied to Angola. The tax income to be gained from such a *modus vivendi*, they stated, would not compensate the loss in manpower that the colony would suffer: "The abundance of money was never synonymous with wealth. The economic conditions of the colony of origin do not get any better with the gold brought back by repatriated workers; and in the meanwhile local agriculture and industry, the only secure and stable source of wealth, must do without the indispensable workers."[248] The Council's solution to the emigration problem was not to make it legal and official, but to prohibit it wholesale. It was felt that improvements to the economic and material conditions along the border would immobilize and help keep the population in the colony, but if such measures proved to be insufficient, then the large-scale resettlement of the border populations to other regions was to be considered.

To some extent, the negative stance towards colonial labour emigration mirrored the ideological position of the *Estado Novo* in the 1930s and 1940s on the subject of emigration from mainland Portugal. In those two decades, emigration figures reached the lowest level for the whole period between 1875 and 2000. The causes are not to be found exclusively in the external pull factors, such as the world economic crisis and the more restrictive immigration policies passed in the United States and Brazil, as this decrease has usually been explained, but also in the internal factors, namely in the decisions taken by the *Estado Novo* to enhance the legal restrictions on emigration.[249]

Given the nature of the emigration policy in Angola, even the powerful WNLA never reached an agreement with the colony for the recruitment of labourers destined to the South

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[248] Parecer n. 18 da nova 3a secção do Conselho do Império Colonial (Regulamentaçao da Emigraçao de Angola para as colónias visinhas e Estabelecimento de um 'modus-vivendi' com as mesmas), p. 5, in: AHU, MU, CIC, Livro dos Pareceres de 1942.

[249] For statistical figures, see Peixoto, João, "A emigração", in: Bethencourt, Francisco; Chaudhuri, Kirti (eds.), *Último Império e Recentramento (1930-1998)* (História da Expansão Portuguesa; 5), Lisboa, 2000, pp. 152–181, here pp. 154–155. References to reinforced legal restrictions in the 1930s and 1940s can be found in Peixoto, *Emigração,* p. 156 and Baganha, Maria Ioannis, "From Closed to Open Doors. Portuguese Emigration under the Corporatist Regime", *e-JPH* 1,1 (2003), here pp. 3–5. Yet, Portuguese emigration policies during the 1930s and 1940s remain strikingly understudied, as most studies stop in 1930, with the end of the 'Brazilian cycle', or start in the 1950s, with the massive emigration to France, see, for instance, Pereira, Miriam Halpern, *A política portuguesa da emigração, 1850-1930,* Lisboa: A Regra do Jogo, 1981 and Pereira, Victor, ""Ainda não sabe qual é o pensamento de Sua Excelência Presidente do Conselho". O Estado português perante a emigração para França (1957-1968)", in: Domingos, Nuno; Pereira, Victor (eds.), *O Estado Novo em Questão,* Lisboa: Edições 70, 2010, pp. 41–79.

African mines.[250] The South African government once more brought up the issue during the official visit of the Governor-General of Angola to South Africa in 1941, but without success.[251] When, however, the WNLA in 1939 resumed its recruitment of 'tropical Africans' – that is, Africans living north of the 22° parallel of the southern hemisphere – official Portuguese policy could not prevent the company from building recruiting stations on the south-eastern border of Angola nor prevent it from hiring clandestine emigrants.[252] Accordingly, Angolan workers made their appearance in the official employment statistics of the South African Chamber of Mines in 1940. In the first decade, the number of Angolans employed in the South African mines averaged about 7,500 a year.[253] On his general administrative inspection tour through the colony in 1944, Nunes de Oliveira, former Governor-General of Mozambique, accidentally met with a group of twenty Angolans returning home after a year of work in the mines around Johannesburg. The reaction in his report was reminiscent of the official position of the *Estado Novo* – noting the labour shortage in Angola, he did not call for a *modus vivendi* to regulate this form of migrant labour, but (still) expressed the hope that improved working and living conditions for the natives in Angola would be able to stem the tide.[254]

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[250] Wilson, Francis, *Labour in the South African Gold Mines, 1911-1969,* Cambridge: Cambridge University Press, 1972, p. 69. In 1961, the Head of the Native Affairs Department in Angola, the government of the Republic of South Africa and the WNLA informed the International Labour Organisation that there was no recruitment of labourers in Angola for the South African mines. See International Labour Office, *Report of the Comission (1962),* p. 201. According to Crush, however, there were negotiations with the Angolan government between 1967 and 1973 to stabilize the supply of Angolan labourers at 5,000 a year, see Crush/Jeeves/Yudelman, *Labor Empire,* p. 108.

[251] See Foreign Office Research Department, *Portuguese Possessions in West Africa*, 06.05.1944, p. 9, in: The National Archives, London (henceforth: TNA), FO 371/60249.

[252] Crush/Jeeves/Yudelman, *Labor Empire,* pp. 45-47; 108, and for migration routes, p. 35. See also Gemmil, William, "The Growing Reservoir of Native Labour for the Mines", *Optima* 2 (1952), pp. 15–19.

[253] Crush/Jeeves/Yudelman, *Labor Empire,* pp. 234–235.

[254] Oliveira, *Relatório Inspecção 1944,* pp. 232–234.

Conclusion

Henrique Galvão's alarming reports of the late 1940s and the reactions it elicited testify to how depopulation anxieties continued to persist well into the post-Second World War period. At first, this might seem to be at odds with developments in the rest of Africa, since it has often been argued that in the 1940s fears of de- and underpopulation subsided and were replaced by a 'Third World' discourse that problematized rapid population growth.[1] Upon a more careful inspection, however, the evidence for this argument stems mainly from British (East) Africa, particularly Kenya, and French West Africa; several recent studies have shown that concern over declining or stagnating populations remained high in the Belgian Congo, French Gabon or in Uganda, with regard to Bunyoro, until well into the 1950s and possibly until the advent of decolonization.[2] Against this backdrop, the situation in Angola was not exceptional.

Although it was widespread, the idea of depopulation was also contested. As early as the 1930s, senior colonial officials in Angola such as Alberto de Lemos and António Damas Mora began to believe that the population had begun to grow again.[3] Demographers at the National Institute of Statistics in Lisbon endorsed this view in the 1940s, in part due to the 'surprising' results of the 1940 census: to calculate the evolution of the Angolan population in the 1940s for the first United Nations Demographic Yearbook of 1949, in fact, they applied the – very optimistic – annual growth rate of 2.7% that had been observed in Mozambique between 1930 and 1940.[4] Although the 1950 census results would reveal a lower growth rate,

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[1] See especially Ittmann, Karl, ""Where Nature Dominates Man". Demographic Ideas and Policy in British Colonial Africa, 1890-1970", in: Ittmann, Karl; Cordell, Dennis D.; Maddox, Gregory H. (eds.), *The Demographics of Empire. The Colonial Order and the Creation of Knowledge,* Ohio: Ohio University Press, 2010, pp. 59–88; van Beusekom, Monica M., "From Underpopulation To Overpopulation. French Perceptions Of Population, Environment, and Agricultural Development In French Soudan (Mali), 1900-1960", *Environmental History* 4,2 (1999), pp. 198–219.

[2] For Gabon, see Cinnamon, John M., "Counting and Recounting. Dislocation, Colonial Demography, and Historical Memory in Northern Gabon", in: Ittmann, Karl; Cordell, Dennis D.; Maddox, Gregory H. (eds.), *The Demographics of Empire. The Colonial Order and the Creation of Knowledge,* Ohio: Ohio University Press, 2010, pp. 130–156; for the Belgian Congo see Sanderson, Jean-Paul, "Le Congo belge entre mythe et réalité. Une analyse du discours démographique colonial", *Population* 55,2 (2000), pp. 331–355; Hunt, Nancy Rose, "Colonial Medical Anthropology and the Making of the Central African Infertility Belt", in: Tilley, Helen; Gordon, Robert J. (eds.), *Ordering Africa. Anthropology, European imperialism and the politics of knowledge,* Manchester: Manchester University Press, 2007, pp. 252–281; Hunt, Nancy Rose, "Rewriting the Soul in a Flemish Congo", *Past and Present* 198 (2008), pp. 185–215; for Bunyoro in Uganda see Doyle, Shane Declan, *Crisis & Decline in Bunyoro. Population & Environment in Western Uganda 1860 - 1955,* Oxford: Currey, 2006. Doyle contrasts the developments in Bunyoro, where population growth was not signalled.

[3] On Lemos and Damas Mora's views on demographic change in the 1930s, see Chapter 2.4.

[4] See Morgado, Nuno Alves, "Estimativas da populacao das colonias portuguesas para os periodos intercensuarios", *Revista do Centro de Estudos Demográficos* 6 (1949), pp. 79–91. See also Statistical Office of the United Nations (ed.), *Demographic Yearbook for 1948,* New York, 1949, p. 75.

the data did indeed confirm that growth had taken place over the last decade and therefore they were added to an increasing body of demographic evidence supporting the existence of overall population growth in Angola in the 1940s and 1950s.[5]

If these data did not spark fears of rapid population growth, it was certainly in part due to the belief that many regions were still underpopulated compared to the labour demands. The case of the Congo region in Northern Angola illustrates this very well. In the late 1950s, Nuno Alves Morgado, a leading colonial demographer at the Centre for Demographic Studies in Lisbon, concluded in various studies that not only was the population of the Congo District (and of the larger Congo Province as well) growing, it was growing at an ever faster raste, due to natural increase and the return of Angolan migrants from the Belgian Congo. This “demographic explosion” in one of the colony’s most densely populated districts did not excite fear, however, since the burgeoning economy of the Congo District, as Morgado stressed, was still dependent upon the massive influx of temporary migrant labourers from Southern Angola.[6] Furthermore, as hundreds of thousands fled towards the newly independent Republic of Congo following the outbreak of the war of decolonization in northern Angola in 1961, it is unlikely that overpopulation became a key issue in that area in the early 1960s.[7] Yet, further research is needed on the 1950s and 1960s to substantiate this supposition.

In this dissertation, I have shown how, from the turn of the twentieth century until the 1940s, given the pervasive anxieties of population decline, a wide array of efforts were conceived and implemented in an attempt to improve the quantity and the quality of the native population in Angola. From the late nineteenth century onwards, Portuguese doctors and scientists participated in the international quest to identify the cause of and find a cure to sleeping sickness. After rather hesitant beginnings, they gave a more resolute response to the disease in the late 1920s. In that same decade, leading colonial doctors began to integrate the struggle against sleeping sickness into a more comprehensive healthcare scheme that also

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[5] Beyond the 1950 census results in "Censos da população do Ultramar de 1950. III. Províncias de Angola e Moçambique", *Boletim Mensal do Instituto Nacional de Estatística* 23,6 (1951), pp. 4–14 and Repartição Técnica de Estatística Geral da Província de Angola (ed.), *II Recenseamento Geral da População, 1950*, 5 vols, Luanda: Imprensa Nacional, 1953-1956, see also Sarmento, Alexandre, "Subsídios para o estudo demográfico da população indígena de Angola", *Anais do Instituto de Medicina Tropical* 14,3-4 (1957), pp. 509–526; Sarmento, Alexandre, "População indígena de Angola", *Actividade Económica de Angola* 50 (1958), pp. 29–57; Morgado, Nuno Alves, *Aspectos da evolução demográfica da população da antiga província do Congo (1949-1956)* (Junta de Investigações do Ultramar - Estudos de Ciências Políticas e Sociais; 24), Lisboa: C.E.P.S., 1959; Morgado, Nuno Alves, "O crescimento da população do Distrito do Congo", *Boletim Geral do Ultramar* 413-414 (1959), pp. 355–360.

[6] Morgado, *Aspectos,* p. 62 (quote); Morgado, *Crescimento*.

[7] Bender, Gerald J., *Angola under the Portuguese. The Myth and the Reality,* Berkeley, Los Angeles: University of California Press, 1978, p. 158.

targeted other epidemic and endemic diseases, exceedingly high infant mortality rates and widespread mal- and undernutrition. Moreover, this scheme aimed to shift the focus from curative to preventive medicine – a shift that was epitomized by the attempts to establish model villages with pre-selected inhabitants, improved sanitary conditions and better access to medical and agricultural assistance and education. Senior officials within the civil administration appropriated the idea of model villages, incorporating it into their plans to reduce internal labour migration in the colony. They promoted the stabilization of labourers with their families near plantations, industries and mines in order to increase birth rates and to secure the reproduction of the work force. From the 1920s to 1940s, the colonial administration also devised various policies aimed at curtailing emigration to Angola‘s neighbouring colonies. Most importantly, it prohibited, with rare exceptions, official cross-border labour migration. Instead, it lowered taxes in border regions and encouraged Catholic missionaries to establish mission posts in border areas in order to keep the population within its boundaries.

Much like the anxieties of population decline – which were present in many African colonies and European countries at the time and often spilled over and mutually reinforced each other – hardly any of these policies was unique to Angola or to Portuguese Africa. Senior colonial officials – whether they were doctors, agronomists, governors, missionaries or experts in the metropole – were embedded in transnational networks that secured the exchange of ideas and practices between colonies and empires. Certainly, they did not always openly acknowledge such transfers, but nor did their foreign colleagues. There are even good reasons to assume that, for Portuguese officials, it was a better strategy to reveal the British, French, German or even Belgian origin of their (reform) ideas and proposals than the other way around, since these countries were increasingly considered to be more advanced in colonial matters than Portugal, especially during the Interwar Period. Yet, overall, national pride and international rivalry caused colonialists of all European countries, time and again, to hide knowledge transfers and to place emphasis on the exceptionalism of their practices and systems.

Hence, even if many of these population policies responded to a multifaceted, pervasive and persistent discourse of population decline, this discourse was never the only rationale that underpinned them. Rivalry with other colonial powers played a crucial role in Portugal’s participation in the international struggle against sleeping sickness and in the

establishment of more comprehensive healthcare schemes. Senior colonial officials and doctors often explicitly mentioned this link. International rivalry was also reflected in the anxieties of local Portuguese officials during their encounters with Africans who could compare their actions with those of foreigners, namely colonial officials of other powers in the border regions or the foreign (Protestant) missionaries. Fearful that such comparisons would be to their disadvantage, Portuguese officials were often haunted by the loss of prestige they might suffer in the eyes of the natives during these moments.

Moreover, the ideal of a growing and healthier population was not autonomous: it was inextricably linked to the labour demands of the colonial economy. Hence, depopulation scares usually intensified in phases of economic expansion, when they dovetailed with fears of labour scarcity.

In Angola, the impact of these population policies varied much between regions. This was also because the healthcare programme had not only concentrated its energies on the sleeping sickness regions in the north of the colony, but because, generally speaking, it was also often more modest than initially planned or hoped. One of the reasons for this is that, throughout most of the first half of the twentieth century, the Angolan health services were underfinanced and understaffed compared to the tasks assigned to them. After a remarkable increase in funding and personnel in the 1920s, the health services underwent periods of stagnation and even contraction in the 1930s, before they expanded again markedly from 1945 onwards. The 'retrogression' of the 1930s may be attributed to the effects of the world economic crisis, which were reinforced by Angola's long-standing financial crisis and the severe austerity policy of the emergent *Estado Novo* regime. Again, this was not unusual in itself: many colonial budgets in Africa suffered from similar cutbacks, insofar as all of them were characterized by the objective to obtain financial self-sufficiency.

Other factors, however, conditioned the implementation of population politics in Angola as well. Both the training programmes and the job opportunities for inexpensive African medical auxiliaries remained very modest: while African nurses were successfully trained, official midwife training schemes failed and the idea of training African doctors was completely abandoned. Moreover, the state health services received little support from Catholic missions, given that these last failed to expand and professionalize their healthcare capabilities before the 1940s. Protestant missions, conversely, were generally better equipped, but Portuguese policy towards their health work was inconsistent. Given the general and widespread mistrust of Protestant missions, official policy oscillated between offers of

support, even financial, and attempts to prohibit altogether their missionary medical practice. Lastly, the colony's approach to the problem of emigration, namely through policies to control the migratory flow and to attract or keep natives from leaving, was often negatively affected by the habitually deficient administrative occupation of (and therefore the insufficient presence of the state in) the border regions. This situation of administrative under-representation was in part caused by the resistance of the administrators themselves and their unwillingness to be assigned to the remote border regions.

Even if it is a central claim of this dissertation that Portuguese population politics were embedded in a broader European debate and were not fundamentally different from those of the other African colonies, with regard to ideology, concepts, techniques and practices, I do not wish to argue that there were no differences at all, particularly with respect to their implementation and impact. However, I believe that this is a question that requires great caution, especially since differences might have been more significant within empires and colonies than between them. For a more complete understanding of these dynamics, much more comparative research is needed.

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