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Valerio Rohden

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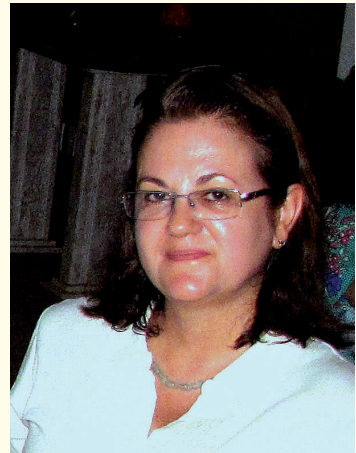
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IN MEMORIAM CLÉLIA APARECIDA MARTINS (1961-2014)

Nach schwerer Krankheit ist Frau Dr. Clélia Aparecida Martins, Professorin am Departamento de Filosofia der Universidade Estadual Paulista Júlio de Mesquita Filho – Campus de Marília, am 15. Juli 2014 verstorben. Für die meisten ihrer Kolleginnen und Kollegen kam die Nachricht von ihrem viel zu frühen Tod völlig überraschend. Ich lernte Clélia 1994 kennen. Nach einer Ausbildung im Sozialdienst an der Universidade de Ribeirão Preto (UNAERP) (1982) und einem 1988 erfolgten Masterabschluss im Fach Erziehungswissenschaften an der Universidade Estadual de Campinas (UNICAMP) hatte sie 1993 ein Doktorat über den Subjektbegriff bei Kant an der Universidade de São Paulo (USP) unter der Betreuung von Franklin Leopoldo e Silva begonnen. Im Rahmen dieses Doktorats besuchte sie mehrfach das Institut für Philosophie der Philipps-Universität Marburg, um bei Professor Reinhard Brandt die Philosophie Kants zu studieren. Weil ich zu dieser Zeit bei Professor Brandt ebenfalls über Kants Subjektphilosophie promovierte und wie Clélia an seinem Oberseminar teilnahm, haben wir uns kennengelernt und über Kants Philosophie diskutiert. Sie ist die erste und einzige Brasilianerin gewesen, die meiner Erinnerung nach in den achtziger und neunziger Jahren des vergangenen Jahrhunderts am Institut für Philosophie in Marburg an ihrer Promotion gearbeitet hat. Mir ist sehr gut die Begeisterung in Erinnerung geblieben, mit der sich Clélia auf die für sie ungewohnte akademische Welt von Marburg eingelassen und die Philosophie Kants in der deutschen Sprache angeeignet hat. Für das Studium dieser Philosophie in Deutschland war sie bereit, zahlreiche Entbehrungen auf sich zu nehmen. Sie vermisste ihre geliebte Familie, und der hessische Winter war ihr natürlich viel zu kalt. Die Promotion erfolgte 1997 mit der Dissertationsschrift *O sujeito em Kant: transcendência e Moral*. An der Faculdade de Filosofia e Ciências de Marília (UNESP), an der sie seit 1987 als Dozentin tätig war, hat

sie ihre institutionelle Heimat gefunden. Ihre Arbeitsschwerpunkte lagen auf der Philosophie von Immanuel Kant und auf der Diskurstheorie von Jürgen Habermas. Besonders interessiert war sie an Menschenrechtstheorien, der Ethik, der Anthropologie und an dem Verhältnis von Natur und Freiheit. Clélia hat aktiv an der Organisation und Durchführung von Tagungen vor allem in Marília mitgewirkt, Forschungsprojekte durchgeführt und zahlreiche Vorträge im In- und Ausland gehalten. Von ihren Veröffentlichungen seien hier beispielhaft ihre Beiträge in den Akten der Kant-Kongresse von São Paulo („Über die moralische Selbstkenntnis“) und von Pisa („Bemerkungen zum philosophisch-historischen Aspekt der ‚Kritik der Urteilskraft‘“) sowie die von ihr mitherausgegebenen Sammelbände *Reconhecimento, direito e discursividade em Habermas* (2013, zusammen mit J. G. Poker), *Kant e o kantismo: heranças interpretativas* (2009, zusammen mit Ubirajara Rancan de Azevedo Marques) und *O pensamento de Habermas em questão* (2008, zusammen mit J.G. Poker) genannt. Ihre besondere Leidenschaft galt jedoch der Übersetzung deutschsprachiger Texte. Zu erwähnen sind vor allem ihre Übersetzungen von Kants *Anthropologie in pragmatischer Hinsicht* (*Antropologia de Um Ponto de Vista Pragmático*, São Paulo 2006) und der *Metaphysischen Anfangsgründe der Rechtslehre* (*Primeiros Princípios Metafísicos da Doutrina do Direito*, São Paulo 2013). Ein Forschungsprojekt zum Opus postumum konnte sie nicht mehr abschließen, einen geplanten Forschungsaufenthalt in Deutschland nicht mehr durchführen.

Ich habe Clélia nach ihrer Abreise aus Marburg erstmals auf dem 2005 in São Paulo durchgeführten X. Internationalen Kant-Kongress wiedergesehen. Aus einer losen Bekanntschaft entwickelte sich in den kommenden Jahren eine Freundschaft zwischen ihr und meiner Familie, die nicht zuletzt für unsere wissenschaftlichen Forschungen ein großer Gewinn waren. Dank ihrer Freundlichkeit, Herzlichkeit, Großzügigkeit und philosophischen Neugier habe ich das große Glück gehabt, auf zahlreichen Reisen nach Brasilien Menschen kennenzulernen, die mir zu Freunden geworden sind, und deren philosophische Arbeiten ich sehr schätze. Ich bin nicht der einzige, der Clélia für ihr Engagement im Bereich der Kooperation zwischen der brasilianischen und der deutschen Kant-Forschung immer dankbar sein wird. Wir werden den Menschen und die Philosophin Clélia sehr vermissen.

Heiner F. Klemme (MLU Halle-Wittenberg)

PALAVRA DO EDITOR

Estudos Kantianos [EK] registra o passamento da Doutora Clélia Aparecida Martins, membro de seu Conselho Editorial, docente e pesquisadora junto ao Departamento de Filosofia da Faculdade de Filosofia e Ciências da Universidade Estadual Paulista, ocorrido em 15 de julho p.p. Entusiasta das atividades do Centro de Pesquisas e Estudos Kantianos “Valerio Rohden” [CPEK], responsável pelo projeto de EK, Clélia Martins muito colaborou com os colóquios-Kant de Marília, também promovidos pelo mesmo CPEK, os quais, em homenagem a ela, passam agora a chamar-se, já a partir da próxima edição dos mesmos, em agosto de 2015, Colóquios Kant “Clélia Martins”. EK agradece ao Prof. Dr. Heiner Klemme por seu texto em memória da Doutora Clélia Aparecida Martins.

•

EK, cumprimentando-os e desejando-lhes pleno êxito, refere os nomes dos membros titulares da nova diretoria da Sociedade Kant Brasileira, eleita para o quadriênio 2014-2018:

Presidente: Maria de Lourdes Borges [Universidade Federal de Santa Catarina];

Vice-Presidente: Sílvia Altmann [Universidade Federal do Rio Grande do Sul];

Secretária: Andrea Faggion [Universidade Estadual de Londrina];

Tesoureira: Monique Hulshof [Universidade Federal do ABC];

Diretor de Publicações e Eventos: Joel Thiago Klein [Universidade Federal do Rio Grande do Norte].

•

O presente fascículo de EK, cuja seção “artigos” foi inteiramente coordenada pela ex-editora associada desse periódico, Doutora Nuria Sánchez Madrid, a quem muito especialmente agradeço, é dedicado ao tema: “Kant e as ciências empíricas”, com doze preciosas e exemplares colaborações de investigadores da Alemanha, Brasil, Canadá, Escócia, Espanha, Estados Unidos, França e Itália, precedidas de uma “Nota da editora convidada”.

A seção “resenhas” conta com duas importantes colaborações: de Paulo Jesus, atual editor associado de EK, e Gualtiero Lorini, que respectivamente consideram o estudo: *Kant's Organicism: Epigenesis and the Development of Critical Philosophy*, de Jennifer Mensch, e a mais recente tradução integral da Crítica da Razão Pura para o português, devida a Fernando Mattos.

A seção “traduções” apresenta “Esboço para um discurso de arguição <Sobre as ficções poéticas>”, escrito de Kant ora vertido pela primeira vez para o vernáculo por Leonel Ribeiro dos Santos, precedido de uma rica “Introdução” do tradutor.

A todos os autores, à ex-editora associada e ao editor associado de EK, meus mais sinceros agradecimentos.

Ao leitor e futuro colaborador de EK – aqui brindado com uma espécie de presente antecipado de fim de ano... –, votos de uma excelente leitura!

Ubirajara Rancan de Azevedo Marques.
Editor.

A WORD FROM THE EDITOR¹

Estudos Kantianos [EK] registers the passing of Dr. Clélia Aparecida Martins, a member of its Editorial Board, university lecturer and researcher in the Philosophy Department of the Faculty of Philosophy and Sciences of São Paulo State University, on the 15th of July p. p. An enthusiast of the activities carried out by the Centre of Kantian Research and Studies “Valerio Rohden” [CPEK], which is responsible for the EK project, Clélia Martins greatly collaborated with the Kant-Colloquia in Marília (also promoted by the same CPEK), which in her memory will henceforth be designated by Kant Colloquia “Clélia Martins”, starting with its next edition in August 2015. EK is grateful to Prof. Dr. Heiner Klemme for his text in memory of Dr. Clélia Aparecida Martins.

•

While greeting and wishing you the best success, EK refers the names of the full members in the new board of the Brazilian Kant Society, elected for the quadriennium 2014-2018:

President: Maria de Lourdes Borges [Federal University of Santa Catarina];

Vice-President: Sílvia Altmann [Federal University of Rio Grande do Sul];

Secretary: Andrea Faggion [State University of Londrina];

Treasurer: Monique Hulshof [Federal University Federal of ABC];

Director of Publications and Events: Joel Thiago Klein [Federal University of Rio Grande do Norte].

•

The present issue of EK, whose “articles” section was entirely coordinated by the ex-associate editor of said periodical, Nuria Sánchez Madrid, to whom I am very thankful, is devoted to the theme “Kant and the empirical sciences”. It includes twelve precious and exemplary contributions by investigators from Germany, Brazil, Canada, Scotland, Spain, the United States, France and Italy, preceded by a “Note by the invited editor”.

The “reviews” section displays two important collaborations: one by Paulo Jesus, the current associate editor of EK, and one by Gualtiero Lorini, who respectively approach *Kant’s*

¹The English version of the “Palavra do Editor” was translated by Fernando Silva, to whom I am very grateful.

Organicism: Epigenesis and the Development of Critical Philosophy, by Jennifer Mensch, and Fernando Mattos' recent translation into Portuguese of the Critique of Pure Reason.

The section “translations” presents “Sketch of a speech for a disputation <On poetical fictions>”, a writing by Kant now translated for the first time into the vernacular by Leonel Ribeiro dos Santos, and preceded by a rich “Introduction” by the translator.

To all the authors, to the ex-associate editor and to the associate editor of EK, my sincere gratitude.

To the reader and future collaborator of EK – herein rewarded with a sort of anticipated end-of-year gift... –, I wish you an excellent reading!

Ubirajara Rancan de Azevedo Marques.
Editor.

GUEST EDITOR NOTE

As guest editor of this special issue of the journal *Estudos Kantianos*, I am honored to introduce the contributions gathered under the general title *Kant and the empirical sciences*. This monographic number two of the second issue of *EK* contains twelve articles, written by an outstanding international group of Kant scholars who have extensive experience on the questions addressed by the issue, published in five languages (English, Spanish, German, French and Portuguese), meeting the multilingual scope of the journal. The original idea of the monographic issue was to discuss whether Kant's firm reduction of science, according to the proper sense of this term, to the condition of apodictic certainty could exhaust his concern with the methodical grounding of science and scientificity. The following excerpt of *Metaphysical Foundations of Natural Science* (1786) displays neatly Kant's point of view about science as a product of reason: "Only that whose certainty is apodictic can be called science properly; cognition that can contain merely empirical certainty is only improperly called science" (MAN, AA 04: 468). However, an earlier Kant's work aiming at defending the *Critique of Pure Reason* against its early misunderstandings, *Prolegomena to Any Future Metaphysics* (1783), points out that all empirical research could be subordinated to the legislation of reason, which therefore will shed some doubts on the legitimacy of the preceding severe categorical statement. Kant formulates this suggestion as follows in the *Prolegomena* (AA 04: 364): "whether or not experience is in this way mediately subordinate to the legislation of reason may be discussed by those who desire to trace the nature of reason even beyond its use in metaphysics, into the general principles of a history of nature; I have represented this task as important, but not attempted its solution, in the book itself". This excerpt encourages the reader to extend the study about the legislative scope of reason beyond the field covered by metaphysics, i.e. descending to the humble *bathos* where the empirical sciences are cultivated. All the articles of this monographic number attempt to cast light on such a valuable and daunting task that Kant left without an ultimate solution.

This collective work aims at providing complementary upshots about Kant's idea of science to those offered by books as *Kant and the Exact Sciences* (M. Friedman ed., Harvard U.P., 1998) and *Kant and the Sciences* (E. Watkins, Oxford U.P., 2001). Moreover, it is especially indebted to hermeneutical and methodological outcomes derived from publications as Alix A. Cohen's essay, *Kant and the Human Sciences: Biology, Anthropology, and History* (Palgrave Macmillan, 2010). Cohen was also editor of the helpful special issue of *Journal Studies on History and Philosophy of Science*, "Kantian Philosophy and the Human Sciences", published

in 2008, whose purview and aims are in part shared by this special issue of *Estudos Kantianos*, which follows a path also paved by publications as Robert Louden's, *Kant's Human Being* (Oxford U.P., 2011), Jennifer Mensch's, *Kant's Organicism. Epigenesis and the Development of Critical Philosophy* (Univ. of Chicago Press, 2013) and the collective book edited by Pedro Jesús Teruel, *Kant y las ciencias* (Biblioteca Nueva, 2012). The authors of all these books fruitfully engaged with the theme of this issue, which has clearly benefited from their experience. Other authors in it, such as Patricia Kitcher, have also contributed indispensable discussions about the attention that Kant bestowed to the empirical sciences. Another contributor — Ana Marta González— published recently a brilliant book —*Culture as Mediation* (Olms, 2011)— focusing on the service that culture renders to morality in Kant's thought. I decided as editor to break down the contributions into three sections, relating first to Kant's approach to the human sciences, second to his appraisal of different empirical features concerning the sciences of nature and, finally, to his treatment of the sciences that regard more directly the human being —Anthropology, Medicine, Biology and History—, providing thus an outline that unfolds the complexity that the study of human nature entails in Kant's thought. In what follows, I shall give a closer review of all them.

The first section of articles includes an introductory and groundbreaking paper of Alix A. Cohen (Univ. of Edinburgh, UK) —*A Defence of Kant's Biological Model for the Human Sciences*—, which claims the biological model that Kant would have applied in his reflection about the human sciences, displaying also a useful critical exchange with another contributor of the volume, Robert Louden. Although Kant's paradigm of science is decidedly committed to the double condition of mathematisable phenomena and universality and necessity of knowledge, Cohen argues that Kant's approach to human science supplies elements that enhance the moral efficiency of the subject and bear a pragmatic purpose. Werner Stark (Univ. of Marburg, Germany) offers in his article —*Naturforschung in Königsberg. Ein kritischer Rückblick aus den Präliminarien einer Untersuchung über die Entstehungsbedingungen von Kant's Vorlesung über Physische Geographie*— a useful review about the Prussian intellectual environment that gave birth to the development of physical geography as an independent discipline, which Kant understands as the counterpart of history. Stark highlights the flaws of Bruno Erdmann's research regarding the historicity of this important pedagogical matter and opens up new sparkling hints of the influence that figures such as Friedrich Franz Saturgus and Friedrich Samuel Bock had over Kant's assessment of the pragmatic character of geography. The articles by Patricia Kitcher (Columbia University, USA) and Andrew Brook (Carleton University Ottawa, Canada) focus on Kant's epistemological theory, suggesting some new approaches. Kitcher proposes in *Kant's Unconscious 'Given'* to test a third way in the discussion between the myth of the given and the myth that denies a separate sensory contribution to cognition, tackling unconscious representations as a paradoxical 'blind' womb of the process of cognition in Kant's view and drawing some significant consequences from this evidence. Andrew Brook attempts, in turn, to contextualize in *Kant and Cognitive Science* Kant's contribution to the history of cognitive research, arguing that most important features of Kant's epistemology (combination of percepts and concepts in representation, transcendental argument, functional method

or unified consciousness) unfortunately have not yet been assimilated by the contemporary paradigm of cognitive science.

The second group of contributions deals with Kant's grounding of natural science, furnishing several original approaches to this issue, which exhibit a common interest in addressing the relation between Kant's theory of nature and the finite framework that he sets up for human knowledge. The contribution of Jesús González Fisac (Univ. of Cádiz, Spain) —*Fenómeno y fenomenología en el periodo crítico de Kant*— aims at untangling main aspects of Kant's transcendental conception of phenomena and phenomenology, taking into account the origin of this term in Lambert's work and raising the question that to accept the reality of phenomena rules out referring to any physical or metaphysical ground. Against the assumption of the dependence of phenomena on the thing itself, Fisac argues convincingly that Kant's theory of the 'obstinacy' of phenomena, a propriety that cannot be ignored or reduced, offers on the contrary a phenomenology of the beholder of that temporal reality. Pierre Kerszberg's (Univ. Toulouse, France) article —*Kant et le principe cosmologique*— starts from a discussion of Kant's first antinomy, aiming at showing that the so called cosmological principle functions as a regulative or heuristic principle of reason. He chiefly underscores the intrinsic ambiguity that the faculty of judgment undergoes in natural scientific research, since this faculty swings between the imperative to order possible experience and the sublime desire to broaden continually human knowledge by deciphering the mysteries that nature conceals. Paolo Pecere (Univ. of Monte Cassino and Meridional Italy, Italy), author of *Kant's Newtonianism: a Reappraisal*, attempts to reassess Kant's view of Newton's physical method, giving a critical account of the classical view of both thinkers which holds that Kant would merely aim at providing a foundation of Newton's physics. Pecere highlights the intertwining of physics and metaphysics along Kant's entire work and brilliantly argues that there is a close analogy between Newton's force of gravitation and Kant's *a priori* theory of matter, whose reality Kant explains as a result of the interaction of attractive and repulsive forces. Pecere concludes that Kant's conception of finite knowledge agrees completely with the methodological grounds of Newton's reluctance to assume any hypothesis in the research process. Finally, Patrícia Kauark Leite (Federal University of Minas Gerais, Brazil) claims in her article *Ciência empírica, causalidade e razão suficiente em Kant* that Kant's conception of causality is much broader than the principle of sufficient reason, the latter of which is understood as a principle that orders the objects of perception, entering thus on a critical discussion of Béatrice Longuenesse account of this issue. Kauark reviews Kant's conception of causality in the field of the empirical sciences, arguing that often the search for the sufficient or determinant reason tries to order the multiplicity of experience or the concepts of understanding as a whole under fundamental forces or a systematic unity, which do not belong to the horizon of temporal and phenomenal knowledge, but aid the goals of reason and thinking.

The last section of contributions focuses on the human sciences, among which Anthropology, Medicine, Biology and History stand out. Robert Loudon's (Univ. of Southern Maine, USA) contribution —*Kantian Anthropology: A Science Like No Other*— endeavors to cast light on some difficulties that hinder anthropology in meeting the severe conditions that science ought to fulfill according to Kant. Although the popularity of this discipline would

explain its mixed scientific rank, Louden suggests distinguishing accurately between the discovery of rules or laws of human behavior and the pragmatic and moral features of this special science. Thus, Kant's anthropology would hardly fulfill the proper meaning of science, but it could also lie within the framework of science just taking into account its pragmatic value. Pedro J. Teruel (Univ. of Valencia, Spain) highlights in the article *'Das Hippocratische Geschäft'. Significado, sentido y ubicación estructural de la medicina en la filosofía kantiana* what he considers a structural link between Kant's approach to medicine and the concerns and goals of his practical appraisal of reason, since to look after the body and the mind benefits without doubt the aim of acquiring a good moral character. He draws the conclusion that medicine eases the transition from physiology to the science of human being, gaining a special rank into the scientific encyclopedia. Jennifer Mensch (University of Waterloo, Canada) claims in her essay, *Kant and the Problem of Form: Theories of Animal Generation, Theories of Mind*, that Kant's use of organic vocabulary in the context of sciences of life, which essentially concerns the understanding of human existence, should be carefully distinguished from the recourse to an epigenesis of reason in Kant's model of mind. Mensch argues that Kant would have never supported a naturalization of the human mind and faculties with the help of a teleological approach. Finally, the article of Ana Marta González (Univ. of Navarra, Spain), *Kant on History*, explores the narrative basis of Kant's idea of history, gathering useful remarks from the *Lectures of Logic* and arguing that this reflection on history furnishes the viewer with an "objective narrative" that encourages human beings to fulfill their moral vocation.

This special issue aims at boosting further research on the entangled status of empirical sciences in Kant's thought. I hope all readers of *Estudos Kantianos* enjoy the following pieces.

Nuria Sánchez Madrid (University Complutense of Madrid, Spain)
"Kant and the Empirical Sciences" Guest Editor

A DEFENCE OF KANT'S BIOLOGICAL MODEL FOR THE HUMAN SCIENCES

Alix A. COHEN

The possibility of a Kantian human science is, so to speak, ruled out a priori for a number of reasons:

1. Kant's paradigm of science is based on the model of physics, requiring that the phenomena under consideration be mathematisable.
 - Yet, insofar as human phenomena are not mathematisable, the human sciences are denied the status of 'science' in the Kantian sense.
2. Kant's paradigm of knowledge demands universality and necessity.
 - Yet, insofar as human phenomena are particular and contingent, the human sciences cannot give rise to 'knowledge' in the Kantian sense.
3. Kant's transcendental idealism denies the possibility of a science of the intelligible.
 - Thus, the human sciences cannot talk about 'freedom' and 'moral agency' in the Kantian sense.

Whilst these claims are all true, I believe that they do not entail that Kant does not talk about the prospects of the discipline of the human sciences. For, Kant's works on biology, anthropology and history suggest that the epistemic model on which his account of the human sciences is grounded is not actually threatened by the claims listed above. This is because:

1. Kantian human sciences are not mathematical disciplines modeled on physics.
 - Rather, they are based on the reflective model of biology.
2. Kantian human sciences do not aim to deliver knowledge that is true or false.
 - Rather, they have the pragmatic aim of helping human beings realise their purposes.
3. Kantian human sciences do not have anything to say about the intelligible.
 - Rather, their moral relevance consists in making human beings more morally efficacious.

The key is to formulate within a Kantian framework what we can and cannot know about human beings, and how we can and cannot know it. A crucial corollary of this enquiry is of course to address the issue of the purpose of these sciences, in particular in the context of Kant's ethics; this issue is particularly relevant to Kant's account insofar as he qualifies the human sciences as 'pragmatic' disciplines.

To this effect, in the first section, I will show that Kant's anthropology is modelled on his philosophy of biology due to the fact that the development of the human species shares a number of peculiar features with the functioning of organisms, these features entailing important methodological characteristics. In the second section, I will defend this claim by addressing a number of issues that have been raised by Robert Louden in his contribution to this volume. Finally, I will discuss a difficulty that is entailed by Louden's interpretation of Kant's anthropological project. Namely, pragmatic anthropology is methodologically and metaphysically incompatible with the claim that human beings are causally determined.

1. KANT'S BIOLOGICAL METHOD FOR ANTHROPOLOGY

The first part of my claim is that Kant's anthropology is modelled on his philosophy of biology. As is now well known, the guiding principle at the basis of Kant's biological method, which is based on the a priori principle of teleology in order to maximise the intelligibility of the world, is the following:

everything in the world is good for something, [. . .] nothing in it is in vain; and by means of the example that nature gives in its organic products, one is justified, indeed called upon to expect nothing in nature and its laws but what is purposive in the whole. (KU 250 [AA 05:379])

This principle is based on the model of an organised being understood as a natural purpose: 'An organized product of nature is that in which everything is an end and reciprocally a means as well' (KU 247–8 [AA 05:376]). For, organisms are the beings 'which thus first provide objective reality for the concept of an end that is not a practical end but an end of nature' (KU 247 [AA 05:375–6]). With this principle in hand, Kant proceeds to his anthropological enquiries by applying the teleological maxim to human actions in the form of the following principle: "Everything in the human world is good for something or other", which in turn gives rise to the concepts of means/ends and defeating/fulfilling a purpose.² Consequently, teleology has a crucial role to play in anthropology: it supplies the a priori principles and maxims with which we can investigate the human world. It is a heuristic principle indispensable for confronting experience with a set of questions and for organising empirical data.

In the *Religion within the Boundaries of Mere Reason*, Kant distinguishes between three predispositions of human nature:

1. The predisposition to the *animality* of the human being, as a *living being*; 2. To the *humanity* in him, as a living and at the same time *rational* being; 3. To his *personality*, as a rational and at the same time *responsible* being (RGV 74 [AA 06:26])

The predisposition I want to focus on here is the predisposition to animality, for I believe it is through its analysis that we can reach a better understanding of Kant's biological account of human nature. Kant defines the purpose of this predisposition as threefold:

first, for self-preservation; *second*, for the propagation of the species, through the sexual drive, and for the preservation of the offspring thereby begotten through breeding; *third*, for community with other human being, i.e. the social drive. (RGV 75 [AA 06:26])³

Kant insists on the fact that these animal predispositions are still at work at the level of civil life: "In the civil constitution of a state, which represents the highest degree of artificial enhancement of the good characteristics in the human species toward final purpose of its destiny, animality still manifests itself earlier and basically stronger than pure humanity" (Anth 244 [AA 07:327]). And decisively, he remarks that what is presupposed for man in the predisposition to animality is in fact identical to what is presupposed for other organisms: the biological determination at work is the same.⁴

Providence refers exactly to that same wisdom which we observe with amazement at work in the preservation of a species of organised natural beings [the human species] that constantly busies itself with self-destruction, and still finds itself always protected. Nevertheless, we do not assume a higher principle in such providential care than we assume to be at work already in the maintenance of plants and animals. (Anth 246 [AA 07:328])

Kant's account of 'Nature's (or Providence's) intentions' for the human species has been the object of numerous debates that I cannot engage with here due to restrictions of space. As is well known, Kant sometimes understands Nature as having providential aspects, and in particular, as designed to allow men to fulfil their moral destiny.⁵ This conception of Nature should, I believe, be distinguished from his 'naturalistic' account of Nature according to which it aims at the preservation of the human species.⁶ The scope of this paper is strictly limited to the latter – its chief aim is to bring to light the biological dimension of Kant's account of the human sciences. In this sense, for my present purposes, it is sufficient to note that Kant's conception of human nature characterises it as developing certain natural predispositions that aim at the preservation of the species:

Nature has also stored into her economy such a rich treasure of arrangements for her particular purpose, which is nothing less than the maintenance of the species (Anth 225 [AA 07:310]).

In the *Anthropology from a Pragmatic Point of View*, Kant analyses these natural predispositions according to four criteria: person, sex, nation and race. Relative to these criteria, Kant distinguishes between different 'types', as shown in the following chart.

Table 1. Human types

Category	Race	Sex	Person	Nation
Criterion	Hereditary transmitted features	Gender	Temperament	Civil whole united through common descent
Type	White, Negro, Hindu, Hunnish-Mongolian-Kalmuck	Male and Female	Sanguine, Melancholic, Choleric, Phlegmatic	French, English, Spaniard, etc.

Each human ‘type’ is the means to the realisation of a particular purpose that contributes to the realisation of Nature’s overall purpose for the species, as summarised in the following chart:

Table 2. Nature’s purpose for human types

Criterion	Type	Nature’s purpose
Gender	Male, Female	Reproduction and preservation of the human species
Race	White, Negro, Hindu, Hunnish-Mongolian-Kalmuck	Diversity of biological character so as to be suited for all climates
Temperament	Sanguine, Melancholic, Choleric, Phlegmatic	Diversity of human character (leading to social antagonism) which secures civil peace
Nation	French, English, German, Italian, etc.	Diversity of national character (leading to external war) which secures international peace

The prominence of teleology in Kant’s anthropological method, and in particular the fact that Kant encourages anthropologists to assume the same teleological principle used in the investigation of non-human nature, may seem to suggest that far from being essentially pragmatic (and in this sense interested in ‘what the human being makes of himself’), anthropology is rather naturalistic (and in this sense concerned with ‘what nature makes of the human being’). This impression is reinforced by Kant’s various claims about Nature’s purposes for the human species. The worry, then, is that anthropology would really study human beings as determined by nature rather than as free.

However, it is crucial to distinguish between two conceptions of the enquiry into ‘what Nature makes of the human being’: one as the investigation of the mind–body relation (physiological anthropology), the other as the investigation of Nature’s purposes for the human species (natural anthropology). Kant does in fact proceed to the enquiry into ‘what Nature makes of the human being’ in the latter sense. So if one form of the enquiry, namely the investigation of mind–body relations, is vain, another form, that of the investigation of Nature’s purposes for the human species, is legitimate when it is used to improve our pragmatic knowledge of human beings – a knowledge that is necessary for us to use nature, and in particular our nature, to realise our purposes.

There is thus a very straightforward way of understanding Kant's claim about Nature's purposes for humankind. Namely, from a pragmatic point of view, the human being is a biological organism as well as a free intentional being. And our everyday life is full of instances of Nature's constraints on us: for instance, we have to sleep to survive. This fact does not mean we are not free. Clearly, it means that we are not free to stay awake for the whole duration of our lives. But it does not mean that we are completely determined either. For there are many different ways of fulfilling our natural needs, and we are free to do so the way we please. The different ways we choose to fulfill our needs are in fact the very expression of our freedom. For instance, in the case of sleep, we can do so through siesta, power naps, late morning lie-ins or early bedtimes. In this sense, the original worry disappears since there is no difficulty in saying that anthropology studies human beings as free, and at the same time that it studies the ways in which Nature restricts or affects their actions. In fact, since freedom is in many ways constrained by human nature, anthropology should study these constraints. This requirement is particularly pressing insofar as Kant's anthropology has a pragmatic intent. For, the study of what constrains human action will be necessary to the elaboration of useful anthropological guidance.

Having delineated Kant's account as I understand it, the aim of the following section is to turn to some objections.

2. DEFENCE AGAINST LOUDEN'S OBJECTIONS

In his paper 'Kantian Anthropology: A Science Like No Other', Robert Loudén questions the approach I have defended by pointing to a number of issues that may seem to go against it. My aim in this section is to address what I take to be his two main points: first, the causal determinism at work in anthropology; and second, its pragmatic nature. I will discuss them in turn and attempt to show that they do not threaten my interpretation if they are interpreted in the right context.

Louden's first claim is that 'Anthropology's job, as Kant sees it, is to find causal connections between human inclinations, passions and thoughts on the one hand and the resulting actions that stem from them on the other, and he clearly views anthropology as an explanatory science here.' (Louden (this volume). On this basis, he suggests that this "should give pause to recent claims that [...] Kantian anthropology is modeled not "on physics" but rather "on the reflective model of biology" and that it does "not aim to achieve knowledge that is true or false."' (Louden (this volume). So, let's pause and consider Loudén's claims. I will argue that whilst I concur with the first one, I disagree with what he takes to be its implications for my interpretation.⁷

Let's begin by clarifying the discipline Loudén brings attention to, namely the explanation of the 'causal connections' between human psychology and the actions that stem from them. This discipline, I believe, is the domain of what Kant sometimes calls empirical psychology. Loudén is of course right that there is a clear sense that anthropology includes empirical psychology – both methodologically, philosophically, and historically.⁸ However, I

believe that it is more important to emphasise what differentiates them rather than what they have in common. To understand this claim, let's look at Patrick Frierson's recent work, and in particular his *Kant's Empirical Psychology*.

Frierson's insightful study convincingly argues that "Overall, not only unpublished lectures but also published writings, and in particular his main *Critiques*, justify the possibility of an empirical psychology. Such a psychology would investigate the human mind in terms of natural causal laws that, in principle at least, would be capable of perfect predictive success. The primary data for this psychology would come from introspective investigation through inner sense" (Frierson (2014): Introduction/XX).⁹ Human beings are moved psychologically by motives, thoughts, desires, inclinations and so on. They have a faculty of desire, a power "to be, by means of one's representations, the cause of the objects of those representations" (MS 376 [AA 06:221]). As Frierson points out, all of this is compatible with a thoroughly causal account of the origin and nature of these intentional states: intentions and their effects are just as empirically-determined as one's brute urges. As a result, 'human actions are determined just as much as every other natural occurrence in accordance with universal laws of nature.' (LaG 108 [AA 08:17])¹⁰ In other words, psychological explanations, as natural-mechanical-causal accounts of the empirical world that include the human mind, can account for the appearance of human intentionality entirely through efficient causality.

However, contrary to empirical psychology, which studies human beings in terms of their psychological nature, Kant's pragmatic anthropology adopts as its starting point the fact that they are the only beings that act according to the purposes they set for themselves.

[T]he materials for an anthropology [. . .] the method of their use in attempting a history of humanity in the whole of its vocation [. . .] may be sought neither in metaphysics nor in the cabinet of natural history specimens by comparing the skeleton of the human being with that of other species of animals; [. . .] that vocation can be found solely in [human] actions, which reveal his character. (RezHerder 134 [AA 08:56])

Hence, Kant's anthropology is 'pragmatic' in the sense that it studies the human being not through what he thinks (empirical psychology), but through what he does 'as a free-acting being': 'it observes solely the actual behaviour of man' (Anth 231 [AA 07:119] and V-Eth 42 [AA 27:244]).¹¹ More precisely, the object of anthropology does not consist in his actions per se, but insofar as these actions reveal what Kant calls 'character', which encompasses the 'rules which that behaviour obeys': 'anthropology is concerned with subjective, practical rules.' (V-Eth 42 [AA 27:244]) Therefore, there is a sense in which there are distinct disciplines at play here, at least in terms of their subject. Although I would want to go much further than this and claim that they also, and more importantly, differ in terms of their methodology – as I have tried to argue in the first section of this paper.

Louden's second point has to do with the pragmatic nature of anthropology. On my interpretation, the fact that Kant's anthropology is a pragmatic discipline sets it apart from other, non-pragmatic sciences. For, the claims of pragmatic anthropology are literally practical – they comprise advice, recommendations, counsels, guidance, warnings and even

admonitions. In this regard, it should be noted that Kant's *Lectures on Anthropology*, on which his published *Anthropology* is based, were intended to teach students how to apply what they learnt at university to their future profession as well as to the conduct of their life in general. In other words, these lectures, which arose from the *Lectures on Physical Geography*, were meant to show students how to use their knowledge and talents as 'citizens of the world'.

The physical geography [course] which I [Kant] am announcing hereby belongs to an idea which I make myself of a useful academic instruction and which I may call the preliminary exercise in the knowledge of the world. This knowledge of the world serves to procure the pragmatic element for all otherwise acquired sciences and skills, by means of which they become useful not merely for the school but rather for life and through which the accomplished apprentice is introduced to the stage of his destiny, namely, the world. (*Of the Different Races*, 97 [AA 02:443])

To accomplish this task, Kant focuses on knowledge 'of practical relevance', that is to say knowledge that is useful to one's conduct in life (Anth 233 [AA 07:122]). This knowledge has an extremely broad scope: it discloses 'the sources of all the [practical] sciences, the science of morality, of skill, of human intercourse, of the way to educate and govern human beings, and thus of everything that pertains to the practical' (Br 141 [AA 10:145]).

Kant in fact begins his *Anthropology* with an explicit reference to its aims: Pragmatic knowledge of the human being is 'the investigation of what he as a free-acting being makes of himself, or can and should make of himself' (Anth 231 [AA 07: 119]). This fundamental claim needs unpacking. The 'make' points to the descriptive part of Kant's project (i.e. what men actually make, or have made, of themselves). The 'can make' refers to the realm of possibility (namely the scope and limits of the human being's influence on himself), whilst the 'should make' indicates the prescriptive part of Kant's project, which encompasses the whole realm of human action – that is to say its technical, prudential and moral dimensions.

Therefore, the uniqueness of the approach of the human sciences lies in their commitment to investigating human phenomena for the purpose of understanding others and interacting with them both prudentially and morally. Far from merely presenting theoretical observations about the human world, they are value-embedded disciplines that play the crucial role of providing a map for human beings to orientate themselves in the world and realise their purposes.

Whilst Loudon acknowledges the pragmatic nature of anthropology, he questions whether it is unique to it and sets it apart from other disciplines. As he writes, "is not science too a value-embedded and morally guided enterprise? [...] we can't claim that Kantian anthropology is not a science simply because it is a value-embedded and morally guided enterprise. For this is also true of physics, Kant's paradigm of science." (Louden (this volume). This is an important point, for behind it lies a disagreement about what is entailed by the fact that anthropology is a pragmatic discipline. There are a number of epistemic values and norms that ought to apply to any scientific investigation and more generally to all of our beliefs. In this sense, cognition is normative – although crucially, the norms are grounded on epistemic values.¹² They are thus different from the values that pragmatic anthropology aims to realise,

and which include prudential and moral values. Anthropology for Kant is a pragmatic project directed from within towards human cultivation, civilisation and moralisation.

3. THE CONDITIONS OF POSSIBILITY OF A PRAGMATIC DISCIPLINE

Louden argues that “Anthropology, as an empirical science, deals with observable aspects of human thought and action, and in its quest to bring them under rules it operates on the assumption that these phenomena – like all other phenomena in nature – are determined according to universal causal laws.” (Louden (this volume)). But he does not consider the implication of this claim for the methodology and the aim of anthropology. For, if anthropology presupposes that human beings are causally determined just as any other object in the natural world, it would seem to entail that it is not free and thus that there is not point in recommending particular courses of action (as is the purpose of pragmatic anthropology). In other words, the very discipline of pragmatic anthropology is methodological and metaphysically incompatible with the claim that human beings are causally determined.

The issue at stake is that of the relevance of the very discipline of pragmatic anthropology: if it is to be morally relevant, it can only function under the presupposition that empirical factors do impact on (and perhaps even determine) our ability to make choices. Yet being a prescriptive, forward-looking discipline, it has to work under the assumption that we are ultimately free and responsible for our choices.¹³ In this sense, either temperaments do have an impact on our choices, in which case we are not working under the presupposition of freedom, or we are completely free from any empirical determination, in which case the claims of anthropology become irrelevant to our moral choices. Whichever way we go, it seems that we have to give up one of Kant’s claims – either freedom or the moral relevance of anthropology.

However, I believe that this dilemma is in fact based on a misunderstanding of the kind of claims that can be made from the practical standpoint. For, when I deliberate under the assumption of freedom, it certainly does feel like I am nevertheless affected by my desires, passions, interests and so on – in other words, nature. So even from a practical standpoint, I have to take into account parts of the naturalistic account of my self (my temperament, my desires, my emotions, my interests, etc.). But the crucial point is that doing so does not amount to presupposing that I am not free; it does not entail that empirical elements do in fact determine my choice. Rather, it amounts to seeing myself as an empirical being who is nonetheless free. Acting under the idea of freedom requires me to understand my experience of deliberation (which includes my temperament, my desires, my emotions, etc.) as compatible with the possibility of freedom, although I can neither know nor understand how I can be both empirically affected and yet free. As Kant writes,

[I]t is impossible to explain the phenomenon that at this parting of the ways (where the beautiful fable places Hercules between virtue and sensual pleasure) the human being shows more propensity to listen to his inclinations than to the law. For we can explain what happens only by deriving it from a cause in accordance with the laws of nature, and in so doing we would not be thinking of choice as free. – But it is this self-constraint in opposite directions and its unavoidability that makes known the inexplicable property of freedom itself. (MS 512fn [AA 06:380])

This is precisely the locus of the fundamental and necessary mystery of freedom: it cannot be known, but adopting the practical standpoint is nothing but presupposing that when I act, I can be affected by empirical elements whilst being ultimately free to choose against them. Insofar as I have to assume that these elements affect me but do not determine my choice, I have to presuppose that I could always have acted otherwise, despite the fact that it is necessarily incomprehensible to me.

In this sense, freedom cannot be known in the way that we 'know' natural events or objects. Kant provides arguments for the claim that freedom and its relationship with natural causation is incomprehensible, and that moreover, we do not in fact need to comprehend it. For instance, 'reason would overstep all its bounds if it took it upon itself to explain how pure reason can be practical, which would be the same task as to explain how freedom is possible. [...] where determination by laws of nature ceases, there all explanation ceases as well' (GMS 104–5 [AA 04:459–60]). Similarly, 'it is impossible for us to explain, in other words, how pure reason can be practical, and all the pains and labor of seeking an explanation of it are lost. It is just the same as if I tried to fathom how freedom itself as the causality of a will is possible. For then I leave the philosophical ground of explanation behind and I have no other.' (GMS 107 [AA 04:461–2]; see also KrV 532ff. [A532/B560ff]). Thus, the idea of freedom only offers a guiding idea rather than a competing understanding of action. It is never meant to be on a par with naturalistic explanations.

However, this still leaves our problem untouched, for if the two-standpoint interpretation is effective in making sense of the relevance of empirical facts about the self whilst preserving the possibility of freedom, it does not account for the moral relevance of anthropology. Rather, it defines empirical claims about the self (for instance, 'my choleric temperament makes it hard for me to control my emotions') on a par with other facts about the empirical world: for instance, that 'I am a body that acts in space and time', 'this person is my father', 'if I hit the ball, it will have these effects', and so on. There is no doubt that all these facts are relevant to my decision-making process insofar as they inform me about the world in which my actions take place. But the difficulty pointed to at the beginning of this chapter is precisely that certain facts about the world, namely facts about my empirical self, seem to have a special status vis-à-vis my decision-making process. Can this special status be accounted for? On the basis of the two-standpoint account just delineated, we have to conclude that this knowledge is no more (although no less) relevant to moral agency than any other empirical claim about the world – which means that it is not ultimately morally relevant. This conclusion is satisfactory on many levels, for, not only does it account for the relevance of anthropology to human deliberation, it does so whilst maintaining that this relevance is not ultimately moral. But although it remains within the limitations of Kant's theory of freedom outlined in Section 1, it is bound to disappoint those who were hoping for a more robust moral account of the role of anthropology.

However, I believe that this demand for robustness can in fact be met if we further refine our account of the standpoint that the human sciences adopt. As I have just argued, from the standpoint of the rational deliberating agent, anthropological claims are not morally relevant. Yet my suggestion is that from the standpoint of the human deliberating agent, an embodied

agent who acts in the empirical world, anthropology is morally relevant because it identifies the form his exercise of autonomy should take at the empirical level. This type of guidance is necessary for human beings because of what is usually called the opacity of motivation, that is to say, the fact that I can never know whether I have ever met moral demands: As Kant writes, human beings ‘can never, even by the most strenuous self-examination, get entirely behind [their] covert incentives’ (GMS 61 [AA 04:407]). This opacity entails that I do not know, and can never know, what an autonomous choice or a virtuous act looks like from an empirical perspective. Empirically, all actions appear the same insofar I have no insight into maxims and motives, whether my own or others’. For instance, I cannot know whether the shopkeeper is acting from duty when he gives the right change to his customers (GMS 53 [AA 04:397]).

However, the aim of the pragmatic standpoint that anthropology adopts is precisely to compensate for this opacity: its moral relevance consists in teaching us a certain way of thinking about how we, free beings, should act in the empirical world.

Insofar as it is a forward-looking, prescriptive discipline, it instructs the deliberating agent that he should choose to be polite and to control his choleric temperament since these actions are the forms assumed by the exercise of autonomy in the empirical world. Thus, self-control, control over one’s emotions or temperament, does not provide an understanding of what freedom really is, for we can never hope to understand such a thing; rather, it represents the only way we can conceive of how an autonomous being should act in the empirical world.

In other words, my suggestion is that the demand for robustness can be addressed by arguing that anthropology is morally relevant in the sense that it teaches the deliberating agent ways in which his freedom should be exercised at the empirical level. It is directed at agents who act in the empirical world and who need guidance as to what form their autonomy should take in the world in which they act and their actions have their effects – that is, what they should make of themselves in this world. Thus, empirical facts about myself are morally relevant to my exercise of freedom because exercising self-control, mastering all the elements that constitute my empirical self, is nothing but how I must understand the realisation of my autonomy at the empirical level. This is why anthropology can be prescriptive and action-guiding without threatening the presupposition of freedom. Its prescriptions are relevant insofar as they are addressed to an agent who is embodied, who ‘feels nature’s push’ whilst he deliberates, despite the fact that he deliberates under the idea of freedom. In other words, for Kant, from the practical standpoint, the exercise of our rational and moral capacities is experienced ‘as empirically embodied’ (i.e. as taking place together with the experience of nature’s push) rather than happening in some timeless inaccessible world. In fact, the practical standpoint never implies that I do not see myself as an empirical being acting in an empirical world. It merely implies that I must see myself as an empirical being who views himself as acting freely.

As a result, the recommendations of anthropology are not as problematic as they first seemed, for its claims can be unpacked so as to avoid threatening the presupposition of freedom whilst remaining morally relevant to the deliberating agent. The anthropologist whose interest lies in understanding actions according to natural laws (what we could call the ‘natural anthropologist’) operates from a theoretical standpoint that is independent from the idea of freedom.¹⁴ On this

basis, he can legitimately claim to know that, for instance, my choice was caused by my choleric temperament. From a practical standpoint, I can recapture this claim by reformulating it as 'I have to presuppose that I freely chose to let my choleric temperament cause my action' (i.e. I could always have chosen otherwise). And the 'pragmatic anthropologist' whose interest is to offer guidance on human action (which is the type of anthropology Kant is ultimately concerned with) can put forward claims such as 'choose to control your choleric temperament' because self-control is one of the ways of realising autonomy, of exercising freedom, in the empirical world, at the empirical level of human action. Anthropology can legitimately make these different kinds of claims as long as each is understood within the right epistemic context.

Accordingly, on this interpretation, the relationship between freedom and the human sciences has been misconceived, not only because Kant's conception of freedom is particularly problematic, but also, and more importantly, because the role of the human sciences has been misunderstood. For Kant, the human sciences, and anthropology in particular, are pragmatic disciplines; by which he means that they are forward-looking, they are oriented towards human action in the world. This has crucial implications for their relationship to human freedom. For as I have argued, many potential difficulties disappear as soon as we understand how and in what sense Kant's anthropology is forward-looking and prescriptive.

CONCLUSION

Instead of summarising my argument, I would like to conclude with a final remark inspired by Louden's overall assessment of the function and method of Kant's anthropology. Towards the end of his contribution, he notes that "Part of Kantian anthropology's origin and aim is indeed scientific – and, or so I have argued, it exhibits this concern and aim in a stronger sense than many commentators have realized. But other parts of Kantian anthropology are pragmatic and moral [...] And so in the end, we are left with a discipline that can be kept within the bounds of science by those determined to do so, but one which can also easily break free of these bonds." (Louden (this volume). This description of Kant's project is no doubt insightful, but it raises a worry: doesn't it portray anthropology as a schizophrenic discipline? At once theoretical and pragmatic, deterministic and studying free-acting beings, empirical and moral, how can it remain unified in more than name alone? On Louden's picture, anthropology turns out to be a science that has different incompatible aims and different incompatible methods. Of course, it could well be that these tensions merely reflect the tensions intrinsic to Kant's project. However, my own interpretative project is based on the claim that the overall approach of pragmatic anthropology should not be fragmented, at least not to begin with. For what is needed is a principle unifying all of its different strands.¹⁵ On this basis, by characterising his anthropology as pragmatic, Kant fundamentally stresses the fact that it deals with the field of human action as a whole. Accordingly, I will suggest that its object, its method and its aim are pragmatic in the following senses: first, its object is pragmatic insofar as it studies human beings in terms of their actions in the world, and thus as freely acting beings; second, its method is pragmatic in that it involves interaction as well as observation; and third, its aim is pragmatic inasmuch as it is not only descriptive but prescriptive.

ABSTRACT: In *Kant and the Human Sciences*, I present an epistemic model of the human sciences according to which Kant's Antinomy of reflective judgment is the "foremost" "basis of the method of human sciences" (Cohen, 2009, p. 29). In this paper, I set out to defend this model against recent objections. In the first section, I show that Kant's anthropology is modelled on his philosophy of biology due to the fact that the development of the human species shares a number of peculiar features with the functioning of organisms, these features entailing important methodological characteristics. In the second section, I support this claim by addressing a number of issues that have been raised by Robert Louden in his contribution to this volume. Finally, I discuss a difficulty that is entailed by Louden's interpretation of Kant's anthropological project. Namely, pragmatic anthropology is methodologically and metaphysically incompatible with the claim that human beings are causally determined.

KEYWORDS: Kant - human sciences – anthropology - biology

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NOTES

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2 See for instance Anth 372–6 (AA 07: 272–5).

3 For an account of the differences between the account of man's natural predispositions in the *Religion* and the *Anthropology*, see WILSON (2001).

4 Note that Kant's concept of biological determination, insofar as it includes domains such as nationality and personality, is notably broader than modern conceptions of the division between nature and culture.

5 See for instance §84 of the *Critique of Judgment* where Kant writes that Nature "strives to give us an education that makes us receptive to purposes higher than those that nature itself can provide". This purpose is "man, the subject of morality, [...] the *final purpose* of creation to which all of nature is subordinated" (KU, 321-3 (AA 05: 433-436)). For analyses of the concept of final purpose in relation to that of ultimate purpose, see YOVEL (1980, p. 175ff.), VAN DER LINDEN (1988, p. 134ff.), and LOUDEN (2000, p. 141ff.).

6 These two conceptions of Nature (i.e. naturalistic and moral) are, of course, closely connected, and I would argue that both are present in texts such as the *Idea for a Universal History* and *Perpetual Peace*. Unfortunately, it falls outside the scope of this paper to discuss this claim.

7 Moreover, as Loudén himself notes, 'German authors, particularly in the past, have often employed the term '*Wissenschaft*' in a wider sense than the English 'science'.' (Louden (this volume): XX) If this is the case of Kant as well, as I believe it is, then he can *consistently* call anthropology and the human sciences more generally 'sciences' although they are not modeled on hard sciences.

8 For a historically informed discussion of the connection between Kant's anthropology, and his *Lectures on Anthropology* in particular, and empirical psychology, see WILSON (2006, p. 20-26). She concludes that 'Pragmatic anthropology as we have already seen, does not have the same pretensions to science as empirical or rational psychology do. It is not a science that seeks to explain, but rather to judge.' (WILSON, 2006, p. 26). Whilst I disagree with Wilson on the explanatory function of anthropology, I agree with the distinction she draws between the scientific pretensions of anthropology and those of empirical psychology.

9 For an enlightening discussion of the objections against this view, see especially FRIERSON (2014, Introduction). For my response to the objection he raises against my interpretation, see COHEN (forthcoming, 2014b).

10 See also KrV 541 (A549/B577) and KpV 219 (AA 05: 99).

11 As Allen Wood has noted, Kant refers to empirical psychology as the part of anthropology that deals with inner sense (WOOD, 1999, p. 197). This part is distinct from the anthropology that deals with outer sense – or at least, they can be distinguished in principle.

12 I have argued for this claim in a Kantian context in COHEN (forthcoming, 2014a).

13 Patrick Frierson formulates this difficulty in the following way: 'a different problem arises when one seeks to make use of empirical claims about causes of human action from a practical standpoint. The sorts of theoretical claims that have the potential to raise a serious theory-in-deliberation problem are theoretical claims about causal influences on choices, where those theoretical claims are treated as causal claims and the choices are considered as free choices.' (FRIERSON, 2010, p. 103)

14 See, for instance, *Anth* 385–9 (AA 07: 286–91). In this passage, Kant's analysis of temperaments adopts such a theoretical standpoint – it accounts for behaviours as mere effects of temperament rather than freedom.

15 Contrast with the many commentators who have focus on the diversity rather than the unity of the discipline. For instance, according to Patrick Frierson, the adjective 'pragmatic' involves: (1) one's happiness, (2) the whole sphere of the practical, and/or (3) the use of others to achieve one's ends. (FRIERSON 2003, p. 80) Allen Wood highlights four senses of pragmatic: (1) pragmatic vs. physiological, (2) pragmatic vs. scholastic, (3) pragmatic as useful, (4) pragmatic as prudential. (WOOD, 1999, p. 203–5 and 2003, p. 40–42). Finally, Robert Loudén distinguishes the following senses: (1) the skilful use of other human beings, (2) the ability to find means for one's happiness, (3) the ability to set one's own ends, (4) man's moral concerns (LOUDEN 2000, p. 69–70). And of course, I do not wish to deny that these various aspects exist within Kant's use of 'pragmatic' – he himself draws these distinctions in a number of places.

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‘NATURFORSCHUNG IN KÖNIGSBERG, - EIN KRITISCHER RÜCKBLICK AUS DEN PRÄLIMINARIEN EINER UNTERSUCHUNG ÜBER DIE ENTSTEHUNGSBEDINGUNGEN VON KANT’S VORLESUNG ÜBER PHYSISCHER GEOGRAPHIE¹

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VORBEMERKUNG

Gegenstand der nachfolgenden Darstellung ist nicht die Naturforschung im Königsberg des 18ten Jahrhunderts selbst. Stattdessen sollen der institutionelle Rahmen und einige personellen Bedingungen thematisiert werden, denen jede historische Bemühung um eine kritisch gesicherte Kenntnis genügen sollte. Medizinisch gesprochen, ist also keine ‚Therapie‘ sondern nur eine ‚Diagnose‘ beabsichtigt. - So weit bekannt, sind keinerlei direkte Informationen oder Dokumente aus dem Studiengang von Immanuel Kant in Königsberg überliefert oder gar erhalten. Um dennoch eine wenigstens angenäherte Vorstellung über die für den jungen Kant damit verbundenen Reflexions- und Orientierungsprozesse entwickeln zu können, müssen Umwege beschritten werden. Über das bisher in dieser Absicht Geschehene soll im Folgenden reflektiert werden.

1. SCHULE

Vorab sind einige Orientierungslinien zu rekapitulieren, die sich aus dem inzwischen erreichten Stand der Kenntnisse über Kant’s schulische Bildung³ ergeben. Einmal ist dies die Tatsache, daß die neueren, naturwissenschaftlichen Fächer auf dem Collegium Fridericianum nicht zum Curriculum zählten. Auch die mathematische Schulung spielte in der durch den Pietismus geprägten, klassischen Lateinschule keine herausgehobene Rolle; wodurch auch erklärlich wird, weshalb Erich Adickes anhand mehrerer Blätter des handschriftlichen Nachlasses zu einer sehr skeptischen Einschätzung von Kant’s mathematischen Fähigkeiten gelangt ist.⁴ - Anders steht es hingegen mit den Realien der Geographie und der Geschichte, für die in Königsberg eigens neue Lehrbücher verfaßt wurden. Die Ausrichtung der Schule als ganzer erfolgte im Sinn der Reorganisation des Schul- und Unterrichtswesens in Preußen gemäß einer Verordnung vom 25. Okt. 1735, worin die Kenntnisse eines Absolventen, wie folgt, expliziert sind:

Für die Entlassung zur Universität wird mindestens verlangt, dass der Abgehende, einen etwas schweren Auctorem als Curtium, und Orationes Ciceronis Selectas ziemlich geläufig expliciren, und eine kleine Oratio absque vitiis gramaticis machen, auch was Lateinisch geredet wird, nothdürftig verstehen könne, dabey aus der Logic das vornehmste aus der Doctrina Syllogistica, und das allernothwendigste aus der Geographie, Historie und Epistolographie inne / habe, imgleichen der nicht wenigstens 2 Evangelisten im Griechischen, als Mattheum und Johannem, und die 30 ersten Capitel des 1. Buchs Mosis im Hebräischen fertig exponiren, und beydes ziemlich analysiren könne.⁵

Entsprechend legt das Curriculum der Lateinschule (*Zuverlässige Nachricht von den jetzigen Anstalten des Collegii Fridericiani zu Königsberg in Preussen. Anno 1742. Gedruckt bey Johann Heinrich Hartung*⁶) fest: Der Geographie wird nur ein geringes Stundendeputat zugewiesen; sie erhält jedoch Gewicht durch ihr Verhältnis zur Historie. Geographische Kenntnisse gelten als unverzichtbar für den Unterricht der Geschichte.⁷

In Abschnitt II "Von den Lektionen,, schreibt der § 11 vor: "Zur Historie wird niemand gelassen, der nicht vorher in der Geographie etwas gelernet,,.⁸ Diese Abfolge der Disziplinen hat Kant später - ausweislich der Nachschriften⁹ seiner Vorlesung über Physische Geographie - den eigenen Studenten gegenüber stets vertreten. Aufgrund der Angaben des § 10 kennen wir das Lehrbuch,¹⁰ anhand dessen Kant seinen ersten Unterricht in der Geographie erfahren hat. Das ohne Nennung eines Autornamens erstmals 1736 in Königsberg gedruckte Lehrbuch trägt den Titel: *Vollständige Einleitung / Zur Geographischen Wissenschaft / Nach der Neuen und Alten Zeit / Zum Gebrauch des Collegii Fridericiani verfertiget*.¹¹ Mit diesem Lehrbuch dürfte nicht nur der geographische Horizont des Schülers Immanuel Kant abgesteckt sein, vielmehr sind darin auch einige der Leitlinien erkennbar, die noch in der ersten Konzeption der Vorlesung über *Physische Geographie* des Universitätsdozenten wirksam geworden sind.¹²

Nimmt man das Lehrbuch in seiner ersten Auflage zur Hand, so zeigt schon sein Titel, daß es in Teilen noch einer älteren Lehrtradition verpflichtet ist, die etwa in der Mitte des 18ten Jahrhunderts durch eine grundsätzlich neue Variante abgelöst wird. Im Untertitel wird auf die Differenz zwischen 'alter, und 'neuer, Zeit verwiesen. Diesem Umbruch wird Rechnung getragen, indem länderspezifische Abschnitte je um einen "Anhang,, zur Alten Geographie ergänzt werden. Asien wird im 'zweiten Buch, mittels sechs einzelner Kapitel abgehandelt (S. 250-301); die Regionen heißen: 1) Asiatische Turkey, 2) Persien, 3) Ostindien, 4) Grosse Tartarey, 5) China, und schließlich: 6) Orientalische oder Asiatische Inseln. Der auf das Alte zielenden Anhang (S. 267-278) ist der 'Asiatischen Turkey, gewidmet; es ist der umfanglichste Abschnitt des zweiten Buches. Gehandelt wird von der 'Biblischen Geographie, bzw. dem 'Gelobten Lande,. Offensichtlich wurden solche Kenntnisse als unverzichtbar für eine sachlich angemessene Lektüre der Biblischen Schriften und der lateinischen oder griechischen Werke des Klassischen Altertums angesehen. - Eine derartige Sicht auf die Erde steht in Kontrast zu moderneren Auffassungen von Geographie: Die Biblische Geographie ist weder an mathematischen Prinzipien ausgerichtet noch basiert sie auf nachvollziehbaren, empirisch gewonnenen Daten. Insgesamt bietet das Schiffertsche Lehrbuch kaum mehr als trockene Einteilungen und - innerhalb dieser - Aufzählungen und Aneinanderreihungen

von geographischen Bezeichnungen. Menschliche Siedlungen (Städte) und natürliche Gegebenheiten wie den Flüssen. Sitten, Gewerbe und Religionen der Einwohner werden jeweils nur sehr knapp unter der Rubrik "Die übrige Beschaffenheit des Landes," skizziert. Die Abfolge der Erdteile ist die folgende: Europa, Asien, Afrika und Amerika; das Hauptgewicht der Darstellung liegt auf 'Europa,.

Ein anderes der in Königsberg für das Fridericianum neu verfaßten Lehrbücher hat hingegen in der Kantischen Vorlesung keine Spuren hinterlassen. Das 1754 von Johann Heinrich Daniel Moldenhauer¹³ veröffentlichte Lehrbuch *Einleitung in die Alterthümer der Egyptier, Juden, Griechen und Römer* einschließlich des Nachtrags über die *Alterthümer der Perser*.¹⁴ Es kommt nicht nur zu spät, um für Kant's intellektuellen Werdegang noch Relevanz gewinnen zu können; vielmehr ist es von der gesamten Durchführung her ganz und gar unmodern und eingebunden in die damalige, noch weitgehend von biblisch-theologischen Prämissen geprägte und auf bloße Memorierung zielende Lehrtradition.

2. UNIVERSITÄT

Mit Blick auf die ersten Universitätsjahre des jungen Kant ist die Anzahl der vorliegenden, sich auf zeitnahe Quellen stützende Darstellungen sehr klein. Läßt man die mehr zusammenfassenden Arbeiten beiseite und konzentriert den Blick auf originäre Beiträge, die sich der Kantischen Biographie jener Jahre überhaupt zuwenden, so sind nur drei Studien zu nennen. Den Anfang bildet die Spezialuntersuchung von Benno Erdmann über *Martin Knutzen und seine Zeit* aus dem Jahr 1876 (Reprint: 1973 / Neudruck 2005). Teils in direkter Opposition dazu publizierte der Königsberger Privatgelehrte Emil Arnoldt genau 100 Jahre nach dem ersten Erscheinen der *Critik der reinen Vernunft* (1781) seine Studie über 'Kants Jugend',¹⁵ 1987 ist schließlich die Kieler Habilitationsschrift von Hans-Joachim Waschkies über *Physik und Physikotheologie des jungen Kant* erschienen. Waschkies ist erstmals - ausgehend von Erdmannschen Fragestellungen - zu wissenschaftsgeschichtlich relevanten Antworten gelangt. Auch wenn nicht definitiv festgestellt werden kann, ob Kant sich selbst als Schüler von Martin Knutzen verstanden hat,¹⁶ so darf doch als gesichert gelten, daß

Kants lebenslang bekundetes Interesse an der Physikotheologie auf seinen Lehrer Martin Knutzen zurückgeht, der sich diesem Thema allerdings erst im Gefolge seiner astronomischen Beobachtungen aus dem Winter 1743/1744 zugewandt haben dürfte. (Waschkies, 1987, S. 61)

Benno Erdmann hat in seiner 1876 erschienenen Schrift primär ein anderes Interesse verfolgt, wie schon der Untertitel anzeigt: "Ein Beitrag zur Geschichte der Wolfischen Schule und insbesondere zur Entwicklungsgeschichte Kants,," Die Studie von 148 Seiten zeigt einen sorgfältig durchdachten Aufbau. Zu Beginn (Kap. 1) wird die "geistige Entwicklung Königsbergs von 1700-1750,," betrachtet; es folgen sechs unmittelbar auf Knutzen gerichtete Stücke (Kap. 2-7); den Schluß bildet das 8. Kapitel "Knutzen und Kant,," Der Knutzen gewidmete Abschnitt startet mit einer nur wenig kommentierten Bibliographie (Kap. 2) und einer Darstellung (Kap. 3) der "Entwicklung der wolfischen Schule zur eklektischen

Popularphilosophie, welche etwa die Zeit von 1720-1760 umfasst, [...]„ (S. 55). Es soll dazu dienen, die Entwicklung nachzuvollziehen, deren „reifstes Product Knutzens Hauptwerk ist,, (ebenda). Diesem ist Kap. 4 gewidmet: „Knutzens Systema causarum und seine Bedeutung für den Streit um die prästabilirte Harmonie,,. Es folgen drei summarische Kapitel (5 - 7) zu den „philosophischen,, „theologischen,, und „naturwissenschaftlichen Schriften,,. Unter meiner gegenwärtigen Perspektive ist das letztere von besonderem Belang. Etwas überraschend stellt sich jedoch auf den S.122-124 heraus, daß nur die Kometenschrift des Jahres 1744 kurz besprochen wird. Erdmann schließt (S. 124) mit der lapidaren Bemerkung:

Wir dürfen hiermit, da die übrigen naturwissenschaftlichen Arbeiten Knutzens keiner besondern Erwähnung bedürfen, die Darstellung seiner schriftstellerischen Tätigkeit schliessen. Es erübrigt nur noch, die einzelnen Züge derselben, die wir allmählich gewonnen haben, in ein Gesamtbild zu vereinigen. 17

Erdmann stützt sich auf einige der erstmals 1860 publizierte Auskünfte zur Biographie von Immanuel Kant,¹⁸ und zahlreiche ausschließlich gedruckte bio-bibliographische Quellen zur Königsberger Gelehrtengegeschichte.¹⁹ Er verfolgt ausdrücklich *nicht* das Ziel, die tatsächlichen Gegebenheiten der Königsberger Albertina bzw. ihrer Philosophischen Fakultät zu rekonstruieren. Die je ersten Sätze der drei ersten Absätze (S. 11f.) seines ersten Kapitels „Die geistige Entwicklung Königsbergs von 1700 bis 1750,, mögen hier als Beleg für eine derartig kritische Abwertung genügen:

Der Darstellung einer örtlich isolirten geistigen Entwicklung, die durch mehr als hundertfunzig Jahre von unserm Fühlen und Denken getrennt ist, sind enge Grenzen gezogen. Die einzelnen Personen, deren verschlungenes Ineinanderwirken den Gang der Zeit bestimmte, sind, sofern sie nicht weit über die Grenzen ihres Heimatortes von Bedeutung waren, unserm Interesse entfremdet. [...]

Die geistige Entwicklung einer spezifischen Universitätsstadt - eine solche ist Königsberg durch das ganze vorige [sc. 18.] Jahrhundert immer geblieben - ist die innere Geschichte ihrer Universität. [...]

Der geistige Charakter Königsbergs nun während der angegebenen Zeit ist trotz der erwähnten Isolirtheit desselben wesentlich bedingt durch die in Deutschland herrschende Strömung der Zeit. [...]

Nachweislich ist das Königsberg des 18ten Jahrhunderts weder isoliert,²⁰ noch primär als Universitätsstadt zu charakterisieren, sondern als eine weltoffene, ganz unhöfische Hafen- und Handelsstadt außerhalb des damals als 'Deutschland, bezeichneten Territoriums.²¹ In der Ausführung eines Zeitzeugen:

Die Stadt ist zwar ihres geraumen Umfangs wegen nicht unter die Vestungen zu bringen, doch ist sie zum Handel und vielerley andern Gewerbe in allen Stücken wohl eingerichtet. [...] Es ist ein Ort, wo der angenehmste Umgang mit allerhand Arten Menschen zu finden, und wo Bals [sc. Bälle], Assemblées, Concerte und andere Lustbarkeiten öffentlich gehalten werden, ja ein Ort, wo man sonst manierlich und artig leben kann, woselbst viele Standes- und Particulierpersohnen sich deshalb aufhalten, umb ihr Leben unter klugen und politen Leuten zubringen, auch ihres von Gott bescheerten Reichthums in guten Tagen zu genießen. [...], also wird man schwerlich dergleichen Örter in Europa viele antreffen, wo ein jeder nach seinem Stande mehr Bequemlichkeit

und Veränderung genießen wird als in dieser großen Stadt, wo fast nichts auszusetzen, dessen man nicht theilhaft werden sollte. 22

Diese kurze Charakteristik widerlegt nicht nur das Erdmannsche Vorurteil, sondern sie kann zugleich als Kommentar gelesen werden zu der gern zitierten Kantischen Formulierung, wonach Königsberg in seiner Lebenszeit 'ein schicklicher Platz, (Ak, VII: 121,34f.) zum Erwerb von Menschen- und Weltkenntnis gewesen ist.

Stadt und Universität konnten schon in dem von Erdmann betrachteten Zeitraum auf eine 500 bzw. 200 Jahre währende sehr eigenständige Geschichte zurückblicken, die in vielem ganz anders verlaufen ist, weil sie - im weitgehend eigenständigen Preußen gelegen - dem kleinteilig in Fürstentümer und Freie Städte gegliederten 'Heiligen Römischen Reich deutscher Nation, eben nicht angehörte. Einwohner und Behörden der Stadt waren sich dessen wohl bewußt: Nicht 'isoliert, sondern 'unabhängig, oder 'eigenständig, wäre ein zweifellos passenderes Attribut gewesen. Erdmann selbst, der vermutlich gar nicht in Königsberg gewesen ist bzw. nicht in dortigen Bibliotheken oder Archiven recherchiert hat,²³ ist viel eher als 'Gefangener seiner Zeit, in den ersten Jahren eines neu begründeten 'Deutschen Reiches, (1871) zu sehen; denn in den zitierten kurzen Ansätzen offenbart sich eben dieselbe hagiographische Vorstellung von Geschichte, die damals zahlreichen Universitätsgelehrten dieses Faches gemein war.²⁴

In der Sache kennzeichnend sind für Erdmann's ganz ungezweifelt verdienstliche Schrift²⁵ und ihre Zielsetzung dann auch zwei *Personen*: Martin Knutzen in Königsberg und Christian Wolff in Halle. Zwischen diesen beiden Ankern sieht Erdmann gleichsam eine Kette aufgespannt, deren einzelne Glieder als Johann Christoph Gottsched, Franz Albert Schultz oder Johann Heinrich Lysius identifiziert werden. Thematisch wird vom Pietismus, von der Orthodoxie oder dem Rationalismus gehandelt, ohne daß die Naturforschung jener Zeit oder gar ihre Königsberger Vertreter in das Blickfeld rücken. - Erst Waschkies hat sich 100 Jahre später dieser Aufgabe unter der speziellen Perspektive der 'Astronomie, gestellt.

Auch in den hier einschlägigen Arbeiten von Erich Adickes (1911, 1911a, 1924/25) sucht man lokale, auf Königsberg gerichtete Ausführungen vergeblich.²⁶ Ganz zu schweigen von den sehr eingeschränkten, viel zu speziellen - weil präformierten - Fragestellungen, die in einigen der in den 1960er und 1970er Jahren entstandenen Arbeiten im Blick auf einen jungen Kant abgehandelt worden sind. Zu nennen sind hier vor allem Giorgio Tonelli²⁷ und Norbert Hinske,²⁸ die ausgehend von einem mehr - wenn nicht ausschließlich - der 'Metaphysik, zugehörig gedachten Immanuel Kant, den intellektuellen Anfängen des Philosophen nachgespürt haben.

Im § 7 (S. 117-172) seiner Studie ist Waschkies eine Rekonstruktion der auch im gegenwärtigen Zusammenhang wichtigen Durchgangsstufen seiner Überlegungen und Argumentationen gelungen: Im Rekurs auf die 1735 neu eingeführten Lehrpläne der Albertina, durch die Analyse eines 1736 in Königsberg veröffentlichten Lehrbuchs *Lineae primae matheseos* und der entsprechenden Kompendien von Christian Wolff wird der Stand der "Unterweisung in der Mathesis an den preußischen Universitäten zur Zeit des jungen Kant,

aufgehellt. Es gelingt so, die geringe Reichweite der technischen - nämlich mathematischen - Fähigkeiten des Königsberger Studenten Immanuel Kant gleichsam abzuschätzen. Weder der Verfasser des Lehrbuches, der Privatdozent Christian Friedrich Ammon (1696-1742), noch Martin Knutzen oder Immanuel Kant gehörten zu der "verschwindend kleinen Elite von Naturwissenschaftlern",²⁹ die über ein hinreichendes intellektuelles Rüstzeug verfügte, um die mathematischen Fundamente der Ableitungen in den Newtonischen 'Principia, zu verfolgen bzw. für die Naturforschung (hier Astronomie) selber produktiv einsetzen zu können. - Waschkies hat auch weitgehend³⁰ Klarheit geschaffen, welche mechanischen Modelle Knutzen bei seinen astronomischen Forschungen benutzt hat (S. 177-193), bzw. welche Leistungsfähigkeit den in Königsberg eingesetzten Teleskopen des Elbinger (Elbląg) Instrumentenbauers Johann Friedrich Endersch (1705-1769)³¹ zugebilligt werden kann (S. 104-110).

Es mag also verwundern, wenn man - nach dem status quaestionis in Sachen Naturforschung im Königsberg der ersten Hälfte des 18ten Jahrhunderts³² fragend - die These formuliert, daß in dieser Absicht kaum Recherchen angestellt bzw. Arbeiten verfaßt worden sind. Verläßt man nämlich die eingeschränkte Perspektive einer Kant-Biographie oder der Interpretation bestimmter philosophischer Ansichten, die Kant in seinen Schriften oder Vorlesungen geäußert hat, und nimmt stattdessen die Institution der Albertus-Universität als solche in den Blick, dann stellt sich anhand der einschlägigen bibliographischen Werke³³ rasch heraus, daß nur eine Arbeit³⁴ und zwar aus der ersten Hälfte des 19. Jahrhunderts zur Geschichte der Natur-Forschung in Königsberg bzw. der Albertina vorliegt. Bei der enormen Rolle, die den neuzeitlichen Naturwissenschaften zumindest in Kant's erkenntniskritischen Werken der 1780er Jahre zukommt, verlangt diese Beobachtung geradezu nach einer Erklärung. Und es zählt sicher zu den Seltsamkeiten der Gelehrten-geschichte, wenn bei näherem Zusehen rasch vergleichsweise simple Ursachen für die genannte Forschungslücke angegeben werden können.

Sämtlichen älteren, vor 1944 erschienenen Arbeiten,³⁵ die sich dem ersten intellektuellen und biographischen Bezugfeld des Königsberger Philosophen Immanuel Kant zuwenden, fehlt eine eigenständige, bibliographisch gesicherte Basis. Ohne diese bewegen sich die Untersuchungen - von zufälligen Beobachtungen oder Funden abgesehen - mehr oder weniger gezwungenermaßen, in den Bahnen, die durch Zeit-Zeugen (hier insbesondere die frühen Biographen von Kant) in Form der Nennung von Personen oder Themen vorgezeichnet sind. Jeder Versuch, sich von derartigen Präformationen befreien zu wollen,³⁶ setzt voraus, daß es einen unabhängigen, systematischen oder chronologischen, Zugang in die intellektuelle Welt der alten Königsberger Universität gibt. Den Schlüssel zu dieser nach 1945 nicht bloß vergangenen sondern zerstörten Welt hat ein Zeitgenosse von Kant gleichsam mitgeliefert, ohne daß die biographisch oder historisch interessierte Kant-Forschung bis in die Mitte der 1990er Jahre hinein davon Notiz genommen hat. Georg Christoph Pisanski (1725-1790) hat über dreißig Jahre³⁷ hin Collectaneen angelegt und biographische Skizzen verfaßt, die schließlich mündeten in den 'Entwurf einer preußischen Litterär-geschichte., Die Jahreszahl 1886 der ersten vollständigen Publikation³⁸ ist zugleich eine entscheidende Wegmarke für die intellektuelle Geschichte der Königsberger Universität und eine kontextsensitive Entwicklungsgeschichte der Philosophie von Immanuel Kant.

Weder der in Kiel lehrende Benno Erdmann noch der Königsberger Emil Arnoldt haben in ihren oben genannten, für Jahrzehnte wegweisenden Arbeiten auf diesen Schlüssel zurückgegriffen bzw. zurückgreifen können.³⁹ Auch - und dies ist eine der eben angedeuteten Seltsamkeiten - in den Kant-biographischen Arbeiten von Karl Vorländer und Hans-Joachim Waschkies sucht man einen Hinweis auf Pisanski's Werk vergeblich. Anscheinend hat erst der 1994 zum 450. Gründungstag der Universität Königsberg in Hamburg erschienene Nachdruck die Szene aufgehell.⁴⁰

Möglicherweise hat bei der ausbleibenden Wirkung auch ein äußerer Umstand eine wichtige Rolle gespielt. Der Herausgeber Rudolph Philippi macht in seiner einleitenden Notiz darauf aufmerksam, daß Pisanski "sein Augenmerk lediglich auf die Facultäts-Wissenschaften," (1886, S. xviii) gerichtet hat. Das zugrundeliegende Ms zeigte keinen eigens formulierten Titel (vgl. S. xvii). So gesehen wäre es näher am Text gewesen, wenn das Buch etwa 'Entwurf der Literärgeschichte der Königsberger Universität, genannt worden wäre. Zumal für die Nachwelt, schon des ausgehenden 18. Jahrhunderts die Redeweise 'preußisch, mißverständlich, weil uneindeutig geworden ist. So hätte im Nachhinein auch leichter erkannt werden können, daß es sich in der Sache um ein Parallel-Stück und eine teilweise Fortführung der Universitätsgeschichte von Daniel Heinrich Arnoldt (1746, 1756, 1769) handelt.

Freilich stellt Pisanski's Schaffen in Königsberg keinen Sonderfall dar, vielmehr steht sein Werk am Ende einer durch das gesamte 18te Jahrhundert führenden Kette, deren prominenteste Glieder mit den Namen von *Michael* (1686-1750) und Theodor *Christoph Lilienthal* (1717-1782) und Daniel Heinrich *Arnoldt* (1706-1775) belegt werden können. Hinzu kommen einzelne Schriften von Friedrich Johann *Buck* (1722-1786), der Brüder Johann *Georg* (1698-1762) und Friedrich *Samuel Bock* (1716-1785) sowie von Johann Friedrich *Goldbeck* (1748-1812). Sie reihen sich ein in das permanente Bemühen, sich selbst der eigenen Leistungen und der eigenen Geschichte schriftlich zu vergewissern. Möglicherweise geht dieser auffällige Charakterzug eines Teils der Königsberger Gelehrten im 18ten Jahrhundert zurück auf eine im Pietismus angelegte Wurzel. Auch die langandauernde Extemporal- oder Occasional-Poesie eines Johann Friedrich *Lauson* (1727-1783) verliert vor diesem Hintergrund ein wenig von ihrer Singularität oder Monstrosität.⁴¹

Auf diese Weise ist nach 1945 eine paradoxe Lage entstanden: Unzweifelhaft sind die lokalen Traditionen abrupt beendet worden. Die Königsberger Bibliotheken und Archive sind zwar teils zerstreut, teils zerstört oder nur verlagert und dennoch ist die dem retrospektiven Historiker hinterlassene Situation vergleichsweise günstig.⁴² Denn bereits die Zeitgenossen haben reichlich für gedruckte Quellenwerke - eine Art von kollektivem Tagebuch - gesorgt. Eine schier unglaubliche Menge auch an alltäglichen Details über und aus der Geschichte von Stadt und Universität ist der Forschung prinzipiell zugänglich. Deutlich ungünstiger ist hingegen - so weit bisher bekannt - die Überlieferung der lokalen Periodica, sodaß auch einige Erstdrucke Kantischer Schriften als verschollen gelten müssen.⁴³

Eine analytische Beschreibung der nach 1945 bzw. nach 1989/90 eingetretenen Quellenlage⁴⁴ ist unvollständig ohne einen hier notwendig sehr kurzen Blick auf die handschriftlichen Formen der Überlieferung.⁴⁵ Die Substanz der Forschung ist in existentieller Weise betroffen, wenn die Archivalien aus Schulen, Behörden und Kirchen oder der Universität als solche verloren gehen. Dasselbe gilt für die zunächst in privaten Nachlässen und Sammlungen akkumulierten Quellen und Zeugnisse, die - unklar in welchem Umfang - bis in die 1940er Jahre hinein ihren Weg in staatliche und städtische Archive und Bibliotheken genommen haben.⁴⁶

Für historische Untersuchungen zur Universität - nicht der Stadt als solcher - ist die Lage wesentlich günstiger als man im Blick auf die Geschehnisse der Region nach dem Frühjahr 1945 vielleicht anzunehmen geneigt ist. Das heißt freilich nicht, daß die sich daraus für eine historisch interessierte Kant-Forschung ergebenden Potentiale bereits genutzt oder gar ausgeschöpft worden sind. Für Karl Vorländer (1860-1928) als den bis in die jüngere Zeit maßgeblichen - weil in seiner Quellenlage unersetzlich scheinenden - Kant-Biographen und die Mehrzahl der nicht mit den Königsberger Traditionen vertrauten Editoren von *Kant's gesammelten Schriften* (Akademie-Ausgabe) kommt beispielsweise die Publikation (1910-1917) der Rektorats-Matrikel der Albertus-Universität zu spät für eine durchgehende, produktive Auswertung.⁴⁷ Eine ähnlich negative Auswirkung hat die Tatsache, daß erst zu Beginn der 1920er Jahre ein geordneter Zugriff auf die Archivalien der Universität möglich wurde.⁴⁸ In der kurzen Periode zwischen den beiden Weltkriegen (1918-1939) ist schließlich an deutschen Universitäten nicht allein in der Philosophie als akademischer Disziplin sondern insgesamt eine zunehmende Abkehr von einer primär wissenschaftlichen Kriterien verpflichteten Geschichtsschreibung zu beobachten. Ideologische, 'weltanschauliche, Prämissen verdrängen und ersticken nach 1933 schließlich nahezu vollends eine vorurteilsfreie Reflexion auf die eigene Vergangenheit.

Allerdings sind in ersten Ansätzen schon im ausgehenden 19ten Jahrhundert⁴⁹ und verstärkt bis in die 1930er Jahre hinein im Gebiet der Germanistik oder Literaturwissenschaft und der Kirchengeschichte Quellen-Werke vor allem im Hinblick auf Korrespondenzen von Königsberger Gelehrten des 18. Jahrhunderts geschaffen worden, die nach dem Verschwinden oder dem Verlust der Handschriften selber in vielfältiger Weise der weiteren Forschung die Grundlage geliefert haben.⁵⁰ Freilich - diese Beobachtung stellt sich beinahe zwangsläufig ein - ist dies von ganz wenigen Ausnahmen abgesehen in der auf Immanuel Kant gerichteten Forschung nur selten der Fall gewesen. Beginnend in den 1980er und deutlich intensiviert in den 1990er Jahren geraten die Bibliotheken und Archive des östlichen Europa wieder in das Blickfeld einer interessierten Öffentlichkeit,⁵¹ so daß auch unmittelbar auf die Biographie und das Umfeld von Kant zielende Quellenwerke in Angriff genommen und realisiert werden konnten.⁵²

Nicht unerwähnt bleiben dürfen diejenigen handschriftlichen Quellen, die zwar im Königsberg des 18ten Jahrhunderts entstanden aber dort nicht verblieben sind: die Korrespondenzen mit Auswärtigen. Von besonderem Interesse sind die Nachlässe von August Hermann Francke (1663-1727) in der Berliner Staatsbibliothek⁵³ und der Briefwechsel von Johann Christoph Gottsched (1700-1766) in der Leipziger Universitätsbibliothek.⁵⁴

* * *

Kennt man Thematik und Inhalt der Kantischen Vorlesung über *Physische Geographie*, so fällt es im Blick auf das Personal der Königsberger Universität⁵⁵ für den hier primär relevanten Zeitraum der Jahre 1740 bis 1755 nicht schwer, eine Skizze der Ausgangs- oder Vorbedingungen für die Immanuel Kant zugängliche, d. h. in seiner nahen intellektuellen Umgebung tatsächlich ausgeübte, Naturforschung zu entwerfen.⁵⁶ Für ein solches, notwendig weiter ausgreifendes Unternehmen ist im gegenwärtigen Zusammenhang kein Raum. Stattdessen soll anhand eines abschließenden Probestücks deutlich werden, daß und in welcher Hinsicht derartige Recherchen eine historisch interessierte Kant-Forschung befördern können.⁵⁷

3. DAS NATURALIENKABINETT VON SATURGUS

Hatte Kant tatsächlich - vor 1772 - zeitweilig die Aufsicht über das Naturalienkabinett des Königsberger Kommerzienrats Friedrich Franz Saturgus (1728-1810)? Die Frage scheint von ausschließlich biographischem Belang; bei näherem Zusehen zeigt sich jedoch, daß die Vorlesung über *Physische Geographie* in didaktischer und substantieller Hinsicht davon berührt ist. - Die ältere Forschung nahm an, daß Kant zeitweilig mit Arbeiten in oder an der genannten naturhistorischen Sammlung beteiligt war.⁵⁸ Die drei neueren, vor rund einem Jahrzehnt veröffentlichten Kant-Biographien (Kühn 2001 [deutsch 12003], Dietzsch 2003, Geier 2003) hingegen haben dieses Detail unbeachtet gelassen. Vor Jahren habe ich selbst im Zusammenhang mit den von Kant benutzten Lehrbüchern die Frage gestreift, ohne eine Meinung zu explizieren.⁵⁹ - Die Frage sollte negativ entschieden werden.

Der Schüler und Amanuensis⁶⁰ von Kant in den 1780er und 1790er Jahren, Reinhold Bernhard Jachmann schreibt in *Immanuel Kant geschildert in Briefen an einen Freund*:

Im Jahre 1766 erhielt er [Kant] die zweite Inspektorstelle bei der königlichen Schloßbibliothek, er übernahm auch die Aufsicht über das schöne Naturalien- und Kunstkabinett des Kommerzienrat Saturgus, welches ihm zum Studium der Mineralogie Veranlassung gab. Beide Stellen gab er aber nach einigen Jahren wieder auf.⁶¹

In dieser Aussage sind drei Momente miteinander verbunden: (1) eine Tätigkeit als Bibliothekar, (2) die Aufsicht über das Naturalienkabinett und (3) ein Studium oder Interesse an der Mineralogie. Während nun für das erste und dritte Moment Tatsachenbelege in Form von Akten vorliegen, ist dies für das zweite, hier interessierende Moment nicht der Fall. Kant ist in der Zeit von 1766 bis 1772 mit einem Jahresgehalt von 62 RTlr. Bibliothekar an der Schloßbibliothek;⁶² im Winter 1770/71 hält er einmalig eine Vorlesung auf der Grundlage eines Lehrbuches des schwedischen Mineralogen Johann Gottschalk Wallerius (1709-1785).⁶³

Für eine daneben bestehende Dienst- oder Lohnbeziehung zum Handlungshaus Saturgus, das als Träger der in Königsberg öffentlich zur Schau gestellten Gelehrten-Kammer fungiert hat, gibt es keinen Anhaltspunkt neben der zitierten Angabe von Jachmann und der vermutlich davon abhängigen Meinung von Rink. Nun darf freilich aus dem Manko

an amtlichen Aktenbelegen als solchen weder auf die Annahme noch die Ablehnung einer derartigen privaten Beziehung geschlossen werden. Nimmt man einige der erreichbaren Informationsquellen über das Naturalienkabinett und das Handlungshaus hinzu, dann zeigt sich, daß dieses die Sammlungen mehrerer nicht allein Königsberger Gelehrter in sich aufgenommen hat. Es würde zu weit führen, die mehr als eine enge Druckseite umfassende summarische Beschreibung hier einzuflechten, die Georg Christoph Pisanski (1725-1790) in seinen vollständig erst posthum erschienenen *Entwurf einer preußischen Litterärsgeschichte* aufgenommen hat. Für den gegenwärtigen Zweck ist hinreichend, die darin enthaltenen Angaben zu zitieren:

Diese vortreffliche Sammlung, welche alle ehemalige und jetzige in Preußen an Vollständigkeit und Kostbarkeit übertrifft, hat den Hrn. Commerciensrath und Negotianten Franz Friedrich Saturnus zum Stifter.⁶⁴ Ihr ansehnliches Wachstum ist vornehmlich dadurch befördert, daß, [...] verschiedene ganze Cabinette derselben einverleibet sind, nämlich des Dr. Löselius, Wosegin, Helwing, v. Sanden, Boretius, Charisius, Fischer, Rappolt, Schrotberg, und aus Danzig des Dr. Lohrer. Nicht minder ist Vieles aus dem Nachlaße des berühmten Arztes Gerhard Paludan, imgleichen sind verschiedene kleinere Sammlungen aus Holland, Hamburg, Lübeck, Berlin, Halle, Leipzig und Dresden hieher gekommen. Es begreift also dieses Cabinet alle Gattungen von Seltenheiten, die sonst schon einzeln ansehnliche Sammlungen ausmachen, zusammen in sich.⁶⁵

Weiter wird ausgeführt, daß darin Gegenstände aus dem “Mineralien-, Thier- und Pflanzenreiche,, , “viele tausend seltene und sonderbaren Stücken Bernstein,, , “Werke der Kunst,, - nämlich Gemälde, Kupferstiche, Fern- und Vergrößerungsgläser - und eine umfangreiche Büchersammlung bereitgehalten wurden. Pisanski schließt (S. 560):

Seine ganze Einrichtung hat dieses Cabinet der vieljährigen und sorgfältigen Bemühung des Consistorialraths Dr. Bock zu verdanken, der auch eine kurze Beschreibung⁶⁶ deßelben [...] herausgegeben hat.

Von Kant ist in dem ganzen Zusammenhang nicht die Rede. - Ein zusätzliches, meines Erachtens aufschlußreiches Detail bietet der dritte 1779 erschienene Band der *Reisen durch Brandenburg, Pommern, Preußen, Curland, Rußland und Pohlen, in den Jahren 1777 und 1778* von Johann Bernoulli. Während seines mehrtägigen Aufenthalts in Königsberg im Sommer 1778 wurde auch das “sartoriussche (!) Naturalienkabinet,, in Begleitung von einigen Königsberger Gelehrten besucht. Namentlich genannt werden [Immanuel] Kant und [Friedrich Samuel] Bock, den Bernoulli irrtümlich mehrfach als “D[oktor]. Bode,, bezeichnet. Gleich zu Beginn der Darstellung wird darauf hingewiesen, daß Bock “es nicht mehr unter seiner Aufsicht [habe], weil sich die Umstände des Eigenthümers verändert hatten, wodurch auch das Kabinet selbst in andere Hände gerathen dürfte.,⁶⁷ Angemerkt wird (S. 67) auch, daß Bock “eine Beschreibung dieser Sammlung [...] drucken lassen,, habe, die Bernoulli nicht zugänglich war.

Im mehr andeutenden denn ausdrücklich formulierenden Stil der Zeit gibt Bernoulli damit zu erkennen, daß er um den im Frühjahr 1777 erfolgten wirtschaftlichen Zusammenbruch des ‘Handlungshauses Saturnus, wußte, daß Bock seine Tätigkeit in und für

die Sammlung deswegen aufgegeben hat, und daß diese also vordem gegen Bezahlung erfolgt sein wird. Die namentliche Nennung von Kant in Verbindung mit dem vordem an Bock gezahlten Entgelt stellt ein klares Indiz dafür dar, daß es eben nicht Kant gewesen ist, der - wie Jachmann später meinte - das Saturnus-Kabinett beaufsichtigt hat, sondern Friedrich Samuel Bock (1716-1785), der ab 1753 mit seiner Ernennung zum Prof. für Griechische Sprache an der Philosophischen Fakultät und zum Prof. der Theologie auch als Erster Bibliothekar der Schloßbibliothek amtierte.

Auch für die frühere Zeit - etwa die 1760er Jahre - ist eine Aufsicht durch Kant auszuschließen, denn die von Pisanski und Bernoulli erwähnte Beschreibung des Kabinetts findet sich bereits im 1764 herausgekommenen ersten Jahrgang der *Königsbergischen Gelehrten und Politischen Zeitungen*. Der Artikel ist zwar ohne Titel und Verfasserangabe erschienen, doch hat Bock seine Autorschaft wenig später selbst bezeugt.⁶⁸ Auch die Ende 1782 erschienene *Beschreibung verschiedener Seltenheiten* bestätigt dies, S. 109:

[...] In den wichtigsten Artikeln dieses Cabinets, als z. B. Eiersammlung, Börnstein, und dergl. habe ich die bereits aufgezeichneten Anmerkungen meines Vorgängers und ehemaligen Aufsehers dieses Cabinets, des Hn. Consitorialrath Bock benutzt, dieselbe an verschiedenen Orten meinem Zwecke gemäs, abgekürzt, oder mit den neuen hinzugekommenen Naturprodukten ergänzt. [Alle nennenswerten Königsberger Sammlungen sind hier eingegangen, u. a. diejenigen von Fischer und Rappolt ...] Auf solche Weise ist diese Sammlung zu einer solchen Grösse angewachsen, daß es gewiß unter den Privatkabinetten eine der ersten Stellen behauptet, wenn sich gleich noch hie und da Lücken vorfinden, die jedoch auszufüllen mehr als ein Menschenalter bedürfen.

Königsberg, den 23. des Wintermonds 1782 / Fried. Sam. Mohr.

Vielleicht hat der Umstand, daß Bock ab 1766 Kant's Vorgesetzter in der Schloßbibliothek gewesen ist, Jachmann⁶⁹ und Rink im Wissen um die zu Beginn dieses Abschnitts erwähnte Vorlesung über Mineralogie⁷⁰ zu ihrer Annahme im Hinblick auf eine Tätigkeit von Immanuel Kant im oder für das Naturalienkabinett verleitet.

Von der Enge der Beziehung zwischen Bock und der großen Königsberger Naturaliensammlung in der Mitte des 18ten Jahrhunderts zeugen zwei von drei ermittelten Portraitdarstellungen. Es sind dies primär ein von dem Königsberger Portraitmaler Becker vielleicht für den Kanterschen Buchladen angefertigtes Ölgemälde und zwei Kupferstiche.⁷¹ Der erste ist als separater Einblatt-Druck verbreitet worden und bezeugt eine enge Verbundenheit zwischen dem Portraitierten und der explizit "Museum Prussicum,"⁷² genannten Naturalienkammer. Dieser Stich des 18ten Jahrhunderts (hier nach dem Exemplar des Marburger Kant-Archivs; Format: 35.0 x 22.5 cm) scheint zudem das Ölgemälde vollständiger wiederzugeben, als der Druck aus der Mitte des 20ten Jahrhunderts. Der zweite zeigt als Titelpuffer den Kopf des über seine rechte Schulter blickenden Verfassers der Schrift *Ausführlicher Grundriß einer Vertheidigung der christlichen Religion wider die Feinde und Spötter derselben*, 2 Bde. (Königsberg: Kanter 1768).⁷³

Ein letztes Bedenken: Unter kulturgeschichtlichen Perspektiven erscheinen 'Naturalien-Kabinette, oder 'mineralogische Schatzkammern, als für das Barock typische

oder charakteristische Einrichtungen. Das in ihnen präsenste Verständnis von menschlicher Wissenschaft steht in sichtlichem Kontrast zu jenem ganz und gar neuzeitlichen Begriff von 'Naturwissenschaft,, der uns in Werken und Vorlesungen von Immanuel Kant allenthalben begegnet.



INHALTSANZEIGE: Der Beitrag zielt auf einen methodisch abgesicherten Rückgriff auf das Umfeld, in dem sich Kant's Intellektuelle Bildung vollzogen hat. Thema sind das Königsberger 'Fridericianum, und die 'Albertus-Universität, in der ersten Hälfte des 18ten Jahrhunderts. Kritisch beleuchtet wird vor allem die 1876 veröffentlichte Studie von Benno Erdmann *Martin Knutzen und seine Zeit*. Insgesamt wird ein bis heute nur unzulänglich erfolgter Rückgriff auf die literarische Produktion der Königsberger Naturforschung des 18ten Jahrhunderts diagnostiziert. Mit einem konkreten Beispiel sollen mögliche Konsequenzen für die Erforschung von Kants Schriften und Vorlesungen verdeutlicht werden.

STICHWORTE: Geschichte der Philosophie und der Naturforschung – Naturgeschichte - Physische Geographie - Königsberg (Kaliningrad) - Albertus-Universität - Collegium Fridericianum - Friedrich Samuel Bock - Friedrich Franz Saturnus - Immanuel Kant - Georg Christoph Pisanski - Benno Erdmann - Emild Arnoldt - Hans-Joachim Waschkies.

ABSTRACT: This article aims at a methodologically secure approach for studying the intellectual environment in which Kant developed his intellectual training. It focuses on Kant's two schools — the *Collegium Fridericianum* and the *Albertus-Universität* in Königsberg — as they were during the first half of the 18th century. Benno Erdmann's *Martin Knutzen und seine Zeit* (1876) is critically examined, with the finding that this and similar research has made inadequate use of the 18th century publications arising out of the natural science being pursued in Königsberg at the time. A few concrete examples clarify the possible implications for future research of Kant's writings and lectures on the sciences.

KEYWORDS: History of philosophy and the Sciences of Nature - Natural History - Physical Geography - Koenigsberg (Kaliningrad) - Albertus-University - Collegium Fridericianum - Friedrich Samuel Bock - Friedrich Franz Saturnus - Immanuel Kant - Georg Christoph Pisanski - Benno Erdmann -Emil Arnoldt - Hans-Joachim Waschkies.

EINIGE KÖNIGSBERGER DRUCKE DES 18TEN JAHRHUNDERTS

ABKÜRZUNGEN:

BM: Biblioteca Miejska [Stadtbibliothek]

BN: Biblioteka Narodowa [Nationalbibliothek]

BG PAN: Polska Akademia Nauk Biblioteka Gdańska

UB: Universitätsbibliothek

OBN: Ośrodek Badań Naukowych im. Wojciecha Kętrzyńskiego, Olsztyn

<nnn>: Leitziffer des Fernleihsystems der Deutscher Bibliotheken

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NOTES

1 Der gegenwärtige Artikel geht in der Substanz zurück auf ein von der 'Fritz Thyssen-Stiftung, in den Jahren 2003 bis 2007 an der Marburger Philipps-Universität gefördertes Forschungsprojekt 'Erneute Untersuchungen zu Kants Physischer Geographie.. - Eine ausführlichere Fassung ist Bestandteil einer daraus erwachsende Monographie. Vgl. auch die Ankündigung in Ak, XXVI.1 (2009), S. xxix, Note 1.

2 Seit 2000 Honorarprofessor der Universität von Marburg (Deutschland). Seit 1982 recherchiert der Autor zu Dokumenten (Akten, Handschriften, Drucke) zum erweiterten biographischen Umfeld von Immanuel Kant. Er hat verschiedene Bände von Kant's gesammelter Schriften herausgegeben; Bd. 25: Vorlesungen über Anthropologie (Berlin) – Gemeinsam mit Reinhard Brandt; Bd. 26.1: Vorlesungen über Physische Geographie ([Das Konzept zur Vorlesung 1757/59] (Berlin) unter Mitwirkung von Reinhard Brandt). Eigene Webseite: http://staff-www.uni-marburg.de/~stark/h_stark.htm - E-Mail: stark@staff.uni-marburg.de

3 Neben den Zeugnissen von GOTTHOLD (1853) und der durch REICKE (1860) veröffentlichten Quellensammlung sind die älteren Arbeiten von ELLENDT (1892 und 1898); ZIPPEL (1898), HOLLACK/TROMNAU (1899), LANGEL (1909) bzw. für die neuere Zeit NOTBOHM (1959) und GAUSE (1964) zu nennen.

4 ADICKES (1924/25, S. 12-25), wonach Kant die 'höhere Mathematik, nicht beherrscht hat. Vgl. ähnlich WASCHKIES (1987, § 7).

5 Zitiert nach ZIPPEL (1898), S. 86f. Es ist gewissermaßen Standard in der biographischen Kant-Forschung diese Passage der Verordnung (ARNOLDT, 1746, Bd. 3, S. 319ff.) heranzuziehen; vgl. ARNOLDT (1881, S. 614) [= ders., GS, Bd. 3, S. 115f.]; VORLÄNDER (1911, S. 15f.); WASCHKIES (1987, S. 129); KLEMME (1994, S. 9-11 und 26); KUEHN (2001, S. 62); KÜHN (2004, S. 82). Nicht jedoch bei ERDMANN (1876, S. 33); PAULSEN (1899, S. 31). - Für die Entstehung der Verordnung vgl. LANGEL (1909,

S. 55-65); VON SELLE (1944, S. 140f. bzw. 1956, S. 146f.), wo die zitierte Stelle paraphrasiert wird. Die gesamte Verordnung bei LANGEL (1909, S. 140-152).

6 Exemplar: Warszawa Biblioteka Narodowa (Pałac Krasińskich): XVIII.1.18636. Auch enthalten in: Erleutertes Preußen, Bd. 5 (1741), S. 487-572. Abdruck auch in: LANGEL (1909, S. 88-129). - Daß diese Regularien erst 1741/42, nachdem Kant die Schule bereits verlassen hat, publiziert worden sind, stellt ihre frühere faktische Wirksamkeit weder im Ganzen noch im Einzelnen in Abrede, wie etwa das Publikationsjahr des Lehrbuches zur Geographie (1736) belegen kann. - 1994 hat Heiner F. Klemme durch seine Edition des Lehrplanes einen Rückgriff auf die wichtigsten, längerfristig wirksamen Leitlinien in der Schulbildung von Immanuel Kant deutlich erleichtert. Kant besucht das Collegium Fridericianum von Ostern 1732 bis Michael 1740; vgl. KLEMMER (1994, S. 38f.) nach REICKE (1860). Die Nachricht ist von Chr. SCHIFFERT (1689-1765) verfaßt, wie das Erleuterte Preußen, Bd. 5, S. 487 anmerkungsweise mitteilt.

7 Das entsprechende Lehrbuch von Friedrich Samuel BOCK (1716-1785), Historische Einleitung in die Kenntniß der Reiche und Staaten / in welcher von derselben Ursprung, Fortgang und itzigem Zustande gehandelt wird, Zum Gebrauch der studirenden Jugend ist ebenfalls erst nach Kant's Wechsel auf die Universität erschienen: 1745(?), ²1750, ³1756. Es zeigt einen strikt an das Lehrbuch der Geographie angelehnten Aufbau. Die mir vorliegende dritte Auflage zählt 124 Seiten. - Ein Exemplar der ersten Auflage konnte ich nicht nachweisen; Exemplare der zweiten bzw. dritten Auflage von 1750 bzw. 1756 in der Polnischen Nationalbibliothek in Warschau: XVIII.1.25127 bzw. XVIII.1.20367 adl. Zur Annahme, daß es sich um ein Lehrbuch für das Fridericianum handelt, vgl. ZIPPEL (1898, S. 106) und KLEMMER (1994, S. 86f.). Die Erwähnung bei PISANSKI (1886, S. 666) deutet hingegen eher auf einen Gebrauch an der Albertina; wogegen spricht, daß dieses Werk nicht zu den von OBERHAUSEN / POZZO (1999) identifizierten Lehrbüchern gehört.

8 KLEMMER (1994, S. 86).

9 HERDER 8° (1763/64), p. 1: "Alle Historie setzt Geographie voraus p.,, HESSE (1770, p. 8): Sie dient "unvergleichlich bei Lesung der Historie.,, KAEHLER (1775?, p. 12): "Die Geschichte desjenigen, welches zu verschiedenen Zeiten geschicht, welches die eigentliche Historie ist, ist nicht anders als eine continuirte Geographie, daher es zu den grösten Unvollständigkeiten der Historie gereicht, wenn man nicht weiß, an welchem Orte etwas geschehen, oder was für eine Beschaffenheit damals es gehabt hat.,, DÖNHOF (1782?, f.2'): "[...] die Geographie ist das Fundament aller Geschichte: denn alles was geschehen ist, ist auf der Erde geschehen, [...],, VÖLCKMANN (1785?, p. 2): "Auch hat die Geographie darin noch einen Vorzug vor der Geschichte daß sie dieser zum Grunde liegt, denn der Zustand der gegenwärtigen Dinge gehört zur Geographie und der Zustand der Dinge in verschiedenen Zeiten zur Historie, [...],, DOHNA (1792, p. 3): "überhaupt ist Geographie ein Fundament zur Historie.,, - Für die Nachschriften vgl. Ak, XXVI.1 (2009), S. lv-lxiii.

10 KLEMMER (1994, S. 85): "Zur Erlernung der Geographie ist allhier ein Buch gedruckt, so zwischen den grössern Werken, und gar kurzten Compendiis die Mittelstrasse hält, und vornehmlich von unserm Vaterlande und denen daran stossenden Königreichen eine zulängliche, aus der alten Geographie aber, die zum Verstande der lateinischen Auctorum nöthigste Nachricht giebt.,,

11 Exemplare: <1a> 1A 42548 // <7> DD97 A 188. Das Schulbuch hat Oktav-Format, umfaßt 352 paginierte Seiten und ein Register. 1773 erlebt es die sechste Auflage. Zuletzt wird es 1782 von Johann Joachim SCHWABE (1714-1784) komplett überarbeitet. Anscheinend ist es von Christian Schiffert, dem 1731 (?) als Nachfolger von Daniel LORENZ SALTHENIUS (1701-1750) ernannten Inspector der Lehranstalt, verfaßt worden. Zu Entstehung und Vorlagen der Schrift vgl. KLEMMER (1994, S. 50ff.).

12 Vgl. insbesondere S. 1-11 die 'Allgemeine Vorerinnerung, ; darin heißt es (S. 2): "Die Erdkugel kan auf eine dreyfache Weise betrachtet werden, und zwar Mathematice, nach ihrer Ausmessung, Physice, nach ihrer natürlichen Beschaffenheit, und Politice, nach ihren Reichen und Ländern. Von einem jeglichen soll kürztlich gehandelt werden.,,

13 MOLDENHAUER (1709-1790) stammt aus Halle/S.; er kommt 1727 als Student nach Königsberg; wird 1730 Lehrer am Collegium Fridericianum; 1737 Diakon im Königsberger Stadtteil Sackheim; 1744 Extraordinarius und 1764 Ordinarius für Theologie an der Albertina. 1765 folgt er einem Ruf als Domprediger nach Hamburg.

14 Exemplare z. B. in der UB Toruń: 272.996 / <7> 8 ANT I, 745.

15 Der vollständige Titel: "Kants Jugend und die fünf ersten Jahre seiner Privatdocentur im Umriss dargestellt.,, Die Studie ist enthalten in Bd. 18 (S. 606-686) der Altpreußischen Monatsschrift; zugleich auch separat als Broschüre in Königsberg erschienen; erneut in Band 3 (1908, S. 103-210) der Gesammelten Schriften von Emil Arnoldt.

16 Vgl. STARK (1999) bzw. KUEHN (2001, S. 78-89) / KUEHN (2004, S. 78-112). - Vgl. auch die einzige, verdeckte, keineswegs positive Erwähnung durch Kant in AA 01 (1746/49): 021,04: "scharfsinniger Schriftsteller.,, mit offensichtlichem Bezug auf Knutzen's Dissertatio pro loco von 1735 bzw. die Buchausgabe von 1745: Systema causarum efficientium, seu commentatio philosophica de commercio mentis et corporis per influxum physicum explicando, ipsis illustris Leibnitii principiis superstructa, [...] Editio altera [...] (Leipzig 1745).

17 Vernünftige Gedanken von den Cometen, darinnen deren Natur und Beschaffenheit nebst der Art und Ursachen ihrer Bewegung untersucht und vorgestellt, auch zugleich eine kurze Beschreibung von den merkwürdigen Cometen des jetztauffenden Jahres (Königsberg 1744, S. 24).

18 REICKE (Hrsg.) 1860. Es handelt sich in der Hauptsache um eine von Samuel Gottlieb Wald am 23. April 1804 in Königsberg gehaltene Gedenkrede zur Ehren des verstorbenen Immanuel Kant; incl. der dazu von Kollegen und Freunden des Verstorbenen eingezogenen Auskünfte.

19 Vgl. ERDMANN (1876, S. 11-46).

20 Das Stichwort wird gern von Nicht-Königsbergern verwendet; vgl. PAULSEN (1899, S. 59): "abgelegene und kleine Universitä.,, Noch KUEHN spricht (2001, S. 65 / 2004, S. 85) von 'geographical isolation, , obwohl er wenige Seiten zuvor (2001, S. 58f. / 2004, S. 77) gegen das verbreitete Stereotyp einer Königsberger Provinz Stellung genommen hat. Zum Beleg wird verwiesen auf zwei durch 45 Jahre (1736, 1781) getrennte Klagen Königsberger Gelehrter, die einen schleppenden Buchhandel zum Hintergrund haben. Ich halte es für unzulässig, aus dem Tempo der Versorgung mit gedruckter Literatur auf das intellektuelle Niveau oder den provinziell abgeschotteten, Charakter einer Universität - auch des 18. Jahrhunderts - schließen zu wollen. Zweifellos kamen Stadt und Universität eine wichtige Brückenfunktion zu beim Aufbau eines 'Venedig des Nordens.; St. Petersburg. Erst in der zweiten Hälfte des 19ten Jahrhunderts konnte das vom Handelskapital geprägte Königsberg als 'isoliert erscheinen, ; denn das moderne und gegenüber die Schifffahrt deutlich schnellere Verkehrsmittel, die Eisenbahn, erreichte Königsberg erst im Jahr 1852. Möglicherweise kommt für den stichwortgebenden Benno Erdmann noch ein politisches Motiv hinzu: Seine Studie ist 1876 und damit fünf Jahre nach der Gründung des Deutschen Reiches erschienen und unter altpreußischen Königsbergern seiner Zeit bestanden weit zurückreichende Vorbehalte gegenüber dem brandenburgischen Berlin als einem neuen Zentrum; vgl. dazu MANTHEY (2005, S. 478-485). - In jüngerer Zeit scheint sich die historisch fehlgehende Ansicht zu verfestigen, wie die "Einleitung,, zum Neudruck der Erdmannschen Studie (FISCHER (Hrsg.), 2005, S. 9) gleich mehrfach offenbart: "In der ersten Hälfte des 18. Jahrhunderts kamen die entscheidenden Impulse für das philosophische Denken in Deutschland aus einigen wenigen Universitätsstädten. Neben Berlin, Halle und Leipzig, deren Bedeutung unbestritten war, sollte das an der Ostsee gelegene Städtchen Königsberg merklich an Einfluß gewinnen.,, Tatsächlich wird erst 1810 in Berlin eine Universität konstituiert; im hier relevanten Zeitraum hat die Stadt nicht mehr Einwohner als Königsberg.

21 Im Schiffertschen Geographie-Lehrbuch von 1736 wird zu Beginn des 8ten Capitels, S. 72 definiert: "Von Deutschland: / I. Die Grentzen. / Teutschland, Germania, oder das teutsche Reich, hat gegen Abend Franckreich, Lothringen und die Niederlande: gegen Mitternacht die Nordsee. Schleswig und die Ostsee: gegen Morgen Preussen, Polen, Ungarn, und Slavonien[!]; gegen Mittag Italien und die Schweiz.,,

22 LUCANUS (1901-1913, Bd. 1, S. 332-334).

23 Einen dortigen Aufenthalt erwähnt Erdmann weder 1876 noch 1881; vielmehr findet sich je am Schluß der Vorworte ein ausdrücklicher Dank an die Königsberger Universitätsbibliothek "für die freundliche Ueberlassung des Manuscripts,, [d. i. Kant's Handexemplar seiner Critik der reinen Vernunft von 1781 - ERDMANN (Hrsg.) (1881, S. 4)] bzw. für die große 'Liberalität, , mit der ihm "nicht wenige seltene Schriften aus der untersuchten Zeit,, (ERDMANN, 1876, S. vii) zur Verfügung gestellt, d. h. nach Kiel entliehen, worden sind. Dasselbe gilt übrigens für die Benutzung der Kantischen Handschriften aus Dorpat/Tartu in Estland; vgl. STARK (1993, S. 67-71).

24 Vgl. RINGER. Die Gelehrten. Der Niedergang der deutschen Mandarine. 1890-1933, S. 93-96, [1983] 1987: eine grundlegende Orientierung am 'Prinzip der Individualität.,,

25 Ich teile die Auffassung von WASCHKIES (1987, S. 38), wonach Erdmann zwar die Problemlage zutreffend erkannt, jedoch in seinem Lösungsversuch zu einseitig geblieben ist.

26 In der "Einleitung,, zum großen Buch von 1924/25 streift Adickes das Thema - ERDMANN (1876) folgend - in wenigen Absätzen (S. 13-15).

27 Vgl. TONELLI (1975 und 1975a). Zu den Stärken und Schwächen bei Tonelli; vgl. die Hinweise von WASCHKIES (1987, S. 39f.) und danach erneut FEHR (2005, S. 7 Am. 8).

28 Insbesondere HINSKE (1970), mit dem Untertitel "Der dreißigjährige Kant,, gilt der Blick den 1750er Jahren, obwohl Königsberger Autoren gar keine Rolle zugestanden wird, wie das 'Namenregister, (S. 144ff.) offenlegt.

29 WASCHKIES (1987, S. 346). - Freilich, darauf soll in Form einer Fußnote wenigstens hingewiesen werden, hat es im ersten Drittel des 18ten Jahrhunderts wohl eine Option in Richtung auf eine produktive Weiterentwicklung der Mathematik als solcher in Königsberg und für die Universität gegeben: Christian Goldbach (1690-1764), der sich durch zahlreiche Reisen in ganz Europa und einen ausgedehnten wissenschaftlichen Briefwechsel zu einem der führenden Mathematiker seiner Zeit entwickeln konnte. 1725 ging er nach St. Petersburg (Vgl. JUŠKEVIČ/KOPELEVIČ 1994; LAWRYNOWICZ 1999, S. 137f.). Auch dem sehr jung verstorbenen Extraordinarius der Mathematik (ab 1720) Georg Heinrich RAST (1695-1726) wird man ein erhebliches Potential nicht ohne nähere Prüfung absprechen dürfen.

30 Die Frage, ob und ggf. in wie weit eine Kenntnis der von Waschkies nicht ermittelten (WASCHKIES S. 177 bzw. S. 683) Informationsquellen (Woit [Woyt] 1740; Woit 1745) zu einer Modifikation oder Bestätigung führen, kann hier nicht weiter verfolgt werden: Die 1740 mit einer Vorrede von Knutzen erschienene Arbeit Kurzer Unterricht zum nützlichen Gebrauch aller Himmels- und Erdkugeln ist in der Danziger Akademie-Bibliothek einsehbar (Ra 4598, 8° angebunden). Unmittelbar einschlägig ist auch eine andere, ebenda vorhandene (Sa 107,02, 4°) Arbeit von Woit aus dem Jahr 1743; die von Waschkies nicht erwähnte

Astronomische Abhandlung des so merkwürdigen Phoenomeni, des Durchgangs des Mercurius durch die Sonne. Zu diesem Phänomen als solchem vgl. WASCHKIES (1987, S. 91-93). Zu WOIT vgl. schon KRAUSE (1893, S. 263f.).

31 Zur Person von Endersch schreibt F. S. BOCK (1782-85, Bd. 1, S. 199): "Der königl. polnische Mathematiker Joh. Friedr. Endersch hat es durch angeborenen Trieb und natürliche Fähigkeit ohne alle Anweisung in mathematischen Wissenschaften und mechanischen Arbeiten so weit gebracht, daß die von ihm verfertigten großen und kleinen Erd- und Himmelskugeln, astronomischen Maschinen, vorzügliche Sehröhre und Vergrößerungsgläser denen ausländischen Werken dieser Art nichts nachgeben. Schon vor 50 oder 60 Jahren verfertigte der Stadtrath Kuhn, ein Bruder des berühmten danziger Mathematickers dieses Namens, den besten Tombed [lies: Tombak?], von selbst spielenden Orgeln, Glockenuhren und mehrere Kunststücke, war auch in allen nur ersinnlichen mechanischen Beschäftigungen durch eigenes Genie geübt.," Vgl. WASCHKIES (1987, S. 102 Anm.) - Das von Knutzen benutzte Teleskop war später Bestandteil des Saturnus-Naturalienkabinetts. Bei MOHR (1782, S. 87) heißt es unter 'Artificialia': "Nr. 3. Telescopium Gregorianum, ein großes gregorianisches Seherohr mit einem meßingnen Fußgestell. (Dieses Stück gehört zu den vorzüglichsten Kunstsachen dieser Sammlung, und kan man eine Nachricht davon [sc. der Sammlung - W.St.] in Bernoullis Reisen durch Preußen und Pommern weiter nachlesen.), D. i. BERNOULLI (1779, S. 66-68). Die von Woit / Knutzen 1740 vorgestellten Globen des Endersch nennt MOHR (1782) ebenda als Nrn. 1 und 2 "Globus terrestris atque caelestis Endersensis maximus, die größte Erd- und Himmelskugel von Endersch in Elbing verfertigt, mit 2 dazu besonders verfertigten Postimenten ,,"

32 Von besonderem Interesse scheinen Leben und Werk des ausgebildeten Mediziners Heinrich von SANDEN (1672-1729), der ab 1704 die ordentliche Professur der Physik an der Philosophischen Fakultät inne hatte.

33 Im wesentlichen die Arbeiten von WERMKE (1933ff.).

34 BUJACK (1840): Über preußische Naturforscher des 16ten, 17ten und 18ten Jahrhunderts. Biographisch-literarische Skizzen [Wermke 1933, Nr. 04.846]. Der Artikel ist in den Bänden 23 und 24 der Preußischen Provinzial-Blätter erschienen. Er scheint ERDMANN, ARNOLDT und auch WASCHKIES (1987) unbekannt geblieben zu sein.

35 Das Stichjahr ist gegeben durch die freilich kaum noch zu unmittelbarer Wirkung gelangte Darstellung der Geschichte der Albertus-Universität durch VON SELLE (1944). Die im Schlußteil ergänzte Auflage von 1956 ist in der politischen Tendenz deutlich gemildert.

36 Vgl. die entsprechende kritische Zwischenreflexion bei WASCHKIES (1987, S. 53f.).

37 Als Anfang setze ich - ein wenig willkürlich - den Antritt der Rector-Stelle an der Domschule (später Kneiphöfches Stadtgymnasium) im Jahr 1759 (nach dem Tod von Coelestin Christian Flottwell); vgl. Philippi in PISANSKI ([1886] 1994, S. xi-xiii). Eine erste Würdigung des Lebens von Pisanski durch Ludwig Ernst Borowski ist Frühjahr 1791 im Preußischen Archiv, 2ter Jg., S. 152-175 (März) und S. 232-241 (April) erschienen; ergänzend dazu ebenda (November), anonym S. 657-671 "Ueber Pisanski als Schulmann - ein kleiner Nachtrag zur Borowskischen Charakteristik - von einem seiner ehemaligen Schüler.," Im Jahr der einhundertsten Wiederkehr der Geburt (1825) rückblickend: Dr. Georg Christoph Pisanski's Selbstbiographie nebst einem von ihm selbst gegebenen Verzeichniß seiner Schriften und literarischen Arbeiten. Mitgetheilt durch den Herrn Ober-Bürgermeister, Geheimen-Regierungs-Rath etc. Dr. Horn. (Mit Pisanski's Bildniß). Beiträge zur Kunde Preußens, Bd. 7, S. 415-462.

38 Vier lateinische Dissertationen aus den Jahren 1762-1765 bilden den noch selbst veröffentlichten Anfang. 1791 hat Ludwig Ernst BOROWSKI in deutscher Sprache den bis zum 17. Jhd. reichenden Part herausgegeben; 1853 hat Friedrich Adolph MECKELBURG das 17. Jhd. abschließen können. 1886 erschien schließlich das Gesamtwerk im Umfang von 722 Seiten, herausgegeben von Rudolph PHILIPPI. Zur Überlieferung und Publikationsgeschichte vgl. MECKELBURG (1846) 'Literarische Entdeckung', [Druckbogen Pisanski],. Neue Preußische Provinzialblätter. Bd. 1, S. 196; PISANSKI / MECKELBURG (1753) Entwurf einer Preussischen Litterärgeschichte während des 17. Jahrhunderts [2. Teil] (Königsberg); PISANSKI / MECKELBURG (1856) 'Von den Schicksalen der Gelehrsamkeit in Preussen im 18. Jahrhundert. / Von den Preussischen Schulen im achtzehnten Jahrhundert. Aus Pisanski's Entwurf der Preussischen Litterärgeschichte., Neue Preußische Provinzialblätter. Bd. 9, S. 161-173 / 173-189 & 430-439.

39 Dem Königsberger Arnoldt wäre es immerhin möglich gewesen, das vollständig ausgearbeitete Ms von Pisanski einzusehen. ERDMANN (1876, S. 13f. Anm.) nimmt nur Bezug auf eine der lateinischen Dissertationen (1765) von PISANSKI.

40 Ein Hinweis auf PISANSKI ([1886] 1994) fehlt noch bei OBERHAUSEN / POZZO (1999, S. lxvi f.). Als selbstverständliche Grundlage fungiert das gedruckte Werk hingegen bei dem Königsberger KRAUSE (1893, S. vii). Aufschlußreich wären genauere Informationen über die geographische Verbreitung der Erstpublikation des Jahres 1886. Eine Abfrage in elektronischen Katalogen der deutschen Bibliotheken über den Karlsruher Virtuellen Katalog (<http://www.ubka.uni-karlsruhe.de/kvk.html>) ergab im Juni 2007 keine 10 Bestandsnachweise. Wobei nur der Reprint des Jahres 1994 bis südlich der Mainlinie vorgedrungen zu sein scheint. Bekannter ist hingegen eine speziellere Arbeit von Friedrich Johann BUCK. Lebens-Beschreibungen derer verstorbenen Preußischen Mathematiker überhaupt. Königsberg 1764. Aufgenommen sind zahlreiche Personen, die unter einem weiten Begriff als 'Mathematiker, verstanden werden können; dazu zählen im 18ten Jhd.: Ammon, Arnd, Blasiesing, Gottsched (der Ältere), Knutzen, Marquard und Rast sowie Christian Bernhard und Heinrich von Sanden. Hinzu kommen mitunter sehr detaillierte Angaben über einzelne Personen des Lehrkörpers der Albertina, die in Gedenk- oder Gelegenheitsdrucken (Leichenpredigten / Gedenkverse) enthalten sind. Sie wurden nach dem Tod eines Gelehrten durch die Universität oder Einzelpersonen herausgegeben; z. B.: Michael LILIENTHAL für Abraham WOLF (1731); Heinrich FISCHER, Johann Friedrich LAUSON und Karl Heinrich RAPPOLT

für Michael LILIENTHAL (1750); Daniel Heinrich ARNOLDT für Franz Albert SCHULTZ (1763); die Universität für Johann Heinrich LYSIUS (1745) oder für Theodor Christoph LILIENTHAL (1782). - Auch etwa gedruckte Versteigerungskataloge der Gelehrten-Bibliotheken bieten wichtige Informationen zur Rekonstruktion eines intellektuellen Profils der Albertina; vgl. TONDEL (2004).

41 Für die in diesem Absatz summarisch avisierten Titel vgl. unten das Literaturverzeichnis.

42 Für die Archive vgl. FORSTREUTER (1955); STARK (1993, S. 219-222); STARK (1994); EULER (1994). Für die Bibliotheken vgl. WALTER (Hrsg.) (2004).

43 Für eine Übersicht vgl. Botho REHBERG (1942). Geschichte der Königsberger Zeitungen und Zeitschriften. I. Persönlichkeiten und Entwicklungsstufen von der Herzogszeit bis zum Ausgang der Epoche Kant-Hamann [Mehr nicht erschienen]. Zur momentanen Lage vgl. http://staff-www.uni-marburg.de/~stark/albert.ine/k_perc.htm.

44 Dazu die dreibändige Geschichte der Stadt Königsberg in Preussen von Fritz GAUSE, zuerst 1965-1971; Nachdruck 1996, ergänzt um eine Bibliographie von Peter WÖRSTER.

45 Vgl. dazu eingehender Stark 2004 in: WALTER (Hrsg.) (2004).

46 Vgl. zur Situation der Königsberger Handschriften: Ralf PÄSLER (1996, 1997, 2000, 2004).

47 Dies gilt auch - die Jahreszahl der Publikation täuscht - für den 1922 veröffentlichten Apparat-Band 13, der den für biographische Belange wichtigsten Teil der Ausgabe, den Briefwechsel, erschließt. - Insbesondere die von Erich Joachim verfaßte Einleitung (in Bd. 3, 1917) zur Matrikel bietet eine Fülle von aufschlußreichen Informationen zu Struktur, Abläufen und Usancen in der Universität. Weder Karl VORLÄNDER (für seine Kant-Biographien, 1911 und 1924) noch Paul MENZER (für Bd. XIII der Ak) haben auf ERLER / JOACHIM zurückgreifen können.

48 Vgl. STARK (1993, S. 219-222); STARK (1994).

49 Vgl. KRAUSE (1881, 1893).

50 Z. B. die Edition der Korrespondenzen von Johann Georg Hamann und Johann Georg Scheffner oder die kirchengeschichtlichen Arbeiten von Albert Nietzki, Walther Borrmann, Gustav Sommerfeld, Paul Schwartz, Paul Konschel, Theodor Wotschke und Erich Riedesel.

51 GARBER: 'Eine Bibliotheksreise durch die Sowjetunion. Alte deutsche Literatur zwischen Leningrad, dem Baltikum und Lemberg.. Neue Rundschau Berlin, 100 (1989), S. 5-38. GARBER, K. / KOMOROWSKI, M. / WALTER, A.E. Kulturgeschichte Ostpreussens in der Frühen Neuzeit. Tübingen, 2001.

52 Herauszuheben sind die Edition der Vorlesungsverzeichnisse durch OBERHAUSEN / POZZO (1999), mehrere Arbeiten von Werner EULER (1994ff.) und KOMOROWSKI / MARTI (Hrsg.) (2008).

53 Vgl. die seit 2001 über das Internet zugängliche Erschließung: <http://www.francke-halle.de>; ebenda die auch für Königsberg ergiebige Portraitsammlung von Jakob Gottfried BÖTTICHER (1692-1762).

54 Dazu schon Gerhard KESSLER (1937); Gerhard SCHIMANSKY (1939), Marianne WEHR (1965) und das erschließende Verzeichnis von Wolfram SUCHIER aus den Jahren 1910-1911 [Reprint: 1971]; vgl. die laufende Edition des Briefwechsels von Johann Christoph Gottsched durch Alfred DÖRING und andere (Berlin 2007ff.) und Manfred RUDERSDORF (Hrsg.). Johann Christoph Gottsched in seiner Zeit. Neue Beiträge zu Leben, Werk und Wirkung. 2007.

55 Dazu die Einleitung in Ak, XXVI.1 (2009), S. vi-xvii und meine Dokumentation zur Philosophischen Fakultät: http://staff-www.uni-marburg.de/~stark/albert.ine/al_phil.htm. - Einen ähnlichen Ansatz verfolgt KÜHN (2001a); allerdings wird trotz des Wissens um PISANSKI (1886), der von Erdmann vorgezeichnete theologisch-philosophische Rahmen nicht verlassen; ein unmittelbarer Rückgriff auf Arbeiten der Königsberger Naturforschung des 18ten Jahrhunderts findet nicht statt.

56 Zur ersten Orientierung hilfreich ist die bibliographische Aufstellung zur "Naturgeschichte von Preussen," bei BERNOULLI (1779, S. 107-111).

57 Auf zwei im Internet zugänglich gemachte, eigene Vorstudien (Vorträge) sei hier zusätzlich verwiesen: Kaliningrad 2004 [<http://www.kant-online.ru/en/?p=323>] und Marburg 2007 [http://staff-www.uni-marburg.de/~stark/files.pdf/mr7_vor.pdf].

58 Unkritisch sind: SCHUBERT (1842, S. 52); SCHUBERT (1846, S. 460); WARDA (1899a, S. 521-523); WARDA (1901, S. 407); WARDA (1905, S. 256 Anm. 3); SCHÖNDÖRFFER (1917, S. 140-145); VORLÄNDER (1911 [4te Auflage 1986, S. 82]) bzw. VORLÄNDER (1924, Bd. 1, S. 180); ADICKES (1924/25, Bd. 2, S. 391 Anm.); KAYSER (1935, S. 110); BENNINGHOVEN (1974, S. 113f.); JÄGER / SCHREINER (1987, S. 110ff.), wo unter Nr. 99 einige Abbildungen aus der 1936 von Friedrich LAHRS angefertigten Litho-Mappe Die Stadt Kant's reproduziert sind. Zurückhaltend hingegen: GAUSE ([1974] 1989, S. 100): "[...] und soll dort mineralogische Studien getrieben haben. Wenn das richtig ist, [...]."

59 STARK (1993, S. 326).

60 Dazu STARK (2014).

61 JACHMANN ([1804] 1980, S. 126), im "Zweiten Brief., Bei RINK (1805) heißt es S. 33: "Der damalige reichste Kaufmann zu Königsberg, Commerzienrath Saturnus, hatte eine Sammlung von Naturalien angelegt, [...]. Er bedurfte indessen, um es [...] wissenschaftlich zu ordnen und zu vervollständigen, eines Mannes, der kein Fremdling in diesen Kenntnissen war, und so übernahm denn Kant, von Saturnus dazu aufgefordert, die Aufsicht über dieses Naturalienkabinet., Weder Jachmann noch Rink bieten Hinweise für Rückschlüsse auf ihre Informationsquellen. Auffällig ist hingegen, daß beide mit keiner Silbe auf den 1785 verstorbenen Friedrich Samuel Bock hinweisen. Anscheinend war beiden 1804 bzw. 1805 entfallen (oder gar gänzlich unbekannt), daß Bock über Jahre hin die Sammlungen von Saturnus betreut hatte.

62 Nach Archivalien des Berliner Ministeriums, des EM in Königsberg und Kant's persönlichen Unterlagen (Dorpat III); vgl. Ak. X: 048ff.: Br.-Nrn. 30, 32; 135f.; Br.-Nr. 71; vgl. WARDA (1899a und 1912a).

63 Vgl. die Hinweise bei STARK (1993, S. 326) bzw. ARNOLDT / SCHÖNDÖRFFER (Hrsg.) (Bd. 5, S. 231f.). Vgl. auch das Vorlesungsverzeichnis des Semesters in OBERHAUSEN / POZZO (Hrsg.) (1999, S. 311): "Collegium Mineralogicum, ipsa naturae exemplaria ob oculos positurus ex Gazophylacio Mineral. secundum Wallerii ordinem disposito offert. P. Kant privatim., [Professor Kant bietet an ein Privat-Colleg über Mineralogie; Beispiele der Natur werden vor Augen gestellt aus der mineralogischen Schatzkammer, anhand der von Wallerius getroffenen Ordnung]. Kant besaß ein Exemplar der zweiten Auflage der deutschen Übersetzung, Johann Gottschalk Wallerius: Mineralogie, Oder Mineralreich, von Ihm eingetheilt und beschrieben (Berlin: Nicolai 1763); vgl. WARDA (1922, S. 30). - Nachschriften des Kollegs sind nicht bekannt.

64 Vgl. den Artikel von Adolf POSCHMANN, in: Altpreußische Biographie, S. 592.

65 PISANSKI / PHILIPPI (Hrsg.) ([1886] 1994, S. 559). Bei den drei von mir hervorgehobenen Namen handelt es sich um Königsberger Professoren der Physik: Heinrich von SANDEN (1672-1729; Ordinarius: 1704-1729); Christian Gabriel FISCHER (1686-1751; Extraordinarius: 1715-1725); Karl Heinrich RAPPOLT (1702-1753; Extraordinarius: 1733-1753).

66 Ohne Titel und Autor, in: Königsbergsche Gelehrte und Politische Zeitungen, Jg. 1764: 34., 35., 36. Stück (28. Mai, 1. u. 4. Juni), S. 133-135, 137-138, 141-142. Neuerdings in: DÖRFLINGER / FEHR / MALTER (Hrsg.) 2009, S. 265-273.

67 BERNOULLI (1779, S. 66). - Bei PISANSKI (1886) wird S. 560 als Zusatz angegeben, daß das Kabinett "1787 durch Verkauf an den Hrn. Commerzienrath Wulff gekommen, sei; anders die knappe Darstellung bei SCHÖNDÖRFFER (1917, S. 14. Bereits 1754 war es im Besitz von Saturnus, wie die Lobrede 'Beschreibung des vortrefflichen Gartens des Herrn Commerzienrath Saturnus, in Johann Friedrich LAUSON's Zweitem Versuch in Gedichten (1754, S. 258ff.) nahelegt; vgl. SCHÖNDÖRFFER (1917, S. 143f.); aufgenommen in: DÖRFLINGER/FEHR/MALTER (Hrsg.) (2009, S. 190-195). - Die enorme Höhe des von Saturnus in der Mitte des 18ten Jhds. angehäuften Vermögens ist ablesbar in den Summen, die Gause in verschiedenen Zusammenhängen nachgewiesen hat ([1968] 1996, S. 161f., 170, 172); über den wirtschaftlichen Kollaps des Hauses (S. 185-187). Zeitnahe sind die Angaben in der zweiten Hälfte des Jahrganges 1783 der zweimal wöchentlich erscheinenden 'Hartungschen Zeitung, (d. i. Königsbergische Staats- Kriegs- und Friedens-Zeitung): Eine erstmals für den 14. August in Aussicht genommene Versteigerung kommt mangels hinreichendem Gebot mehrfach nicht zustande (vgl. Jg. 1783, S. 520, 680, 816; UB Toruń: 014.599); ebenda, S. 520 auch der Hinweis: "Das hievon gedruckte Verzeichniß oder die Beschreibung kan hier in Königsberg beym Justitz Commissarius Dalkowski, in Berlin, Hamburg, Warschau, Wilda und Grodno aber von den dortigen Zeitungs-Expeditionen abgeholt werden., Offenbar ist dies Verzeichniß identisch mit: Samuel Friedrich MOHR, Beschreibung verschiedener Seltenheiten der Natur, der Kunst und des Alterthums, welche in dem Cabinette des Commerzienrath Saturnus zu Königsberg in Preußen einige Aufmerksamkeit und Betrachtung verdienen, in zweien Theilen, verfertigt im Jahre 1782 [kl. 8°, 111 S.]. Königsberg, 1782; Exemplar: <1a> Lg 10382. Zur Information über die Entstehung dieser Beschreibung vgl. WARDA (1905, S. 256 Anm. 3).

68 BOCK (1767a, S. 123). Ebenda S. 122-146 eine systematisierte Übersicht der Bernsteinsammlung; worauf schon PISANSKI (1886, S. 560) aufmerksam gemacht hat. - Notiert werden muß auch, daß die Bocksche 'Beschreibung, aus dem Jahr 1764 der Darstellung von PISANSKI ([1790/91] 1886) die Vorlage geliefert hat. Bei Pisanski fehlt hingegen ein Verweis auf MOHR (1782).

69 Jachmann's "Zweiter Brief, enthält weitere biographische Fehlinformationen, die ich hier unbeachtet lasse; sie sind auch nicht bemerkt in VORLÄNDER (1918).

70 Vgl. insbesondere den in Anm. 63 zitierten Hinweis auf die 'mineralogische Schatzkammer.

71 Vgl. HAMANN, Briefwechsel, Bd. 2, S. 419 (28. Aug. 1768): "Kanter wird diese Woche seinen Laden beziehen und er hat sich was kosten laßen um dem Publico zu gefallen. Die Einrichtung verdient meines Erachtens Beyfall. [...] In die Schreibstube des Ladens werden gemalte Köpfe kommen; wovon er Moses [Mendelsohn] und Ramler gleichfalls von Ber[lin] mitgebracht, und hier Schaffner [sc. Scheffner], Willamov, Hippel, Lindner p. gesammelt; auch Kant sitzt bereits, [...]. Bock wird nicht genannt. - Das Beckersche Ölportrait nicht bei SINGER (1932), der nur die Stiche (J. F. Bause, J. D. Philipp) unter den Nrn. 8118-8120 kennt. Ein Schwarz-Weiß-Druck (gegenüber S. 138) nach dem Beckerschen Ölgemälde in: Ermina von OLFERS-BATOCKI (1986): Das Taubenhaus. 100 Jahre Familiengeschichte in und um Königsberg 1762-1862 als Roman erzählt. Es handelt sich um die 2. verbesserte Auflage eines Privatdrucks von 1968, herausgegeben von Hedwig von LÖHLHÖFFEL.

72 So die Aufschrift des Blattes unter der rechten Hand des Dargestellten; links unterhalb des Portraits der Vermerk: "J. D. Philippin geb. Sysangin. sc. 1765,.". Ein weiteres Exemplar dieses Kupferstichs findet sich im zweiten Band der Königsberger Universitätsmatrikel; vgl. ERLER / JOACHIM (Bd. 1 (1910), S. XXXVII).

73 Exemplar; UB Toruń: 272.281 [Bd. 1] / 272.022 [Bd. 2]. Nach OBERHAUSEN / POZZO (1999) hat Bock erstmals für den Winter 1767/68 angekündigt (S. 288): "Privatim vel Collegium apologeticum, in librum a se conscriptum, sub tit. "Ausführlicher Grundriß einer Vertheidigung der Christlichen Religion wieder die Feinde und Spötter derselben, cujus pars prior, Lipsiae typis jam impressa, propediem in officina libraria Kanteriana, venalis erit, vel Theologiae moralis scientiam offert.", Der in der Unterschrift beider Stüche zu lesende Hinweis auf das eigene, aktuelle Dekanat in der Theologischen Fakultät stimmt überein mit der zweiten Ankündigung für das Sommersemester 1768 (OBERHAUSEN / POZZO, 1999, S. 291). Das Titelpuffer stammt von Johann Friedrich Bause; nach <http://www.tripota.uni-trier.de> [Zugriff: 19.05.2014].

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KANT AND COGNITIVE SCIENCE¹

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INTRODUCTION

Immanuel Kant (1724-1804) has a serious claim to be the single most influential figure in the pre-20th century history of cognitive research. His influence continues to be so deep-running that in many respects he is the intellectual grandfather of contemporary cognitive science. Consider the widely-held view that sensory input has to be worked up using concepts or concept-like states, or the conception of the mind as a system of functions that lies behind the view. Kant originated the first view and worked the second up into something more than a sketch for the first time (the basic idea can be found in Aristotle, Descartes and Hobbes). Both views were central to Kant's model of knowledge and mind and they came to contemporary cognitive science from him by a direct line of descent. In Section 2, we will explore these influences.

Some great thinkers of the past may now be merely cultural artefacts, intriguing and historically significant but long since superseded. In one of the most patronizing comments ever made about a philosopher, William James expressed just that attitude about Kant:

Kant's mind is the rarest and most intricate of all possible antique bric-à-brac museums, and connoisseurs and dilettanti will always wish to visit it and see the wondrous and racy contents. The temper of the dear old man about his work is perfectly delectable. And yet he is really ... at bottom a mere curio, a 'specimen' [James 1907, p. 269].

Kant is more than a cultural artefact, however. If the Kantian cast of much of contemporary cognitive science is striking, what cognitive science has not assimilated from Kant's work is equally striking.

As well as the ideas just mentioned about the relation of concepts to sensory input and the functional nature of the mind, Kant also held that processes of synthesis, mental unity, and consciousness are central to cognition as we know it and he had some highly original views about self-consciousness. Until recently, these ideas have played no role in cognitive science (what might turn out to be related ideas are now beginning to appear in some quarters). Far from Kant's work being superseded by work in the past half-century on cognition, much of what Kant has to offer has not even been assimilated by it, to its detriment. What cognitive science has not taken over from Kant's work on cognition will be the topic of Sections 3 and 4.

1. BIOGRAPHY AND WRITINGS

Kant was the last great thinker of the German Enlightenment. As was true of most Enlightenment thinkers, he took the human individual and his or her experience of self and world to be the fundamental unit of analysis. Kant was born in 1724 and lived a very long life, dying just before his eightieth birthday in 1804. Though one-quarter Scottish (it is said that ‘Kant’ is a Germanization of ‘Candt’), he lived his whole life in Königsberg in what was then East Prussia. (The area is now called Kaliningrad and is an autonomous region of Russia located just below Lithuania.) He was a devoutly religious man, though hostile to many forms of conventional religious observance, and came from a very humble background. By the time of his death, he had been rector of the University of Königsberg and was virtually the official philosopher of the German-speaking world.

Until middle age, he was a prominent rationalist in the tradition of Leibniz and Wolff. Then recollection of David Hume (probably Hume’s *Enquiry*), “interrupted my dogmatic slumbers”, as he put it (*Prolegomena to Any Future Metaphysics*, Prol, AA 04: 260).³ He called the new approach that ensued Critical Philosophy. One of its fundamental questions was, what must we be like to have the experiences that we have? The view of the mind that Kant developed in the course of answering this question framed all subsequent cognitive research until the advent of connectionism and dynamic systems theory.

Philosophy of mind and knowledge were by no means the only areas in which Kant made seminal contributions. He founded physical geometry. (Since it is said that he never travelled more the fifty kilometres from Königsberg in his whole life, field work was clearly not important.) Kant had a wide circle of sea-faring friends whose company he preferred to the company of academics; apparently Kant learned his physical geography from his many, many discussions with them.) His work on political philosophy grounds modern liberal democratic theory. And his deontological approach to the justification of ethical beliefs put ethics on a new footing, one that remains influential to this day. (Deontology is the approach of deducing ethical propositions from more general, factual propositions about the nature of the person, or the requirements of rationality, or some other factor that far transcends the specific domain of ethical thought.) He taught mechanics, theoretical physics, algebra, calculus, trigonometry and history, in addition to metaphysics, ethics, and physical geometry, an almost unimaginable range of topics for anyone now.

Kant’s most famous work is the *Critique of Pure Reason*, which discusses perception, science, and the mind, among other things. He was already 57 when it was published in 1781 (his Humean awakening came relatively late in life). In addition to this work, he wrote two further *Critiques*, the *Critique of Practical Reasoning* (1788) on moral reasoning and the *Critique of Judgment* (1790), a work devoted to a number of topics including reasoning about ends, the nature of judgment, and aesthetics. The three *Critiques* are only a tiny portion of his corpus. He wrote books on natural science, cosmology, history, politics, geography, logic—the list is long. For our purposes, the two most important books are the *Critique of Pure Reason* just mentioned and a small book that he worked up from lecture notes and published only when he became too old to lecture any longer, *Anthropology from a Pragmatic Point of View* (1798).

By the time the Critical Philosophy reached full maturity in the *Critique of Pure Reason* (hereafter the first *Critique*), Kant aimed to do two principal things with it:

- Justify our conviction that mathematics and especially physics are a unified body of necessary and universal truth.
- Insulate morality and religion from the corrosive effects of this very same science.

The reason for (2.) was that for Kant there was not the slightest doubt that moral responsibility and God exist but, as he also thought, the universal causal determinism and mechanism of science would undermine both morality and religion if scientific evidence and argument are relevant to them. If so, morality and religion can survive modern science only if the truth of the propositions of science is irrelevant to the truth of the propositions of morality and religion. This Kant attempted to show, primarily by arguing as follows: 1. science is about how things appear to us, morality and religion are about how things are; 2. we can never know that the mechanism and determinism that we find in things as they appear to us reflects their real nature; therefore, 3. we are free to form our views about how things really are on the basis of factors other than scientific evidence, the latter being merely evidence concerning how things appear to us.

It was the pursuit of the first aim, the aim of putting mathematics and science on a secure footing, that led Kant to his views about the mind. This came about in the following way. Kant approached the foundations of mathematics and science by asking: What are the necessary conditions of experience? Now such conditions could be found in two places—in what our experience and the objects of our experience must be like, and in what *we* must be like to have such experience. It was in the former that Kant uncovered the foundations for mathematics and physics that he sought, in particular in the conditions of our experience having objects at all, but Kant went after the conditions of our *experience* having object via the latter: What must *we* be like to experience objects? Though this question is, as Kant once put it, strictly speaking inessential to his main task (Axvii), it led him to his discoveries about the mind.

From the point of view of contemporary cognitive science, two things about Kant's approach are interesting. The first is this. Like contemporary cognitive science but radically unlike other philosophies of his own time, Kant was blithely unconcerned about the great questions about knowledge of the external world, scepticism, solipsism, etc. His target is human knowledge, that is to say, objectively valid perception and belief, and he was a successor to Descartes, Berkeley and Hume. However, his concerns are strikingly different from theirs. Unlike the tradition but like contemporary cognitive science, he simply took it for granted that we have knowledge: *a priori* knowledge about conceptual structures and perceptual knowledge of the world of space and time. What interested him is how these various types of knowledge hang together. In any case, as he argued, our access to ourselves is neither better nor worse than our access to the spatiotemporal world, so the contrast at the centre of, for example, Descartes' account of knowledge between the access we have to ourselves and the access we have to things elsewhere in space does not obtain. (We will return to this point below.) Kant had concerns that go beyond those of contemporary cognitive science, of course, in particular his

negative interest in showing that knowledge has limits in order to make room for faith (Bxxx). Nevertheless, his positive interest in knowledge is strikingly like the interest of contemporary cognitive science.

This brings us to the second point about Kant's approach. If Kant's interest in knowledge was like contemporary cognitive scientists', his methods were utterly different in one crucial respect: unlike virtually all cognitive researchers now, Kant held that an empirical science of psychology is impossible. As he argues in a famous passage in *The Metaphysical Foundations of Natural Science*, "the empirical doctrine of the soul ... must remain even further removed than chemistry from the rank of what may be called a natural science proper" (MAN, 04: 471). (Kant's notorious remark about chemistry was made before it had been reduced to a single quantified theory.) First, mental states have only one universal dimension, namely distribution in time, so their contents cannot be quantified; this make a mathematical model of them impossible. Second, there is no objective basis for deciding where one mental state stops and the next ones starts. Third, these items "cannot be kept separate" in a way that would allow us to connect them again "at will", by which Kant presumably means, 'according to the dictates of our developing theory'. Fourth, each person can study the mental states of only one person, namely, him- or herself. Finally, "the observation itself alters and distorts the state of the object observed". (Little did Kant know how big an issue that would become!)

How then can we study the mind? For Kant, the answer was: by *a priori* reasoning—we study what the mind *must* be like and what capacities it *must* have to represent things as it does. He called this the transcendental method; as we will see, it came to have a huge influence on the research programme of cognitive science, its nonempirical roots notwithstanding.

Everything I have just said about Kant's hostility to the idea of an empirical science of psychology is true but it may also be misleading. Kant did not mean by 'psychology' what we mean by it. For him, psychology is the study of what we can be aware of in ourselves via introspection. What we would now call psychology, largely the study of behaviour and the causal context of behaviour, he gave the name 'anthropology'. To see the contrast, we need to return to a work mentioned earlier, *Anthropology from a Pragmatic Point of View*. In this unjustly-neglected work, Kant tells us that anthropology is the study of human beings from the point of view of their behaviour, especially behaviour toward one another, and of the things revealed in behaviour. Anthropology in this sense contrasts with what Kant understood as empirical psychology, namely the introspective observations of our own mental states. Kant's rejection of introspection and turn to behaviour have a very contemporary feel to them. (For more on Kant on introspection, see Brook 2004.)

The *Anthropology* is important for other reasons, too. In particular, it illuminates many things in Kant's picture of cognition. To make sense of behaviour, character, etc., Kant urges early in the work, we must know something of the powers and faculties of the human mind: how it gains knowledge and controls behaviour. Thus, before we can study character, etc., we must first study the mind. In fact, this study of the mind (Anthropological Didactic, he calls it) ends up being three-quarters of the book. In it, Kant discusses many topics more clearly than anywhere else. In one amusing passage, Kant indicates that he was, if anything, even more

hostile to the use of introspection to understand the mind than I have indicated. Introspection, he tells us, can be a road to “mental illness” (Anth, AA 07:161). Strangely enough, Kant never seems to have asked whether anthropology in his sense could be a science.

2. WHERE KANT INFLUENCED COGNITIVE SCIENCE

Kant’s influence on cognitive science was via a direct line of descent through 19th century cognitive researchers such as Herbart and Helmholtz, to turn-of-the-century thinkers such as Freud and James (even though James ridiculed Kant, his model of the mind is still quite Kantian) and on to contemporary researchers such as Fodor and the classical symbolic cognition model of classic cognitive science, 1970’s-style.

Of the ideas about cognition that came down to cognitive science from Kant, probably the best-known is the doctrine that representation, much of it at any rate, requires concepts as well as percepts—rule-guided acts of cognition as well as deliverances of the senses. This doctrine has become as orthodox in cognitive science as it was central to Kant. Its origins in Kant are well-known; as he put it, “Concepts without intuitions are empty, intuitions without concepts are blind” (A51=B74). The idea, put in more contemporary terms, is that to discriminate anything from anything, we need information on which to base the discrimination; but for information to be of any use to us, we must also bring capacities to discriminate to it.

Second, Kant’s central methodological innovation, the method of transcendental argument as he called it, has become a major, perhaps the major, method of cognitive science. One way to describe the role of transcendental arguments is to say that they attempt to infer the conditions necessary for some phenomenon to occur. Other ways include: they are used to infer the constraints on any such phenomenon occurring, and, they are used to infer what must be true of a system which could contain that phenomenon. This method is important in cognitive science because it provides a toehold on which to climb from observable behaviour to unobservable psychological antecedents. Transcendental arguments are a way of identifying constraints on what the unobservable antecedents could be like. So closely linked is this method to Kant that Flanagan, for example, even calls it the method of transcendental deduction, Kant’s term for his most important form of analysis (1984, p. 180).⁴

Here is a simple example: in an early experiment aimed to tease out how memory works, subjects were asked to memorize a short list of random items (letters of the alphabet or whatever). They were then asked if a given letter occurred in the list. Researchers then reasoned as follows. If it takes subjects less time to find the target letter when it is near the beginning of the list than near the end, memory must work by serial search starting at the beginning of the list. If it takes subject the same length of time no matter where the target item occurs, they must be doing an exhaustive search. If, on the other hand, reaction times vary but unsystematically, then it is likely that subjects are searching only till they find the target item but entering the list at randomly varying points. And so on. We do not need to describe the whole range of possibilities to see the Kantian point: what researchers *actually observed* was reaction times. They then *inferred*

something about underlying mechanisms as causes of the observed behaviour. This is precisely the method of transcendental argument as Kant described it.

Third, even Kant's general conception of the mind and what we can and cannot capture in our models of it has been taken over by cognitive science and philosophers associated with it, at least in a general way. In the light of what cognitive science has not taken up in Kant's model of the mind, this may seem a bit strange, so let us explore the matter further. In cognitive science at the moment, functionalism, specifically the functionalist version of the representational model of the mind, is virtually the official philosophical view of the mind, eliminativist antagonists such as P. M. Churchland (1984) and P. S. Churchland (1986) notwithstanding. The basic idea behind functionalism is this. The way to model the mind is to model what it does and can do, that is to say, to model its functions (in the words of one slogan, 'the mind is what the brain does'). In representational models, the basic function of a mind is to shape and transform representations. Kant too held a representational model of the mind and he too viewed the mind as a system of functions for applying concepts to percepts.

The three tenets of Kant's model of the mind are as follows. (I) Most or all representation is representation of objects; such objects are the result of acts of synthesis. (ii) For representations of objects to be anything to anyone, they must "belong with others to one consciousness" (A116); for this, the mind must synthesize its various objects of representation into what I will call the *global object* of a *global representation* (these terms are defined in Section 3). (iii) Synthesis into either individual or global objects requires the application of concepts. —These are the central elements of the model. All three tenets describe either functions or conditions on functions operating (unified consciousness, for example). Kant even called them functions (A68=B93, A94 and elsewhere). In general, like functionalism, Kant's approach to the mind is centred on how it works, as opposed, for example, to how such a system might be physically constituted. He even shared functionalism's lack of enthusiasm for introspection.

Functionalism now comes in many flavours—that mental content can only be specified by its relationship to other mental content (plus, perhaps, the environment and the subject's history); that explanation of mental functioning is a special sort of explanation (focussing on reasons for action); that explanation of mental functioning must be conducted in the language of psychology; that this vocabulary and the style of explanation conducted by using it have 'autonomy' (cannot be reduced to nonpsychological explanation); that this autonomy stems from such explanation being holistic in certain ways; and perhaps others. Kant had no notion of such variation, of course. Kant's functionalism was of a rather general sort. Nevertheless, I think it is fair to view his model of the mind as a precursor of functionalism.

The thought that Kant was a functionalist *avant le mot* is not new. Sellars (1970) was perhaps the first to read Kant as a functionalist or protofunctionalist; more recently Dennett (1978), Patricia Kitcher (1984), Meerbote (1989), Powell (1990) and others have joined him. (Sellars, 1968, also offers an early version of functional classification, and in a Kantian context.) It is less often noticed that Kant was committed to a vital negative doctrine of functionalism, too, the dictum that function does not determine form.

About the relation of function to form, functionalists maintain two things: (I) mental functioning could be realized in principle in objects of many different forms; and, (ii) we know too little about the form or structure of the mind at present to say anything useful at this level in any case, except that mental functions will never be straightforwardly mapped onto any forms that may be associated with them. Kant accepted a variant of both these positions. Concerning (ii), Kant maintained not just that we know little about the ‘substrate’ (A350) that underlies mental functioning but that we know nothing about it. This is his doctrine of the unknowability of the noumenal mind. If the noumenal mind is unknowable, however, (I) immediately follows; the mind as it is has to be able to take different forms. Otherwise, how its functions would tell us how it is. Indeed, function imposes so few constraints on form that, so far as we can infer from function, we cannot determine even something as basic as whether the mind is simple or complex (A353). In short, Kant not only accepted the notion that function does not dictate form, but accepted a very strong version of it.

Indeed, his doctrine of the unknowability of the noumenal mind is little more than a strong version of that idea, at least on some readings. And noumenalism is no mere personal fancy in his system. On the contrary, the doctrine was absolutely vital to him. The very possibility of free will and immortality hang on it, and our belief in freedom and immortality are two of the three great practical beliefs whose possible truth Kant wrote the whole first *Critique* to defend (Bxxx). (The third was belief in God’s existence; the possibility of its truth depends on noumenalism, too, but noumenalism about the world, not the mind.) The first *Critique* has other goals too, of course—more positive, theory justifying goals. But noumenalism is vital to the work’s practical goals.

In short, three of Kant’s most central insights have been embraced by cognitive science:

- his epistemological insight into the interdependence of concepts and percepts in experience;
- his main method, the method of transcendental argument; and,
- his general picture of the mind as a system of concept-using functions whose task is to manipulate representations.

Indeed, some workers in cognitive science have even explored the implications of more specific aspects of Kant’s model of the mind for their work, Martindale (1987) for example.

Let us turn now to ideas of Kant’s that have not been taken up by cognitive science so far.

3. IDEAS OF KANT’S THAT HAVE NOT BEEN TAKEN UP BY COGNITIVE SCIENCE

If some of Kant’s ideas have been taken over by cognitive science, came down indeed via a direct line of descent, others have not been taken up by cognitive science at all, not from Kant and not from anywhere else either. Before we begin our investigation of the latter, it would be helpful to say a word about the general nature of what cognitive science has and has not taken over from Kant. There are some systematic differences between the two groups of ideas.

Begin with the commonly accepted point that cognitive science has made better progress with mental content (information bearing states of certain kinds) and the processing of content (cognition) than it has with consciousness. This obtains, most would agree, whether it is consciousness of external objects of which we are speaking or consciousness of self. It would be natural to expect that what has been taken over from Kant and what has not would split along the same fault line. That would be only partly true. Until very recently, cognitive science has certainly not paid much attention to consciousness, neither of objects nor of self, but it has paid equally little attention to other aspects of the mind that Kant emphasized, one kind of synthesizing power that we have and the mind's unity in particular. Nor has the explosion of writing on consciousness since about 1985 changed things with respect to either topic. What makes this absence so peculiar is that no feature of cognition and consciousness is more obvious than that we tie the various elements of our experience together, and that what results is a single, unified representations of the world.

Kant held that cognition of the sort that we have requires two kinds of synthesis. The first ties the raw material of sensible experience together into objects. The second ties these individual representations together into what I will call *global representations* (to be introduced shortly).

The first kind of synthesis is to be found in contemporary research in the form of the notion of binding (in the psychological, not the linguistic sense). It has been the object of considerable attention. However, the second has hardly received any attention at all. Here is one standard picture of binding. Colours, lines, shapes, textures, etc., are represented in widely dispersed areas of the brain. These dispersed representations have to be brought into relation to one another if they are to become parts of a single representation of an object.

Interestingly, one influential current model of binding even parallels Kant's in important ways, namely, the model developed by Treisman and her colleagues (1980). Though they do not indicate any awareness of the parallel, like Kant they hold that three stages of visual processing are involved. First the content of feature modules are applied to the input of the senses, next the result of this application of stored features to sensible input is located on a map of locations, and then the result of both processes is recognized via a recognition network and object files. Kant too had a three stage model of synthesis of objects and Treisman's stages parallel his stages of apprehension, reproduction, and recognition in concepts very closely.

Binding is only one of the two forms of activity to which Kant gave the name synthesis, however. The other is the activity of tying multiple representations together into a global representation. What is special about a global representation is the unity that it displays. It is a single representation, and it is single by virtue of connecting the representations that are its parts to one another in such a way that to be aware of any part of the representation is to be aware of other parts of it, too, and of the collection of them as a single group. Let us try to capture the unities we are discussing more formally.

The unities all begin with the activity of forming multiple representations into what we might call a global representation. We can define a global representation as follows:

A global representation =*df.* a representation that a number of objects or contents of representation, and usually a number of ways of representing, as its single global object.

We can then define ‘single global object’:

A single global object =*df.* an intentional object that represents a number of intentional objects such that to be aware of any of these objects and/or their representation is also to be aware of other objects and/or their representation and of the collection of them as a single group.⁵

As a very simple example, each person reading this chapter is aware of the words I have written, the page of the book, the surrounding room, various bodily sensations, thoughts about what I have written (‘why is he taking me through this silly exercise?’), and so on. And each of us is aware of these various things not individually but all together, as the single complex object of a single representation.

Kant thought that the capacity to form global representations is absolutely essential to both the kind of cognition that we have and the kind of consciousness that we have. One of the interesting aspects of Kant’s work on synthesis is that he tried to unite the two kinds of synthesis he distinguished in a single theory, something that no other theorist to my knowledge has done.

The two kinds of synthesis can be viewed as operating on two different levels. Here is an example. As a result of having bad handwriting, I am all too often in the position of not being able to recognize a word I wrote earlier. If, however, I take a careful look at what I scrawled and then go and do something else for a while, I will eventually recognize what I wrote. The word ‘marginalized’ was a recent example. (If the brain is a neural network, that is about what one would expect; a neural network needs time to settle on a solution.) All of this happens without any apparent recourse to complex reasoning and quite outside of consciousness. However, at the end of this process of nonconscious interpretation, a second level of activity commences; I form a representation of the word, recognize it, and set out to do whatever I choose to do with it.

Much of the work of cognitive science so far has focussed on the first level, the transformation of the meaningless scrawl into a recognizable word and similar kinds of processing. Where cognitive science is Kantian, it is Kant’s ideas about processing at this level that it displays: ideas about the synthesis (or binding as it is now called) of diverse sensory information into representations of single objects, ideas about the functional nature of minds able to do such synthesizing, and so on. Where cognitive science has not assimilated ideas of Kant’s, on the other hand, it is generally ideas that he had about what is going on at the second level, ideas about broader and more complex processes of synthesis, about the unity of minds able to perform these more complicated kinds of synthesis, and about the consciousness involved in recognition of representations and in consciousness of self. Looked at in the light of this distinction between the two quite different levels of cognitive processing, the contrast between what cognitive science has taken over from Kant and what it has not begins to look quite interesting.

Earlier I said that cognitive science has neglected more than consciousness in Kant and that is true. However, it *has* neglected what he had to say about consciousness. Indeed, the unity found in global representations is also the feature of consciousness that most interested Kant. Global representations need not be conscious, certainly not conscious of themselves and perhaps not even conscious of objects. This is an important point and one on which Kant is widely misunderstood. It is equally important, however, that when representations are conscious, they display the same unity as global representations generally.

In fact, this unity is a feature not just of global representations and of consciousness. It is also a feature of *recognition* of representations—we recognize them as single representations. We can pull these points together in a single definition:

The unity of representation, recognition, consciousness =*df.*

- a single act of representation, recognition, consciousness, in which,
- a number of objects of representation and, often, the representing of them are combined in such a way that to represent, recognize or be aware of any of these items is also to be aware of at least some of the other items, as the object of a single representation.

As this definition makes clear, the kind of unity in question is more than just being one representation, one object of recognition, one object of consciousness. All three are not just singular but also combine a multiplicity of representational items into one representation. This latter is what their unity consists in.

Unity on the side of representations also requires unity on the side of the thing doing the representing, the mind. Though Kant dealt with this topic quite briefly, he left us at least the outline of a theory that unified global representations are the result of unifying acts of synthesis, and/or recognition and/or consciousness, and that to perform such unifying acts, the actor must be a single, unified mind. None of these claims about the unities crucial to cognition has played any significant role in contemporary cognitive science.

The ideas about synthesis, consciousness, and the mental unity underlying them that cognitive science have not taken over from Kant have a common feature. They all concern the mind as a whole and are about functions that can draw on information in a great many subsystems of the mind, functions that Fodor (1983, p. 107) calls isotropic. Another way to put the point is to say that they are all relatively holistic features of the mind. Now, some cognitive scientists have paid attention to properties of the mind as whole. Here I am thinking of the work on production systems such as Newell's (1973, 1990) Soar and Anderson's (1983) ACT, and Minsky's (1985) society of mind. There is also relevant work in metacognition theory and in philosophy, for example the work of Patricia Churchland and others (1986, 1991) on connectionist models and large scale integration of data and Dennett's (1991) multiple drafts model of consciousness. However, none of this work takes up the unities that interested Kant.

That Kant's insights into the various unities central to cognition have been neglected in cognitive science heretofore is due in part, I think, to the way recent philosophers of mind have dealt with issues closely related to mental unity.

It seems obvious, *prima facie*, that the most interesting and cognitively central unities are synchronic: the representing or recognizing or being aware of a number of things *at the same time*. Synchronic unity was the form of mental unity that most interested Kant (of the many passages that indicate this, A100, A103, A108, and A352 are especially relevant). Yet when contemporary philosophers of mind talk about mental unity at all, they almost always take up only unity *across* time—even when they are discussing Kant! Kitcher (1990) is a good example: she always interprets Kant’s talk about mental unity to be about diachronic unity. Of course, diachronic unity, the representing or recognizing or being aware of earlier representations and combining them with current ones, is vital to many cognitive activities. But it is not the only or even the most important form of mental unity.

The way many philosophers have linked unity to personal identity exacerbates the problem. (When philosophers use the term ‘personal identity’, they mean ‘being one person’, usually over time. What they mean by the term is thus very different from what clinical psychologists mean.) Philosophers, including most commentators on Kant, tend to tie them closely together, taking it to be obvious that mental unity requires personal identity, that a number of representations can be unified into one global representation only if they are all the representations of a single person or mind. Since cognitive scientists have generally not been much interested in personal identity, I suspect that the philosophers’ way of linking unity and identity may have helped to turn them away from questions of unity. Whatever, the neglect is a shame; mental unity is central to our kind of mind.

Moreover, the linkage between unity and identity is looser than these philosophers hold. Again, there is both a synchronic and a diachronic question. Synchronically, the link may be close; if a number of representations are combined in one global representation, it is plausible to think that that will be enough to make them the representations of a single mind. (The possibility of the link here makes it, if anything, even more strange that philosophers have typically ignored the synchronic forms of both unity and identity.) When we turn to diachronic unity and identity, however, the link is anything but close. There seems to be no reason in principle why a mind could not combine earlier representations had by another mind with his or her current representations. All it would take is the right kind of memory access to the earlier representations. (Of course, what the right kind of access *is like* might be tricky to specify.) Moreover, and this is what makes the standard treatment of Kant on the subject so surprising, Kant was well aware of this possibility. In a famous footnote to A363, he entertains the possibility of minds so structured that “one [mind] communicates representations together with the consciousness [memory] of them” to another one, and so on in a chain. Clearly, both for Kant and in fact, mental unity across time can be and should be distinguished from personal identity.

4. KANT’S CLAIMS ABOUT CONSCIOUSNESS OF SELF

Contrary to what is often said, Kant did not consider consciousness to be essential to all forms of unified cognition, not consciousness of self at any rate. To the contrary, he spoke of

cognitive systems that are not aware of themselves at all a number of times. (Whether simple consciousness of objects is required is a more complicated matter; on one view, consciousness of objects simply *is* a synthesized, unified global representation of them.) Nevertheless, Kant was well aware that consciousness of self is at least a prominent feature of cognitive systems as we find them in people and he had some interesting things to say about it.

Indeed, Kant made both positive and negative contributions to our picture of consciousness of self. His negative contributions are contained in his attack on rationalist pretensions to infer fundamental facts about minds from concepts and an appeal to consciousness of self alone. Descartes, Leibniz and maybe Reid were the prime targets; Kant called their reasoning paralogisms and his attack on it is found in the well-known chapter called Paralogisms of Pure Reason in the first *Critique*. The key inferences are that the mind or soul is simple and that it has some form of strict and absolute persistence. Kant's attack is devastating but it had no enduring influence because the ideas under attack had no enduring influence, thanks in part to Kant's attack. So we will not consider it further.

By contrast, some of Kant's positive contributions are not well known at all. They address six topics.

1. How many kinds of self-consciousness there are. Most theorists of self-consciousness, whether they are working in the terminology of self-consciousness as most philosophers do or the terminology of metarepresentation as is more common among cognitive psychologists, treat it as all being much alike. Kant did not. He distinguished between two kinds, consciousness of one's representational states and consciousness of oneself as the subject of these states. In the latter, I am aware of myself as myself, the common subject of my representations. In the former, I am aware of particular psychological states and activities, states and activities that are in fact mine, though I may or may not be aware of that. It seems obvious that there are these two quite different kinds of consciousness of self, indeed that it should be fundamentally important to distinguish them, yet few theorists have followed Kant in doing so.
2. The cognitive and semantic machinery used to obtain consciousness of self as subject. Here Kant made a major discovery: we use a very special kind of referential apparatus to become aware of ourselves as ourselves, as the subject of our representations. Kant says that when we refer to ourselves in this way, we 'denote' but do not 'represent' ourselves (A382) or we designate ourselves 'only transcendently', without noting in ourselves 'any quality whatsoever' (A355). What Kant is isolating here anticipates Frege's and other work on indexicals and bears a striking resemblance to Shoemaker's (1968, ⁶⁷p. 558) notion of reference to self without identification. Compare Kant's last remark to this statement of Shoemaker's:

My use of the word 'I' as the subject of [statements such as 'I feel pain' or 'I see a canary'] is not due to my having identified as myself something [otherwise recognized] of which I know, or believe, or wish to say, that the predicate of my statement applies to it [1968, p. 558].

That is to say, I am aware of myself, as myself, without inferring this from any other feature of myself. If so, that the referent is myself is something I know independently of knowing anything else. If so, I must be able to refer to myself as myself independently of 'noting any quality' in myself, just as Kant said. Let us call this *nonascriptive reference to self*. Shoemaker attributes the core of the idea to Wittgenstein but it goes all the way back to Kant.

3. The representational base of consciousness of self as subject. Kant had an explanation for the peculiarities of this form of reference to self. He never laid this theory out fully in any one place, so it is easy to miss it, but it is there. The fundamental idea is this. To become aware of a representation of X, usually we do not need any representation other than the representation of X (we also need some general cognitive skills). In the same way, virtually any representation can make us aware of ourselves as its subject. It is this universality that opens the way to reference to self without ascription. (The details are complicated. I discuss them in Brook 1994, Ch. 4). No cognitive theorist has ever developed a general explanation of the peculiar semantics of reference to self that is better than Kant's. Most theorists do not even try.
4. How we appear to ourselves when we are aware of ourselves as subject. When we are aware of ourselves as subject, Kant thought that the way we appear to ourselves has important peculiarities. As we appear to ourselves here, "nothing manifold is given" to ourselves (B135). As well as explaining the peculiarities of self-reference without identification, the theory of the universality of the representational base of consciousness of self explains this peculiar lack of content, too.
5. The unity in our consciousness of ourselves as subject. When we are aware of ourselves as subject, we are aware of ourselves as the "single common subject" of a number of representations (A350). The representation itself is equally unified. These instances of unity strongly resist explication by the resources of any existing theory of mental contents, and may be a main source of the tenacity of the problem of the homunculus.

To reveal the power of this notion of the unity of consciousness of self as subject, let us apply it to that old saw of anti-functionalism, the mind whose 'neurons' are the population of China. As an objection to functionalism, the story goes as follows: 'If what defines a mind is functional organization, then size is irrelevant. If so, then the people of China could be one mind. All that would be required is that they be hooked up to one another so as to exhibit the right functional organization. And that is absurd.' It is interesting to reflect on how Kant might have reacted to this claim.

Perhaps along the following lines. To find out whether the population of China could be a single mind, we need to determine two things. First, could the information realized in the relationships among the members of this population, some of it at least, be integrated so as to become a single object of a global representation? Second, could we imagine the spread-out entity composed of this population becoming aware (i) of such an object, (ii) of the global representation of this object, and (iii) of itself, and *as* itself, the common subject of the elements of this representation? I do not know how to answer these questions and I am not sure what

Kant's answer would have been but he does give us the right questions. His notions of the unity of experience, the unity of consciousness, and the consciousness of oneself as the common subject of one's representations clarify the issue of what the Chinese population *would have to be like* to be a mind.

6. When I am aware of myself as subject, of what am I aware? Here the question is: Am I aware of myself? That is to say, does nonascriptive reference to self give me epistemic access to the thing that I am, or is consciousness of self, so-called, just consciousness of another representation, in this case a representation of myself? Such a representation would presumably be as concept-laden and doctored by the mind as all other representations are. All cognitive theorists in Kant's time and most since have simply taken it for granted that nonascriptive reference to self gives us consciousness of ourselves, not just of another representation. Even among contemporary theorists, the Churchlands are among a rare few who think otherwise. Kant is the only pre-twentieth century theorist that I know of who rejected the idea; he would have been firmly on the side of the Churchlands. We "know even ourselves only through inner sense, and therefore as appearance ..." (A278; see B153-154). However, there is a twist to Kant's rejection. He certainly thought that we have no *knowledge* of ourselves as we are but he may have thought that we do have a 'bare consciousness' of ourselves as we are, a "consciousness of self [which is] very far from being a knowledge of the self" (B158). This twist is enough by itself to make his version of the 'no direct consciousness of self' thesis more subtle than, for example, the Churchlands' version.

As has been indicated, not one of Kant's six ideas about consciousness of self has been taken up by cognitive science. Even when parallel ideas have appeared in recent work, as with Shoemaker's reference to self without identification and the Churchlands' denial that we have direct, unmediated consciousness of self, the authors of the idea do not seem to know that Kant beat them to it over two hundred years ago. As a general theorist of the mind, Kant is no mere cultural artefact.

FINAL COMMENTS

In this chapter we have explored ideas of Kant's that have been incorporated into contemporary cognitive science and ideas that have not. The latter concern his claims about synthesis, about the unity of representation, consciousness and mind, and about the peculiarities of consciousness of self as subject.

The topic that we have discussed do not exhaust Kant's ideas about cognition. In particular, he had a complex, sophisticated model of representation in space and time. I have not discussed it because, unlike his claims about synthesis, unity, consciousness, etc., his views on cognition in space and time have been almost universally rejected (Kitcher, 1990, and Falkenstein, 1996, are excellent treatments; for my thoughts on Falkenstein, see Brook 1998). There are also some important questions about Kant. One of the more intriguing is the one raised by Dascal at the end of his chapter in this volume: Why did Kant care so little about

language? It wasn't as though he wasn't exposed to sophisticated theorists about language, Herder for example. Since there is not much to be said by way of an answer to this question, I have not taken it up.

ABSTRACT: In this paper I argue that while the dominant model of the mind in cognitive science is deeply Kantian, some of Kant's most arresting ideas have not been assimilated into the contemporary picture. The Kantian elements in the contemporary picture are mainly these three: Representation requires both percepts and concepts, the study of cognition is based on inference to the best explanation (Kant called it transcendental argument), and the mind is a complex system of functions – minds are (part of) what brains do. Three other important ideas of Kant's have played little role: That unified consciousness is essential to our kind of cognition (beginning to change), that such unity is the result of concept-using synthesizing activities of the cognitive system, and that the knowledge that such a system has of itself has some highly specific and unusual features.

KEYWORDS: Kant - cognitive science - mind - unified consciousness - synthesis - self-knowledge

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NOTES

- 1 First published in Andrew Brook (ed.). *The Prehistory of Cognitive Science*. Basingstoke, UK: Palgrave Macmillan, 2007, pp. 117-36.
- 2 Andrew Brook is Chancellor's Professor of Philosophy and Cognitive Science at Carleton University in Ottawa (Canada). He is the founder and former Director of the Institute of Cognitive Science there and former President of the Canadian Philosophical Association. He is the current President of the Canadian Psychoanalytic Society. He has published about 120 books and papers.
3. Except for references to the *Critique of Pure Reason*, references to Kant's work in the text follow the practice of using the volume and page number of the twenty-nine volume German edition begun in 1902 by the *Preussischen Academie der Wissenschaften* and still not completed. References to the *Critique of Pure Reason* is in the pagination of the first two editions, usually called the 'A' and the 'B' editions. (These were the only two editions that Kant prepared himself.) Translations are from Norman Kemp Smith's 1927 translation, *Immanuel Kant's Critique of Pure Reason*. If a reference is to only one edition, the passage does not appear in the other one.
4. Flanagan's choice of this name for transcendental argumentation is curious, the intention to honour Kant notwithstanding. Kant himself used the term 'transcendental deduction' for something quite different, namely the kind of analysis used to *deduce* that use of certain concepts is necessary for representations to come to have objects. Kant used transcendental arguments in the course of this deduction, of course, but they are still different things. Nevertheless, Flanagan is quite right to pick Kant out as the originator of the method of transcendental argumentation. Given that Kant urged that empirical psychology (= introspective psychology) is impossible and never pursued the question of whether an empirical science of anthropology in his sense is possible, it might seem paradoxical that the main method behind his nonempirical, purely *a priori* work on cognition should become the methodological basis for current empirical theory-building about cognition but that is what happened.
5. The notions of a global representation and global object and the rest of the ideas discussed in this chapter are considered further in Brook (1994).

6. Among commentators on Kant, Strawson (1966) came closest to seeing that Kant spotted something similar to what Shoemaker later labelled 'reference to self without identification'. Strawson's name for the phenomenon, 'criterionless self-ascription' (p. 165), obscures more than it reveals, however. What is in question is not ascription but reference.
7. I thank Rob Stainton for helpful comments on a draft of this chapter.

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KANT'S UNCONSCIOUS 'GIVEN'*

Patricia KITCHER²

1 INTRODUCTION

The main doctrines of Kant's epistemological theory are well-known: Cognition requires both intuitions and concepts; it requires both *a priori* and *a posteriori* elements; it is empirically real, yet transcendently ideal. Oddly, however, none of these well-known claims can be fully appreciated without also understanding his view that cognition requires unconscious representations. In the next three sections, I try to clarify the role of unconscious representations in Kant's theory by contrasting his reasons for assuming such representations with those of his predecessors, in particular, with Leibniz's arguments for *petites perceptions* and by filling in the sparse account of unconscious representations in the *Critique of Pure Reason* by drawing on some of his unpublished notes and lectures. This material will show the direct link between his hypothesis of unconscious representations and his doctrines that cognition requires intuitions and *a posteriori* elements, and is empirically real.

In *Mind and World*, John McDowell argues that Kant's transcendental epistemology makes unacceptable use of the 'Given',³ because it has an isolable contribution from sensibility, namely the susceptibility of receptivity.

to the impact of a supersensible reality, a reality that is supposed to be independent of our conceptual activity ... (McDowell, 1994, p. 41).

McDowell's criticism rests on the widespread assumption that, for Kant, cognition must begin with noumenal 'affection.' In section 5, I argue that, despite solid textual evidence for this attribution, Kant's ultimate defense of the necessity of introducing *noumena* is not that empirical cognition must be grounded in noumenal objects affecting a noumenal self. The considerations

raised in sections 2 and 3 lay out the distinctively Kantian reasons for maintaining that human cognition can only begin with the receipt of unconscious representations. In section 6, I show that his theory of an unconscious given opens up a sound middle way between the myth of the Given and the myth that there is no isolable sensory contribution to cognition—but a way that is available only to those who are willing to follow other doctrines of transcendental idealism.

2 WHY ASSUME UNCONSCIOUS REPRESENTATIONS?

In prefatory remarks to the *New Essays on Human Understanding*, Leibniz presented a classic, if not entirely satisfactory, argument for the existence of unconscious perceptions. When a person is aware of the roar of the ocean, he is not conscious of (cannot distinguish) the sounds of the individual waves. Yet he must be aware of the sounds of the individual waves in some sense or he would not hear the combination of these sounds as a roar (Leibniz 1765/1982, 54). Hence

[e]very moment there is in us an infinity of perceptions, unaccompanied by awareness or reflection ... of which we are unaware because these impressions are either too minute and too numerous, or else too unvarying, so that they are not sufficiently distinctive on their own. But when they are combined with others they do nevertheless have their effect and make themselves felt, at least confusedly, within the whole. (Leibniz 1765/1982, 53).

Perhaps, however, each ocean wave does not make a sound, but contributes to a large sound-wave, which is then propagated to the hearer.⁴ Leaving this problem aside, it is natural to read Leibniz's preface as setting the stage for one of main controversies in the ensuing 'dialogue,' Philalethes's and Theophilus's debate over the existence of innate principles.

In the *Essay Concerning Human Understanding*, Locke had taken up the Cartesian challenge of providing an empirical basis for ideas claimed to be innate. With the ancient debate about nativism rejoined, Leibniz offered a critique of Locke's rejection of innate ideas and principles in the *New Essays*. Leibniz (in the persona of Theophilus) argued that since the principles of logic and mathematics were necessarily true, they could not be established by experience (Leibniz 1765/1982, 50, 86, 80). He countered Locke's preemptive rebuttal (delivered by Philalethes), that principles such as 'everything that is, is' could not be innate, because they were unknown to children (Leibniz 1765/1982, 76), with the hypothesis that the minds of cognizers have many principles of which they were not immediately conscious (Leibniz 1765/1982, 76). Thus, they know the principles, but not explicitly; they cannot articulate them. Again, Locke had considered this move and dismissed it as incoherent:

It seeming to me near a contradiction to say, that there are truths imprinted on the soul, which it perceives or understands not: imprinting, if it signify anything, being nothing else but the making of certain truths to be perceived. For to imprint anything on the mind without the mind's perceiving it, seems to me hardly intelligible. (ECHU 1:1:5).

Leibniz/Theophilus replies that there is another possibility

Why couldn't the soul ... contain things without one's being aware of them? ... Must a self-knowing subject have, straight away, actual knowledge of everything that belongs to its nature? ... [and] [o]n any view of the matter, it is always manifest in every state of the soul that necessary truths are innate, and that they are proved by what lies within, and cannot be established by experience as truths of fact are. (Leibniz 1765/1982, 78-79)

At this point, Philaethes makes the obvious reply on behalf of Locke. Knowledge of any truth must be subsequent to possession of the ideas from which it arises, and all ideas come from experience. Theophilus then notes that the ideas that are contained in necessary truths are intelligible (meaning presumably, that their elements are clear and distinct), whereas any idea that comes in from the senses is confused (Leibniz 1765/1982, 81).

The reply seems somewhat off the mark. The possibility of principles of which the possessor is unaware raises the specter of unconscious ideas, though it does not require it. Explaining that thinkers have clear and distinct intellectual ideas—of which they are conscious—exacerbates, rather than lessens, the problem of innate, but unknown principles. If cognizers have a clear conscious grasp of the ideas 'from which they [the principles] arise' (Leibniz 1765/1982, 81), then why are they not also cognizant of the principles?

Philaethes returns to the issue, observing that the ideas in which innate principles are couched are so general and abstract as to be alien to ordinary minds (Leibniz 1765/1982, 83). Leibniz/Theophilus replies that general principles are nevertheless in all thinking

General principles enter into our thoughts, serving as their inner core and as their mortar. Even if we give no thought to them, they are necessary for thought, as the muscles and tendons are necessary for walking. The mind relies on these principles constantly; but it does not find it so easy to sort them out and to command a distinct view of each of them separately, for that requires a great attention to what it is doing, and the unreflective majority are highly capable of that. (Leibniz 1765/1982, 83-84).

This reply also seems somewhat askew. Philaethes complains that general ideas are 'alien' to the ordinary person, that is, the ordinary person is unfamiliar with them, unaware of them. Theophilus replies that the innate principles are necessary for thinking.

Although Theophilus allows that innate principles are not known by children, he is less concessive about uneducated adults. He thinks that principles such as non-contradiction are known implicitly by laypeople. People constantly use the principle, when, for example, determining that someone is lying. And when presented with the principle, they immediately assent (Leibniz 1765/1982, 76). Leibniz's hypothesis is that just as reasoners use enthymematic premises in spoken and internal argumentation, laypeople make tacit use of the principle of non-contradiction in reaching their judgments (Leibniz 1765/1982, 76). To support the claim that people make constant use of implicit principles, he invokes the standard test of acceptance upon first hearing.

In a sense, Leibniz's argument for innate and so unconscious principles runs parallel to his argument for unconscious perceptions of the sound of each wave: It is possible to make sense of conscious mental states—hearing the roar or judging someone to be a liar—only on

the assumption of that these depend on perceptions or principles that are unconscious. As we have seen, however, the hypothesis that innate principles and their constitutive concepts are unconscious does not fit very well with his view of the relevant concepts. He regards those concepts not as confused, but as intelligible—indeed as far clearer than sensory perceptions. They would not be at all like his parade case of unconscious perceptions: the minute, numerous, and easily confused sounds of individual waves. Hence I think that Leibniz's prefatory example is not intended to pave the way for an acceptance of innate principles. He does not and need not rely on the existence of unconscious perceptions in this case, because he has two knockdown arguments for such principles—the principles are in constant use and, as necessary and universal, they could not be acquired from experience. Further, since they are recognized on first hearing, it is not much of a stretch to see them as known implicitly.

If not the argument about innate principles, then what is the famous discussion of the roar of the ocean intended to presage? Since Leibniz appeals to minute, indistinguishable perceptions in his discussion of the metaphysics of personal identity, that seems a likely candidate. Leibniz/Theophilus introduces Locke's familiar view that personal identity is secured by continuity of consciousness or memory and immediately endorses it:

I am also of the opinion that consciousness or perception of the ego proves a moral or personal identity. (Leibniz 1765/1982, 236).

Leibniz's support for the memory criterion is unsurprising, since he had advocated it himself in the *Discourse on Metaphysics*, published four years before Locke's *Essay* (*Discourse* §34, Loemker, 1969, 325).

But the agreement on the importance of memory to moral identity masks a deep metaphysical disagreement between Locke and Leibniz. For Leibniz, the moral identity must rest on real substantial identity:

[he] should have thought that, according to the order of things, an identity which is apparent to the person concerned—one who senses himself to be the same—presupposes a real identity obtaining through each immediate [temporal] transition accompanied by reflection, or by the sense of *I*. (Leibniz 1765/1982, 236).

The transitions in question are from one conscious perception to another. Leibniz holds our consciousness of such transitions to be indubitable. Such consciousness cannot, in the natural order of things (i.e. without Divine intervention), be mistaken (Leibniz 1765/1982, 236). In a slightly later, discussion, however, he suggests that the real bond across the states of an individual rests on unconscious perceptions. In considering whether a spirit could lose all perceptions of past existence, Theophilus demurs:

[A] spirit retains impressions of everything which has previously happened to it ... but these states of mind are mostly too minute to be distinguishable and for one to be aware of them ... It is this continuity and interconnection of perceptions which make someone really the same individual. (Leibniz 1765/1982, 239).

That is, self-identity is carried by the train of 'petites perceptions.'

This doctrine is clear in the *Monadology* as well as in the *New Essays*. After explaining, in effect, how Monads could be substances—because they perdure through change understood as changes in their perceptions—he preemptively rebuts the obvious criticism that rocks, and so forth, do not have perceptions:

Monadology § 20. For we experience in ourselves a condition in which we remember nothing and have no distinguishable perception; as when we fall into a swoon or when we are overcome with a profound dreamless sleep. In this state the soul does not perceptibly differ from a bare Monad; but as this state is not lasting, and the soul comes out of it, the soul is something more than a bare Monad.

Monadology §21. And it does not follow that in this state the simple substance is without any perception. That, indeed, cannot be, for the reasons already given; for it cannot perish, and it cannot continue to exist without being affected in some way, and this affection is nothing but its perception ...

Monadology §22. And as every present state of a simple substance is naturally a consequence of its preceding state, in such a way that its present is big with its future.

Monadology §23. And as, on waking from stupor, we are conscious of our perceptions, we must have had perceptions immediately before we awoke, although we were not at all conscious of them; for one perception can in a natural way come only from another perception, as a motion can in a natural way come only from a motion. (Loemker, 1969, p. 645).

What is interesting about the reasoning of the *Monadology* is that it is exclusively metaphysical. Leibniz does not press the necessity of assuming *petites perceptions* in order to explain conscious cognitions, but in order to avoid gappy substances. If all perceptions had to be conscious, then his Monads would be liable to the same objection as Descartes' souls whose fundamental attribute was (conscious) thought: They would be annihilated by bouts of unconsciousness, including dreamless sleep. Leibniz turns this objection on its head and claims that waking from a stupor establishes the existence of unconscious perceptions in souls—on the further metaphysical assumption that perceptions can arise only from other perceptions. But if unconscious perceptions must be assumed in this case, they must be possible and so could also exist in soulless Monads.

Kant was aware of Leibniz's claims in the *Monadology*, since he criticized one of them⁵ in one of his earliest writings, the *Nova Dilucidatio* of 1755. That Leibniz's theory of self-identity rested on the assumption of *petites perceptions* also seems to have been generally accepted at the time. Johan Nicolaus Tetens catalogued and synthesized many then contemporary psychological and philosophical theories in his *Philosophische Versuche über die menschliche Natur und ihre Entwicklung* of 1777. Tetens attributes this view to Leibniz without explanation or argument:

The foundation and basis of the soul consists, as Leibniz said, in unperceived representations. (1777/1979, vol. I: 265).

Since Kant's reading of Tetens's *Versuche*⁶ has been well-documented, he would have been aware of the metaphysical character of Leibniz's support for *petites perceptions* both first-hand and as a matter of common knowledge.

Although Leibniz's striking hypothesis of a teeming unconscious was bound up with Monad metaphysics, other contributors to the debate offered epistemological arguments. For example, in 'An Essay On the Origin of Knowledge,' the French Sensationist, Etienne Bonnot de Condillac (1746/1987, 445) considered several phenomena that illustrated the problem of insensible or unreportable perceptions. In reading, the subject is aware of the sense, but not of the shapes of the letters. Condillac maintained that subjects must have been conscious of these shapes, because their conduct, reading, proved that they were. On his view, consciousness could sometimes be so superficial that it left no memory trace. Some of Kant's remarks indicate that he was aware of a position very like Condillac's. In "negative Magnitudes" (1763), he exclaimed:

But also what admirable bustle is concealed in the depths of our minds, which we fail to notice as it is exercised ... and that because the actions are very many and because each is represented only very obscurely. The good proofs of this are known to all; among these one only needs to consider the actions which take place unnoticed within us when we **read**.⁷ (AA 02: 191).⁸

Condillac's countryman, the naturalist Charles Bonnet, argued for a different view in the *Essai de Psychologie* (1755/1978). Bonnet starts with scientific assumption that the mind or brain is barraged by sensory information. It is an assumption also made by Hume when he noted that all we need to do is turn our heads to be confronted with an 'inconceivably rapid' succession of perceptions (1739/1978, 252-53). Since the brain can only be in one state at a time, Bonnet thought it more reasonable to assume that, when many stimuli come at once, the result is an impression that is a composite in which the different stimuli are weighted according to their intensity. That is, it is not that each perception is conscious for a flash, but then unrecalable. Rather, under these circumstances, the brain cannot represent the perceptions as distinct from one another (1755/1978, 113).

Christian Wolff, who is often taken to be a follower or even a systematizer of Leibniz's philosophy, tacitly invoked unconscious perceptions in a somewhat different epistemological debate. He began *Vernünfftige Gedanken von Gott, Der Welt und der Seele des Menschen, auch allen Dingen Überhaupt* (1751/1983), the so-called 'German Metaphysics', with an apparent endorsement of Descartes' claim for the epistemological priority of the *cogito*:

No one can doubt that he is conscious of himself and other things; For, how can he deny to me or bring into doubt if he is not conscious of himself or other things? ... Whoever is conscious of the one, which he denies or brings into doubt, is the same as that one (1751/1983, 1).

In fact, he is criticizing Descartes' priority claim, as a later passage makes clear:

This difference [between ourselves and other things] appears directly as we are conscious of other things. For should we be conscious of that which we cognize through the senses, we must recognize the difference between that thing and others ... This differentiation is an effect of the soul, and we

cognize therefore through it the difference between the soul and the things that are represented (1751/1983, 455-56).

That is, cognitive subjects can be conscious of themselves as such only through differentiating objects of consciousness. On Leibniz's view, not all perceptions were conscious or apperceived. Apperceiving takes some effort, perhaps like the effort of attending. In that case, however, self-consciousness could not precede consciousness of some object of consciousness, because the self as differentiator, must itself be differentiated from the things it differentiates.

Besides this indirect argument for unconscious perceptions, perceptions which must be present to be differentiated, thus allowing object and self consciousness, Wolff also provides a telling example in support of assuming them. A person might see something white in a far-off field without knowing what he is seeing, because he cannot separate one part from another [even though he must see the parts to see the white patch]. Under these circumstances the thought is said to be 'obscure' [*dunke!*] (1751/1983, §199, 111).

Kant offers a very similar example when introducing unconscious representations in *Anthropology from a Pragmatic Standpoint*:

If I am conscious of seeing a man in a far away meadow, though I am not likewise conscious of seeing his eyes, nose, mouth, etc., then actually I only conclude that this thing is a man; for if I wanted to say that, because I am not conscious of seeing these parts of the head (and also the other parts of the man), I do not at all have representations of these parts in my intuition, then I would also not be able to say that I see a man; for the whole representations is composed from these part representations. (AA 07: 135).

Although the passage is somewhat difficult to follow, the point seems to be that even though the observer cannot distinguish the parts of the head, he must still be intuiting those parts; otherwise he would not be seeing the man, but merely inferring his presence. On the other hand, the knowledge that he is intuiting these parts is not immediate, but inferential.

Taking stock, as Kant came to write the *Critique*, the reasons for assuming unconscious representations were many and varied. The scientific evidence pointed to a constantly changing stream of representations on the retina. Particular examples demonstrated the need to assume unconscious representations as the foundation of conscious cognitions acknowledged by all. Metaphysical considerations led Leibniz to hypothesize a myriad of unconscious perceptions as the basis of the continuity of Monads. Given the scientific, epistemological, and metaphysical support for unconscious ideas at this time, it is astonishing—or worse—that Freud claimed to have discovered them nearly two hundred years later.

3 KANT'S APPEAL TO UNCONSCIOUS REPRESENTATIONS

Although Kant's Anthropology lectures always assumed the existence of unconscious representations, his attitude towards them changed dramatically. In his early lectures (perhaps from 1772)⁹, he is reported as suggesting that the teeming world of the unconscious presented

a large field of obscure perceptions that it was up to the philosopher to clarify (AA 25: 22). The published *Anthropology* of 1798 still holds that we must conclude that there are a vast number of unconscious representations. He characterizes the immeasurable field of obscure sensory intuitions and sensations as a huge map in which just a few places are illuminated by consciousness (AA 07:135). Nonetheless, he now maintains that the study of unconscious perceptions does not belong even to pragmatic anthropology (let alone to philosophy). Since the obscure representations are sensory, the topic belongs to physiological anthropology (AA 07: 136).

Since the notes from the early lecture course are cryptic, it is not clear why Kant thought that unconscious representations would be such a fertile field for philosophy to study. Perhaps he had hoped that examining them might reveal how the mind dealt with sensory information. He took the study of logic to be important, because it made explicit the implicit principles by which people thought (see 16.18,19,31-32, 24.791). So he may have believed that studying unconscious perceptions would enable philosophers to determine the principles by which the mind organized conscious percepts. In the *Critique*, however, he clearly realized that it was not possible to study the mind's way of taking unconscious sensations and turning them into conscious perceptions. Both the data and operation of synthesizing them were closed from view (A78/B103). To determine the mind's contributions to sensory representations, a different method was required—what he called the method of 'isolation': first separate everything from a representation that is conceptual and then separate everything that belongs to sensation (i.e. everything that can be understood as being received through the sensory apparatus we have). The well-known results of applying the method were that representations of space and time did not enter cognition through the senses, but were 'forms of intuition' (A23/B38, A30/B46).

At this point, we can see a clear and distinctively Kantian reason for accepting unconscious representations. No one doubted that it seems to humans that they are aware of a succession of mental states. In the *Inaugural Dissertation*, Kant had objected to Leibniz's view that the representation of succession is abstracted from experience:

They [one sort of realist about time] conceive of it as something real that has been abstracted from the succession of internal states—the view maintained by Leibniz and his followers. Now the falsity of [this] ... opinion clearly betrays itself by the vicious circle in the commonly accepted definition of time (AA 02: 400-401).

Two pages earlier, he had laid out the definitional problem:

it is only through the idea of time that it is possible for the things which come before the senses to be represented as simultaneous or successive. Nor does succession generate the concept of time; it makes appeal to it. And thus the concept of time, regarded as if it had been acquired through experience, is very badly defined, if it is defined in terms of the series of actual things which exist one **after** the other. For I only understand the meaning of the little word **after** by means of the antecedent concept of time (AA 02: 399).

Although the criticism is directed at Leibniz, it applies equally well to Locke's account of the acquisition of the idea of succession:

Tis evident to any one who will but observe what passes in his own mind, that there is a train of *Ideas*, which constantly succeed one another in his Understanding . . . *Reflection* on these appearances of several *Ideas* one after another in our Minds, is that which furnishes us with the *Idea* of *Succession*. (ECHU 2.14.3, 182, my underscoring).

I will not try to evaluate the justice of this objection to Leibniz (or to Locke). My interest is in what the resulting view implies about the role of unconscious representations in Kant's epistemology.

Similarly, no one doubted that humans perceived objects to be represented in space. That was the common assumption of the Newton-Leibniz debate. But, again, Kant will argue that the intuitive representations of objects in space do not supply but presuppose the 'form' of space. When these doctrines are considered in relation to his claims about intuitions, the implications for unconscious representations are evident:

In whatever way and by whatever means a cognition may refer to an object, still **intuition** is that by which a cognition refers to objects directly, and at which all thought aims as a means. Intuition, however, takes place only insofar as the object is given to us; but that, in turn, is possible only—for us human beings at any rate—by the mind's being affected in a certain manner. The capacity (a receptivity) to acquire representation as a result of the way we are affected by objects is called **sensibility** (A19/B33).

This observation is interesting, in part, for its seamless blending of normative and psychological considerations. Cognition *must* refer to an object [and that is *possible* only insofar as there is a necessary relation between the cognition and the object (A92/B124)]. Given the psychological limitations of the human mind, this *necessary* relation can be secured only when the mind is affected by the object. But since space and time cannot be received by human sensibility, the representations it receives cannot be conscious representations, since human intuitions are either of 'outer' objects in space or of 'inner' mental states in time (A22/B37). More simply, true cognition requires sensory inputs; the senses cannot take in the spatial and temporal information required to form conscious perceptions; therefore the representations received from sensory stimulation by objects (A1/B1) that are necessary for cognition must be unconscious. Hence Kant's well-known *Stufenleiter* of representations has a clear place for unconscious representations (A320/B376).

Given that his theory clearly implies that unconscious representations are necessary for cognition, it might seem strange that Kant did not highlight them. There are two complementary explanations for this apparent neglect. The first, which we have already seen in part, is that the Leibnizian tradition already accepted them. Both Leibniz and Wolff offered robust defenses of them, and Kant's discussion in the *Anthropology* suggests that the issue was already settled (AA 07: 135). On the Lockean side, Tetens also assumed the existence of unconscious perceptions. What Tetens thought had to be explained was how a unified and seemingly simple perception emerged from unconscious representations:

This impression [*Empfindung*] may consist in a multitude, and a multitude of uncountable small feelings that follow each other. And each may contain many simpler simultaneous ones in it, it is,

for me, a **unitary feeling**, and one and the same **act of consciousness** through which I join these small feelings in a total feeling, distinguishes it as **one** impression. I observe no multiplicity in this act, and no series [*Folge*] and no parts ... (1777/1979, 1.389).

With then contemporary Lockean on board with unconscious perceptions, there would be no pressing need to defend them. Indeed, as De Vleeschauwer first observed, Kant appears to draw on Tetens's discussion of perception in offering his account of the first synthesis (of apprehension) in the A edition (1962, pp. 85-90).

The second, and complementary, explanation is that, as we have just seen, Kant does allude to unconscious representations in the *Critique*. Given the wide acceptance of such representations, he does so, however, with little fanfare. To a knowledgeable reader, his discussion of the synthesis of apprehension would carry a clear implication of unconscious representations:

In order for this manifold to become unity of intuition (as, e.g., in the representation of space), it must first be gone through and gathered together. This act I call the **synthesis of apprehension**. (A 99).

What can the pre-synthesized, non-spatial representations be but unconscious? Perhaps because he had moved away from Tetens's views, Kant was more explicit about the role of unconscious representations in the B edition transcendental deduction:

First of all, let me point out that by **synthesis of apprehension** I mean that combination of the manifold in an empirical intuition whereby perception, i.e., empirical consciousness of the intuition (as appearance) becomes possible. (B160).

Again, if conscious perception requires a synthesis, then the representations that are available to be synthesized can only be unconscious.

As we see in the next section, it is not easy to figure out exactly how Kant thinks unconscious representations can provide a basis for synthesizing conscious representations. My point here is that his belief that they must is an integral and unwavering part of his empirical realist epistemology. When first introducing his hypothesis of the forms of intuitions in the *Inaugural Dissertation*, he explains that

just as the sensation which constitutes the **matter** of sensory representation is evidence for the presence of something sensible ... so to the **form** of the same representation is undoubtedly evidence of a certain respect of relation in what is sensed. (AA 02: 393).

Thus, Kant's theory of forms does not commit him to the implausible view that the sensations a cognizer receives are irrelevant to whether he perceives something to be square or triangular; spatial representations reflect something in the sensory data.

In the *Inaugural Dissertation*, Kant distinguished a world of sense from a world of intellect, so that, whatever it was about sensations that was supposed to be reflected in the spatial or temporal properties of representations, it could not be something tied to conceptual representation. This doctrine is changed completely in the *Critique*. As noted, one of its central themes is that cognition requires both intuitions and concepts. Further, he had come to believe that the synthesis that was necessary to form conscious perceptions (the *synthesis speciosa* in the B edition) was carried out by the imagination under the guidance of the understanding (B151, B160).¹⁰ In that case, if he still held that the spatial or temporal properties of a perception reflect something in the sensations, then that something would be reflected in the perception through originally being reflected in the way the sensations were conceptualized.

Were there no reflection of sensory elements—if categories and forms were applied irrespective of the given sensory materials—then Kant's epistemological theory would be liable to the charge he raises against Rationalist metaphysics. This field is rife with errors precisely because its proponents forego the touchstone of experience. So, for example, rather than seeing the idea of a simple soul as a regulative idea of reason (the Psychological Ideal), they take the idea to amount to knowledge:

[It is] indeed very easy for reason, but it also entirely ruins and destroys all natural use of reason according to the guidance of experiences. [It leads the 'dogmatic spiritualist' to bypass] ... for the sake of his convenience, but with the forfeiture of all insight—the sources of cognition that are immanent in experience (A 690/B 718).

And, for reasons we have seen, the 'guidance' provided by experience can only be the guidance provided by unconscious representations. Since this guidance is a pervasive and systematically necessary feature of Kant's view, it is reasonable to believe that he had some notion of how it might be possible.

4 SEARCHING FOR SUBSTANCES AND CAUSES

At the dénouement of the transcendental deduction in the A edition, Kant lays out the central claim of transcendental idealism:

Hence the order and regularity in the appearances that we call **nature** are brought into them by ourselves; nor indeed could such order and regularity be found in appearances, had not we, or the nature of our mind put them into appearances originally. (A125).

Since that order and regularity cannot be independent of sensory evidence—or the guidance of experience would be forfeited—his account of how the understanding puts order into experience would be a promising place to look for his understanding of the relation between unconscious sensory or *a posteriori* elements and the *a priori* forms of cognition.

I quote his subsequent discussion of the issue at some length:

The understanding is always busy scrutinizing [*durchzuspähen*] appearances with the aim of uncovering some rule in them. Rules, insofar as they are objective (and hence attach to cognition of an object necessarily) are called laws. Many laws are indeed learned by us through experience. Yet these laws are only particular determinations of still higher laws. And the highest among these (those under which all others fall) issue *a priori* from the understanding itself. These laws are not taken from experience; rather, they must provide appearances with the latter's law-governedness, and precisely thereby must make experience possible. Hence understanding is not merely a power of making rules for oneself by comparing appearances; understanding is itself legislative for nature. I.e., without understanding there would not be any nature at all, i.e. any synthetic unity in the manifold of appearances according to rules; for appearances, as such, cannot occur outside us, but exist only in our sensibility. (A126-27).

This passage may seem merely to repeat the claim that the regularities found in nature are put there by the understanding rather than to explain it. One thesis is clear: Particular empirical laws that are discovered through comparing observations can be found in the appearances of the senses only because they are species of higher level laws that were put there perhaps by the understanding.

Much later in the text, in the discussion of the Regulative Use of the Ideas of Reason (in the Appendix to the Dialectic), Kant suggests that the understanding succeeds in forming concepts and finding laws, because reason has prepared the realm in which the understanding is to operate:

Hence reason prepares the understanding's realm by these means: (1) by a principle of the **homogeneity** of the manifold under high genera; (2) by a principle of the **variety** of the homogeneous under lower species—and in order to compete the systematic unity, reason adds (3) also a law of the **affinity** of all concepts... (A657/B685).

My concern is not with the details of Kant's claims about the regulative ideas of reason, but with the general picture he presents.

According to the A deduction passage, the understanding operates by scrutinizing appearances to find a rule in them. An obvious way to illustrate this process is through a search for causal laws. The understanding would run through the representations provided to it by the senses to see if any can be understood as instances of causation, as an instance of an object altering from being in state A to being in state B in the presence of some other object C.¹¹ However many instances of A-type properties being succeeded by B-type properties in the presence of objects of type C, it is impossible to conclude that the succession from A to B in the presence of C is necessary. The law that Cs cause objects to alter from state A to state B could never be extracted from sensory data. Yet some sensory data can be interpreted as instances of it.¹² The understanding looks for possible instances of causal rules and when it finds candidates, when A-type properties are always followed by B-type properties in the presence of C, it pronounces the relation to be one of cause and effect.

But how is the understanding guaranteed to succeed? Why must there be rules to be found? It is not enough that the understanding is urged by reason to look for the homogeneous,

although this might be a necessary condition for discovering laws. In a way, success cannot be guaranteed. If there is nothing homogeneous to be found in the data of sense, then the search for laws is hopeless. Even assuming some homogeneity, however, the search for laws of nature will still be doomed unless the understanding not only seeks the homogeneous, but excludes or ignores, the totally irregular. The only way that the understanding's scrutiny in search of empirical causal laws could be guaranteed to succeed is if the appearances had gone through an earlier scrutiny that culled all and only representations that exhibited the regularity necessary to make them possible instances of causal laws. In effect, this earlier scrutiny would be governed by the principle that all alterations that count as such are caused. Under these circumstances, the search for natural laws can succeed and the laws discovered empirically will be species of the higher level law that the only appearances of alterations or events that count as real are those that fall under causal laws—because that law has been put into appearances.

Kant does not present what I have described as an 'earlier' scrutiny in the *Critique*, except perhaps obliquely in the claim that the understanding is constantly scrutinizing. He does so, however, in a Reflection from around 1772-73 that Wolfgang Carl (1989) regards as the first draft of the transcendental deduction. The main point of the Reflection is to draw a contrast between (merely) logical actions or functions and 'real' functions:

The real function consists in the way in which we posit a representation in and for itself; thus it is an action (*a priori*) which corresponds to every *dato* (*a posteriori*) and by means of which the latter becomes a concept ... From these arise all cognition: namely how we can grasp *data* and form something for ourselves that is called cognition. In nature no *data* can come before us unless, when one perceives the laws therein, they correspond to the universal kinds according to which we posit something, because otherwise no laws would be observed, or any object whatsoever, but only confused internal alterations. Therefore, since we can represent objects only by means of our alterations, insofar as they have in themselves something in conformity with our rules for positing and negating, the real functions are the ground of the possibility of the representation of things, and the logical functions are the ground of the possibility of judgments, and consequently of cognitions (R4631, 17.615, see also R1608, 16.34–35).

Kant's view is that *a posteriori* or sensory materials may arrive in the mind, but they can come before the mind as sensory data (perceptual appearances) for human cognizers only if there is something in them that accords with the principles associated with universal kinds (i.e. categories). Only in this way is cognition possible, because the realm in which understanding is to produce cognition is prepared for it.

It is tempting to object that I am misreading a straightforward normative claim as an endorsement of a suspect psychological process. Perhaps Kant's point in the dénouement of the A deduction, the ensuing discussion, and even the Reflection is just that humans use the essential cognitive norm that putative alterations and events that cannot be given causal explanations must be rejected as phantasms. He would certainly endorse this claim. What he is trying to argue in the transcendental deduction and principles chapter, however, is that

the categories of the understanding apply not only to all judgments about objects, but also to everything that is presented in intuition:

The categories of understanding ... do not at all represent to us the conditions under which objects are given in intuition. Therefore, objects can indeed appear to us without having to refer necessarily to functions of understanding, and hence without the understanding's containing *a priori* the conditions of these objects. Thus we find a difficulty that we did not encounter in the realm of sensibility: viz: how **subjective conditions of thought** could have **objective validity**, i.e., how they could yield conditions for the possibility of all cognition of objects. (A89-/B122).

That is, the aim of the transcendental deduction is to show that whatever is represented in (conscious) perceptions must fall under the categorial concepts.¹³ He makes the same point in summarizing the B deduction in section 26:

We must now explain how it is possible, through **categories**, to cognize *a priori* whatever objects **our senses may encounter**—to so cognize them as regards not the form of their intuition, but the laws of their combination—and hence as it were, to prescribe laws to nature, and even to make nature possible. (B159-60).

Given this more ambitious goal, his claim cannot be just that falling under a causal law is a normative principle governing what is to count as an event. It must be that the higher faculties somehow use this principle in working up

the raw material of sense impressions into a cognition of objects that is called experience. (B1).

Otherwise, there would be no guarantee that everything the senses may encounter must fall under the categories. This processing of sensory impressions is not further discussed in the *Critique*, except perhaps in the 'scrutiny' passage, but it seems to be the topic of the Reflection cited above.

Unfortunately, none of this material sheds any light on how the processing of raw materials could operate so that it both depends on the character of the sensations and regiments them under categories. The problem becomes more difficult when we realize that what I have called the 'earlier' scrutiny cannot work in the way that I have presented the understanding as scrutinizing for particular laws of nature. The understanding could not fasten on cases of regular succession in the sensory data, because the senses do not register succession. It is this aspect of Kant's view that stands behind the frequent complaint that his account of the necessity of using the causal concept in the Second Analogy is circular (e.g. Cheng, 1997, p. 368). He argues that humans can determine the succession of their mental states only by tying them to objective succession or events, and so to causation (A193/B238), but he knows that the standard view is that causal laws can be discovered only by observing the constant succession of different states of affairs (A195/B240).

Although Kant does not say what it is about sensations that the scrutiny of the understanding can latch onto, we have a description of the feature: It must be something that is

a reliable indicator of the presence of succession and/or causal relations. Further, he would have been aware of the obvious candidate.¹⁴ Motion, or real motion, was widely understood as a sign of causation; further, common motion was widely understood as an indicator of a single object. What is different now is that we have some understanding of how the brain detects motions.¹⁵ The nervous system is set up so that some higher level visual cells fire only if the lower level cells to which they are connected fire in a particular order, e.g., n_1, n_2, n_3 , whereas others fire only when the lower level cells fire in the opposite order. In effect, these assemblies allow the nervous system to register a point of light, say, moving from left to right or from right to left in the visual field; hence they also allow it to derive right position *after* left position or vice versa. Although the nervous system makes use of temporal relations - it is set up to take advantage of the time lag in which it receives different information - it does not detect time, but motion.

A motion detector singles out sensory data that could be involved in three interconnected types of claims: a light *moves* from A to B, the light was at B *after* it was at A, the *succession* of the state of being at A to the state of being at B is *necessary* or rule-governed. It is thus an ideal candidate for the means by which the understanding scrutinizes sensations in order to find materials that are likely to stand in lawful relations. Those alterations that were unrelated to motion (or to the surrogates of other categorial principles) would fail to be posited as representations of objects or events. Still, the mechanism, as I have described it, does not do justice to Kant's claims that the understanding scrutinizes for rules or that it is guided by reason to look for homogeneity. So the process needs to be more complex. To be presented to the mind as sensory *data*, materials must not only be singled out by a motion detector, but those singled out must be surveyed to see if they contain successions of similar representations and only those which do will be retained as representations of real events. This additional processing would presumably require some further mechanisms which register when sensations are qualitatively similar. With this more complex preceding scrutiny, the understanding can succeed in scrutinizing appearances for the (particular) laws in them.

My claim is not that Kant had a fully worked out theory of how the mind scrutinizes unconscious impressions in order to introduce order into its conscious perceptions. As we have seen, and as he seemed to understand, any such theory would need to invoke physiological mechanisms that he was in no position to discover. Further, I have considered only one category, causation, and I have given no reason to think that Kant was right that similarity was essential to working up sensory impressions into suitable materials for causal cognition. Perhaps humans do not fasten on causal relationships by looking for constant conjunctions, but by seeking a causal mechanism (Ahn and Bailenson, 1996). My concern has only been to show that the scrutiny process that he sketched (in Reflections and briefly in the *Critique*) could be developed in a way that it honored his goals: the order and regularity in the appearances that humans call nature is made possible through the activities of the 'higher' faculties, yet it is still guided by—because dependent on—the receipt of sensations and their particular qualities. It is still grounded in unconscious representations.

5 THE UNCONSCIOUS AND THE NOUMENAL

As I understand it, the beginning of the cognitive process that Kant describes in the familiar opening statements of the Introduction involves unconscious representations:

There can be no doubt that all our cognition begins with experience. For what else might rouse our cognitive power to its operation if objects stirring our senses did not do so? In part these objects by themselves bring about representations. In part they set in motion our understanding's activity, by which it compares these representations, connects or separates them, and thus processes the raw material of sense impressions into a cognition of objects that is called experience (B1, my underscoring).

For reasons we have seen, the representations brought about by objects can only be unconscious. A venerable critical tradition takes a very different view of Kant's account of how cognition must originate. It does not begin with unconscious representations caused by (phenomenal) objects, but with real or noumenal objects affecting a noumenal self and thereby making possible the creation by that self of a phenomenal world of appearances.

McDowell's rejection of Kant's 'transcendental story' of epistemology (McDowell, 1994, p. 41) is rooted in the long-standing view that he must—but cannot legitimately—appeal to *noumena* to explain cognition of appearances. And since *noumena* are, by definition, outside the realm of human concepts, the dependence of Kantian epistemology on *noumena* means that it relies on the myth of the Given. Many careful scholars have agreed that Kant's theory commits him to an incoherent notion of noumenal affection,¹⁶ so the interpretation must rest on fairly substantial evidence. We don't have to look far to find the evidence, since Kant provides it himself in justifying the introduction of the concept of '*noumenon*' in the A edition¹⁷:

But as for the cause why one, being not yet satisfied by the substratum of sensibility has added to the phenomena also *noumena* that only the understanding can think, it rests exclusively [*lediglich*] on the following. Sensibility—and its realm, *viz.*, that of appearances—is itself limited by the understanding so that it deals not with things in themselves but only with the way in which, by virtue of our subjective character, things appear to us. This was the result of the entire Transcendental Aesthetic; and from the concept of appearance as such, too, it follows naturally that to appearance there must correspond something that is not in itself appearance. For appearance cannot be anything by itself and apart from our way of representing; hence if we are not to go in a constant circle, then the word appearance already indicates a reference to something the direct representation of which is indeed sensible, but which in itself—even without this character of our sensibility (on which the form of our intuition is based)—must be something, i.e., an object independent of sensibility.

Now from this consideration arises the concept of a *noumenon*. But this concept is not a determinate cognition of some thing, but signifies only the thinking of something as such—something in which I abstract from all form of sensible intuition. (A251-52, my underscoring).

That is, it is necessary to find some correlate of sensory appearance—the thing whose representation is sensible. Kant believes that it follows from transcendental idealism that the thing in question cannot be characterized in terms of the forms of intuition, because those elements of cognition are not received from objects, but added through the processing of what

is received. Since the object must then be understood in abstraction from such forms, it can only be thought in this abstract manner and not sensed, and thus should be understood as a creature of the mind or as a *noumenon*. Notice, however, that this claim seems inconsistent with the claim on which it rests—namely that the direct representation of this thing is sensible.

There is also a serious, but understandable, flaw in Kant's reasoning. By his theory, a green thing, such as a tree, does not produce a spatial representation in a subject when it strikes her senses; it conveys only greenness and other sensory qualities. Now assume the standard account that objects produce sensations of green in humans because some feature of their surface structures reflects green light that is received by the cone cells of the retina. Even if he is right that the immediate effect of objects on the senses conveys no spatial information, it hardly follows that spatial predicates cannot be used to describe what it is in objects that enables them to produce sensations of green. Alternatively, whatever information is conveyed to cognitive subjects through objects stirring their senses, cognitive theorists are not restricted to that information in describing how objects stir the senses.

Kant's error is understandable, because the empirical psychology of his day was limited to introspection. In a passage in the *Amphiboly of Concepts of Reflection*, he returns to the difficulty of determining the causes of sensations and pins the problem on the inadequacies of inner sense:

[W]e have not been given [the ability] to observe even our own mind for it in lies the secret origin [*Ursprung*] of our sensibility—by means of an intuition other than that of our inner sense. Sensibility's reference to an object, and what may be the transcendental basis of this objective unity, this doubtless lies too deeply hidden so that we, who are acquainted even with our own selves only through inner sense and hence as appearance, might with so unfitting an instrument of our investigation discover anything other than what are always in turn appearances—whereas it was the nonsensible cause [*Ursache*] of those appearances that we hoped to explore (A278/B334, my underscoring).

The immediately preceding discussion highlights the problem of description, noting that humans could not understand an account of the cause of appearances even if it were offered, because they cannot understand anything that does not supply an intuition to give the words meaning (A287/B334). As noted, this problem can be overcome by contemporary science. In the text just cited, the problem is one of access. The states to which inner sense has access are inner appearances or conscious perceptions. With no access to what is immediately received by the senses, there is no opportunity to investigate the reception of information by the senses in order to determine how appearances are constructed on that basis. This limitation is consistent with his crucial appeal to the method of isolation: The method works by determining properties that cannot be received by the senses; it cannot reveal how the senses receive the information they do or how that information is used by the mind's active faculties to form appearances.

The passage from the chapter on phenomena and *noumena* was omitted from the second edition. Still, it was present in the first edition for all to see, and it seems to give Kant's *imprimatur* to the interpretive thesis that transcendental idealism is committed to noumenal affection. Fortunately he also returns to the issue of the reception of sensory data in section

6 of the Antinomy of Pure Reason. The focus of the passage is another key concept, that of a ‘transcendental object’:

Our power of sensible intuition is, in fact, only a receptivity, i.e., a capacity to be affected in a certain way with representations. The relation of these representations to one another is a pure intuition of space and time (which are nothing but forms of our sensibility); and insofar as these representations are connected and determinable in this relation according to laws of the unity of experience, they are called **objects**. With the nonsensible cause [*Ursache*] of these representations we are entirely unacquainted, and hence we cannot intuit it as object. (1) For such an object would have to be represented neither in space nor in time (which are merely conditions of sensible representation), and without these conditions we cannot think of any intuition at all. We may, however, call the merely intelligible cause of appearances as such the transcendental object, just so that we have something that corresponds to sensibility, which is a receptivity. (2) To this transcendental object we may attribute the whole range and coherence of our possible perceptions, and about it we may say that it is given in itself prior to all experience. But appearances are given, in conformity with the transcendental object, not in themselves but only in this experience. For they are mere representations, which signify an actual object only as perceptions; they do so, *viz.*, if such a perception coheres with all others according to the rules of the unity of experience (A494-95/B522-23, my numbering).

The point of the passage I label (1) is to explain the difficulty in characterizing the correlate of sensory appearances, or that which corresponds to sensible representations. Kant maintains that given the theory of transcendental idealism, it cannot be described in terms of time or space. The issue here is thus exactly the same as that in the passage from the A edition Phenomenal/Noumenal chapter: There must be correlate of a sensible appearance, yet that correlate could not be represented sensibly [even though it is directly sensed].

So how is that which gives what the senses receive to be characterized? Kant solves the problem in this passage by introducing an abstract description, ‘transcendental object.’ Since he describes the transcendental object as ‘nonsensible’ in segment (1), it is somewhat shocking that he then claims in the segment I indicate as (2) that humans attribute to it the whole range and coherence of their possible perceptions. This abrupt change has led Henry Allison to claim that the passage presents two very different roles for ‘transcendental object’ in Kant’s theory (1983, 251-52).¹⁸ One difficulty with Allison’s hypothesis is that Kant’s discussion flows seamlessly from the occurrence of this expression in (1) to its occurrence in (2). The second usage is explicitly tied back to the first by the anaphoric description, ‘to this transcendental object.’ I offer a simpler hypothesis.

What Kant means by ‘transcendental object’ in the Antinomy passage is basically what he meant by the ‘transcendental object=X’ at A105, namely, a formal description of an object of empirical cognition. Since, roughly,¹⁹ any object of empirical cognition must (a) cause sensory representations in subjects and (b) have properties that could all belong to one object both characteristics are part of the description. With the notion of a ‘transcendental object,’ he is able to solve what he takes to be the difficulty of characterizing the correlate of sensation without using forms of intuition—and without sacrificing his empirical realist principles. Even if humans cannot have an intuition of the correlate of sensation, they can still think abstractly about aspects of empirical objects as the causes of sensations. As indicated in condition (b)

above, at the end of the cognitive process, subjects attribute a range of sensory and other properties to empirical objects. The ordinary person has no qualms about characterizing the causes of sensations as objects with various properties. By contrast, the scientifically informed epistemologist who knows the limits of the senses believes (falsely, it turns out) that he must be circumspect in characterizing the correlate of sensibility, and so falls back on an abstract description, 'transcendental object.' In introducing the concept of the 'transcendental object' he thus saves the phenomena as causes of sensations. What he does not do in the passage is appeal to noumenal causes.²⁰

As we have seen, however, in the first edition, Kant employed the concept of a '*noumenon*' to characterize that 'which corresponds to appearance.' Since a '*noumenon*' is a creature of the mind—i.e. something thought of as independent of sensibility, there is something very odd about this terminology. He acknowledges as much, with the admission that the representation of this correlate, is 'indeed sensible' (A252, cited above). The discussion takes an even stranger turn after the introduction of the concept '*noumenon*.' He points out that it is entirely negative—meaning that it with it we think of something as such — something in which [we] abstract from all form of sensible intuition. (A252, also cited above)

He goes on to discuss the notion of a 'transcendental object':

[this is] the wholly indeterminate concept of something as such. This object cannot be called the *noumenon*. For I do not know concerning it what it is in itself, and have no concept of it except merely the concept of the object of a sensible intuition as such—an object which, therefore, is the same for all appearances. I cannot think it through any categories: for a category holds only for empirical intuition in order to bring it under the concept of an object as such. (A253, my underscoring).

Given the Antinomy passage, which is common to both editions, and the Amphiboly passage, which also labels that which is the basis of appearances a 'transcendental object'²¹ and which is also common to both editions, he is being inconsistent. Both the '*noumenon*' and the 'transcendental object' correspond to appearances, but they are not to be identified.

The difference between the concept of '*noumenon*' and that of 'transcendental object' is that the former is a label for an object thought of as independent from any form of sensible intuition at all, whereas the latter is a label for an object thought of as independent from any particular form of sensible intuition—as an object of sensible intuition in general. This difference suggests that the way to resolve the inconsistency is to drop the already implausible idea that the *noumenon* is that which is directly represented sensibly. And that appears to be what happens in the second edition, where the two passages assigning the correlate of sensation to the 'transcendental object' are retained and the passage assigning it to the '*noumenon*' is dropped. The argument for the necessity of using the concept of a *noumenon* in the second edition is reduced to the consideration raised at the end of the first edition (and repeated in the second):

The concept of a *noumenon*, i.e. of a thing that is not to be thought at all as an object of the senses but is to be thought (solely through a pure understanding) as a thing in itself, is not at

all contradictory; for we cannot, after all, assert of sensibility that it is the only possible kind of intuition ... (A254/ B310).

That is, what transcendental idealism implies is that since some properties of objects reflect the forms of human sensibility, it is possible to think of objects that are independent of those (or any other) forms of sensibility. On this point, I agree with the main conclusion of Gerold Prauss's exhaustive study of Kant's uses of 'thing in itself,' 'transcendental object,' and '*noumenon*.' This 'restriction' argument is the central consideration in favor of the necessity of using a concept of '*noumenon*' (Prauss, 1974/1989, p. 90ff.).

By contrast, Kant's 'considered' (i.e. second edition) view is that the origins of human cognition are beyond its purview, not because they are noumenal, but because they are inaccessible by either human sense or intellect. They are inaccessible by sense, because outer sense cannot divulge the workings of the mind (as Kant believes) and inner sense can display only conscious perceptions already cloaked in the form of time. And since temporal determinations do not enter through the senses, what does enter is not an inner appearance/ conscious perception. Neither can this process be understood intellectually, since the mind's intellectual resources—the categories—can be employed to produce knowledge only when they can be applied to intuitions (A253, cited above, second underscored segment). Still, despite the human incapacity to know how cognition works in any detail, some general features are known (and admitted by all in debates about cognition): knowledge of particular states of affairs and of particular concepts can be acquired only by causal interaction with objects. Hence the confident assertion at B1 that there can be no doubt that cognition begins with objects stirring the senses. Kant believes that humans can also come to understand through reading the *Critique* (or through their own efforts²²) that their cognition must (or seems to) employ certain universal principles as norms for empirical reality. Thus they may have an explicit—but certainly have an implicit—abstract notion of a sensible object as such, an object that corresponds to the sensations it causes and whose properties meet certain standards of coherence. So, although he emphasizes the opacity of cognitive processes for humans, he thinks that they are far from clueless about the bases of their knowledge.²³ To capture what humans do know implicitly (and possibly explicitly) about objects of cognition, while acknowledging what they don't know, he introduces the concept of a 'transcendental object.' This concept, which is importantly different from that of a '*noumenon*,' fits very well with his account of the blind synthesizing of obscure representations in the transcendental deduction.

6 HOW CAN AN UNCONSCIOUS GIVEN 'GUIDE' COGNITION?

McDowell believes that Kant would have avoided the myth of the Given if he had not offered a transcendental story of noumenal affection (1994, 41, 46). Since noumenal affection is not Kant's considered view, it may seem that all is fine. In fact, the situation is more complicated. In a recent essay, McDowell endorses the Kantian position that while cognition depends on both intuitions and concepts, there is no reliance on an aconceptual Given, because

the unity of intuitions is also a result of the activities of the understanding that produce the unity of concepts (McDowell, 2008, p. 8). Because of this fact

an intuition's content is all conceptual, in this sense: it is in the intuition in a form in which one *could* make it, that very content, figure in discursive activity. (McDowell, 2008, p. 8).

This position is part of Kant's view. It captures his claim that cognition is possible only because reason 'prepares' the field for the understanding in such a way that all perceptions can be brought under the categories (and so under concepts). It does not, however, do justice to his insistence that intuitive and conceptual representations must be anchored in sensations—in the effects that objects produce in cognizers.

McDowell takes Kant, as well as Sellars, to reject the idea that

sensitivity by itself could make things available for the sort of cognition that draws on the subject's rational powers (McDowell, 2008, p. 2).

This claim admits of two interpretations. On one it is incontestable: No cognizer could justify a perceptual claim by appealing to a sensation—especially one of which he is unconscious. On the other, however, it denies exactly what Kant asserts: The understanding is able to direct the imagination to construct conscious perceptions only because sensitivity has made available a pattern of sensations that can serve as an input to the mechanisms that carry out the construction.

McDowell may be struck by the fact that when Kant characterizes the *synthesis speciosa*, he lays great emphasis on the spontaneity of the understanding in directing the synthesis and contrasts that with the receptivity of sense:

The synthesis of imagination is an exercise of spontaneity, which is determinative, rather than merely determinable, as is sense... (B151-152).

But three cautions are in order. Although the synthesis of apprehension is spontaneous, it does not produce concepts, but intuitions. Further, the production of the intuition is not a rational, but a causal process, since both the materials and the processing of them are unconscious. Finally, although the understanding and its imaginative synthesis are determining rather than determinable, they cannot float free of the character of the sensations or Kantian epistemology would lose the guidance of experience. The understanding may dispose, but only when the senses propose—only when they make available a pattern of sensations that can be determined in one of the ways in which the understanding is able to determine.

In a recent paper, Hannah Ginsborg has objected to the approach to the given just sketched on the grounds that it concedes too much to Empiricism and so ends up begging the question against the position. It concedes too much because Kant's

empiricist opponent might well simply insist ... that, insofar as the unconceptualized manifold determines whether an object is to be represented

as a substance endowed with the quality of being green, or as a substance endowed with the quality of being blue, then it is, *eo ipso* representing what is given to us as green or as blue. (Ginsborg, 2006, p. 72).

I think the term ‘determine’ is not quite right. As I understand Kant’s view of the relation between a sensation and a perception, it is analogous to the relation between a planar projection and a solid object.²⁴ A planar projection does not determine the object of which it is a projection, since differently sized and oriented objects can produce identical projections. The object information is not given in the projection. Nonetheless, the projection provides guidance for its three-dimensional interpretation; the interpretation does not float free of the projection. By analogy, the patterns and characters of sensations do not determine the conscious perceptions to which they give rise, because they don’t determine the types and patterns of sensations that can be made into conscious perceptions.²⁵ The understanding does that. In actual cases, however, the determination can be carried out only when a suitable determinable has been made available by the senses. Hence the question is not begged against the Empiricist, since the materials made available through the senses are guiding but not determining in producing the conscious perception that is able to provide a reason for a judgment. On Kant’s picture, the unconscious given and the conceptual capacities of the understanding provide constraints on each other in the production of an intuition that can be the basis of a rational belief.

As I present it, the Kantian solution to the problem of the myth of the Given has a very odd feature. Although the understanding is supposed to be spontaneous and the basis of rational thought, its ‘direction’ of the synthesis of apprehension by the imagination is a ‘blind,’ ‘brute causal’ process. Both McDowell and Ginsborg recognize that the understanding can be involved in both the production of intuitions and the production and use of concepts only if it operates in somewhat different ways in the two cases (Ginsborg, 2006, p. 91²⁶). Still, it is reasonable to object that my Kant has the understanding functioning in perception in a most un-understanding fashion. It seems to operate here just like the mechanical processes of the animal mind that Kant, Leibniz, and other moderns used as the contrast case for the human mind.

In a sense, this is correct. The only ‘rationality’ involved in the understanding’s direction of the synthesis of apprehension is that of Mother Nature; it is her ‘norms’ that lead to the ‘positing of a representation as such’ (R4631, 17.615) or to the construction of a conscious perception (A120n.). There is, nonetheless, a crucial difference between the cases, one that provides a warrant for Kant’s claim that the understanding is at work in constructing perceptions. In the human case, Nature’s norms have an additional purpose, because they are useful to humans in a special way. Unconscious processes work up the raw materials of sensation in such a way that they are apt for the understanding’s capacity to look for rules in the appearances of conscious perception. In this way, the understanding can discover or make explicit the rules operating in the phenomenal world and so come to use such rules normatively, by testing and rejecting them, by appealing to them to explain why the world is as it is. Kant could assign the task of processing sensations into understanding-friendly conscious perceptions to a different higher faculty. As noted, he sometimes assigns it to ‘reason.’ Since the fit is so close—representations are posited as representations of objects insofar as they conform to the principles associated with the categories

of the understanding—it seems extravagant to hypothesize two faculties that operate in accord with the same basic principles. So he opts instead for one faculty with two modes of operation, one blind and one where the cognizer can be aware of his representations as instantiating rules and so of the rational relations among them.

Although I have defended Kant's use of unconscious representations in avoiding the Myth while preserving the essential role of the sensory given in ways that his successors, as well as his predecessors, have not always managed, his solution comes at a high cost. It is only because he insists that human cognition is possible only if it conforms to the categorial principles that the first scrutiny works. Without this (in essence simplifying) assumption, he could account for the inevitable suitability of conscious perceptions for the application of concepts only by the implausible proposal that rules associated with all concepts conjointly act as norms for positing representations of objects as such. Similar hypotheses are currently on offer, but most philosophers reject them as extravagant. Since most philosophers are equally incredulous about Kant's categories, it's far from obvious that looking to his philosophy for a dissolution of the myth is going to be fruitful. This is not surprising, because he wasn't trying to solve the problem of the *a posteriori*, the given, but that of the *a priori*, the constructed. That's why the solution his theory implies for the given depends on a commitment to *a priori* categories.

ABSTRACT: Kant appeals to unconscious representations for reasons that are deeply connected to his distinctive theory of cognition. He is an empirical realist, accepting the Empiricist claim that cognition must be based in sensory data. He is an idealist about spatial and temporal representations. He believes that human perception is always of objects or events with temporal and spatial properties. It follows from these three claims that the sensations that must begin the process of cognition lack spatial and temporal properties and so are not perceived, but unconscious.

KEY WORDS: unconscious representation – cognition – Leibniz - personal identity - empirical realism.

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NOTES

* First published in P. Giordanetti/R. Pozzo/M. Sgarbi (eds.), *Kant's Philosophy of the Unconscious*, Berlin/New York, W. de Gruyter, 2012, pp. 5-36.

2 Patricia Kitcher is Roberta and William Campbell Professor of Humanities and Professor of Philosophy at Columbia University. She works on Kant's theoretical philosophy, especially his theories of mind and cognition. A more recent interest is Kant's moral psychology.

3 McDowell (2008) revises this estimation. There he suggests, in essence, that Kantian intuitions provide a model for a non-objectionable given. As I argue in section 5, however, intuitions can play their role in Kant's empirical realist epistemology only because they depend on materials given in unconscious sensations.

4 I owe this objection to Philip Kitcher.

5 The thesis he criticizes is that a Monad can change from having one perception to having another through the work of an inner principle (1.411).

6 The oft-recounted story from Hamann is that Tetens's book lay open on Kant's desk as he wrote the *Critique*. See BONA-MEYER (1870, p. 56). Kant also reports his reading of Tetens in a letter to Marcus Herz of April 1778 (10.232).

7 Kant's view seems to be somewhat different from Condillac's, since he focuses on the unconscious acts of perceiving the letters, rather than on the unconscious perceptions of the letters.

8 References to Kant's works, other than the *Critique of Pure Reason*, will be to Kant 1900—and will be cited in the text by giving volume and page numbers from that edition. References to the *Critique of Pure Reason* will be in the text, with the usual 'A' and 'B' indications of editions. In providing English translations, I usually rely on PLUHAR (1996), but I also use KEMP SMITH (1968), and GUYER and WOOD (1998) at points. I do not, however, follow Pluhar rendering 'Vorstellung' as 'presentation,' but use the more standard 'representation.' When I alter a translation beyond rendering 'Vorstellung' as 'representation,' I indicate that the translation is amended. In all citations I follow the suggestion of Guyer and Wood and indicate Kant's emphasis with boldface type. When citing Kant's literary remains, I follow standard practice and cite the R (for *Reflexion*) number assigned by the editors of the Academy edition.

9 Beyond *Anthropology from a Pragmatic Standpoint*, Kant's views on anthropology are available in the form of student lecture notes from his Anthropology courses, now available in Vol. 25 of the Academy edition (Kant 1900-), and in his own notes published in Vol. 15 of that edition. Although the student notes cannot be presumed to be accurate representations of Kant's changing views (especially since they are not actual lecture notes, but later transcriptions that are often hard to date), I appeal to them when they are consistent with, but amplify, views expressed in his published work. For fuller discussion of this issue, see my 2011, chapter 2 and accompanying endnotes.

10 In notes that are often regarded as an early draft of the transcendental deduction, the so-called *Duisburg Nachla*, Kant had suggested that the syntheses of the understanding depend on those of apprehension: "Everything that is given is thought under the universal condition of apprehension. Hence the subjective universal of apprehension is the condition of the objective universal of intellection" (R 4675, 17.653.).

11 Here I follow MELNICK (1973) and, subsequently Guyer (1987) in interpreting Kant as taking causation to be a three place relation among powers or events, and earlier and later properties of substances.

12 My discussion here is dependent on Hannah Ginsborg's clear and useful analysis of the argument of the Appendix to the transcendental ideal (GINSBORG, 1992 draft)

13 The view that the transcendental deduction is supposed to establish the applicability of the categories to anything that can be sensed is a central theme of CARL'S (1989, 1992, 1998). See also GINSBORG 2006.

14 Kant links the concept of succession to mental motion: "What first produces the concept of succession is motion, taken as act of the subject (rather than as a determination of an object) and consequently as the synthesis of the manifold in space". (B154-55) His point here is not that motion indicates succession or causation, but that the representation of succession presupposes a spatial representation, which in turn presupposes the mental act of constructing a spatial representation. In making the point, however, he tacitly acknowledges that object motion is a standard way of explaining the representation of succession.

15 Here I follow HARPER'S (1984) helpful presentation of the relevant science.

16 Among others, F. H. JACOBI (1787/1983) was the first to offer this objection between the editions of the *Critique*; STRAWSON (1966) provided its canonical 20th century version in terms of the notion of 'noumenal affection'; ADAMS (1997) offers a recent version.

17 Other passages also suggest noumenal affection, but the passage I discuss provides the strongest support. Further, as I show in my 2011, they can be handled in the same way in which this key passage is handled.

18 The two roles are that of the 'correlate' of sensibility and the cause or ground of the "matter" of human knowledge in general. (ALLISON 1983, p. 251-52)

19 I say 'roughly,' because I am leaving out objects that cannot be sensed, such as the other side of the moon, or objects that can no longer be sensed, because they existed in the past. Kant takes these sorts of objects to be knowable by a chain of inference from objects that can be sensed (A225/B272-A226/B273) and A493/B521). The discussion of how to understand receptivity is introduced in terms of the problem of knowledge of the past.

20 On this basic point, I am in agreement with ALLISON'S analysis (1983, p. 251-54).

21 This is the text: "The transcendental object, however, which may be the basis of this appearance that we call matter, is a mere something, about which we would not understand what it is even if someone were able to tell us. For we cannot understand anything except what carries with it, in intuition, something corresponding to our words". (A278/B334)

22 For further discussion, see Chapter 13, section 4 of my 2011.

23 This point is crucial for Kant, since he thinks that what is distinctive about human cognition (as opposed to 'lower' types of cognition common to animals) is that humans know the reasons for their judgments. I offer evidence for this claim in Chapter 9, section 3 of my 2011.

24 This analogy would have been familiar to Kant, because Leibniz used it in the *new Essays* to characterized the relation between primary and secondary qualities (1765/1982, p. 131). On the other hand, I've used the analogy before (1999) in a discussion with which Ginsborg is familiar, so she may not find it persuasive (though the context was somewhat different).

25 GINSBORG (2006, p. 73) rejects this sort of account on the grounds that it undermines the distinction between empirical and a priori concepts. As a general point, this is correct, but on Kant's view, empirical concepts are merely specifications of categorial concepts.

26 See also LONGUENESSE (1998, p. 63).

FENÓMENO Y FENOMENOLOGÍA EN EL PERÍODO CRÍTICO DE KANT¹

[*PHENOMENON AND PHENOMENOLOGY IN
KANT'S CRITICAL PERIOD*]

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1. EL FENÓMENO Y LA RENUNCIA AL FUNDAMENTO. EL ATISBO DE UNA FENOMENOLOGÍA EN LAMBERT

Como es sabido, Kant toma de Lambert el término “fenomenología”. Estamos ante un término infrecuente que aparece en la *Dissertatio*, pero sobre todo en la correspondencia entre 1770 y 1772. Pero Kant también toma de Lambert el sentido de la fenomenología, que es básicamente negativo. Para Lambert la fenomenología es una lógica de la apariencia. Kant no renunció nunca a este sentido negativo, si bien pronto dejó de utilizarlo. En una obra posterior, articulada conforme a la arquitectura de la crítica, los *MA*, recuperará el término para dar nombre a los cuartos principios metafísicos de la naturaleza, de modalidad, por tanto con un sentido positivo. Sin embargo, ya desde la obra precrítica podemos reconocer un sentido constante y obstinado, vinculado con una lectura del fenómeno como aparecer inalienable. Desde esta lectura vamos a ordenar nuestro trabajo.

Encontramos dos puntos de coincidencia entre Lambert y Kant.³ El primero tiene que ver con el vínculo entre apariencia e ilusión. Lambert entiende la fenomenología como el trabajo de distinguir la verdad de lo que no es la verdad, donde incluye al error, *Irrthum*, pero también a la apariencia, *Schein*. En este sentido, la verdad no se opone sólo a la falsedad. La verdad también se opone a un particular modo de presencia, que es la apariencia. Otra traducción de *Schein* es ilusión, que es como la encontramos frecuentemente vertida en la *Dissertatio*. En cualquier caso, la verdad y lo que se opone a ella, la no-verdad, se encuentran en un ámbito común, que es el de lo que se muestra. Por eso lo que conjura la no verdad es una fenomenología. La verdad está en un particular modo de aparecerse, que es el fenómeno,

mientras que la no-verdad tiene su propio aparecer consistente, que es la apariencia. Por eso para Lambert no hay sólo una doctrina del pensamiento, la *Dianología*. Toda vez que la verdad también se muestra, y que es un hecho que se se muestra equívocamente, todavía deberá distinguir entre la doctrina de la verdad o *Alethología* y la doctrina de la apariencia, que es la *Phenomenología* propiamente dicha. La fenomenología no se dirige a la verdad en un sentido meramente lógico; la fenomenología se ocupa de la verdad metafísica.⁴

Lambert no desecha totalmente la condición apariencial de la verdad. Ciertamente los términos en que Kant y Lambert piensan el fenómeno y la apariencia no se pueden avenir. Lambert entiende que Kant, al hacer de espacio y tiempo “entes imaginarios” (*MSI*, AA 04: 404), ha caído en el idealismo. Sin embargo, aunque para Lambert espacio y tiempo no dejan de ser apariencia eso no significa que sean simplemente nada. Espacio y tiempo no son falsos, lo que haría de ellos una nada lógica, un oxímoron, sino que *son* apariencias. Su consistencia es otra que la meramente lógica. Lambert expresa esto distinguiendo entre “apariencia real”, *reeler Schein*, de parte de la que quedan espacio y tiempo, y “apariencia vana o vacía”, *leeren* (carta a Kant, AA 10: 110), que es la ilusión. Lo aparente no es lo real, pero tampoco es nada. ¿Y qué puede haber de real en lo que es sola apariencia?. Lambert acepta que en la apariencia cabe encontrar un orden. Para Lambert la sensibilidad no puede ser fuente de verdad, así que este orden queda de parte del pensamiento. No obstante, importa comprender que el rango fenomenológico de la distinción de Lambert no es tanto que distinga lo real de lo aparente, que no deja de oponer, sino que de una consistencia inédita a la apariencia, aunque, y esta es la dificultad, *sin dejar de ser apariencia*. La clave que anticipa la posibilidad del fenómeno kantiano es que pueda haber “una apariencia que *nunca engaña*” (AA 10: 110; el subrayado es mío).

Esta consistencia de la apariencia es un modo fenomenológico de comprender el mostrarse, que demanda un ámbito de mostración previo a la distinción entre apariencia engañosa y apariencia cabal. Para ello ante todo hay que desprenderse de la exigencia de dar con un fundamento de lo que se muestra. La apariencia en general tiene que ser irreducible. En Kant ésta ha sido la razón de buena parte de los enredos en torno a la noción de *Erscheinung*. Por eso vamos a referirnos a una indicación de Lambert muy sugerente y atinada, que luego aparecerá en la solución kantiana.

Lambert está buscando un método. Esta impronta metódica es fundamental para comprender también el sentido de la crítica en Kant. Concretamente Lambert va a tomar como modelo el método de los astrónomos. Este método consiste en elaborar la teoría a partir de los *Phenomena* observados, esto es, a partir de los datos recogidos en las efemérides. La teoría no es una explicación por las causas sino una interpretación del orden de los efectos. La teoría hace comprensible la apariencia desde la apariencia misma, sin necesidad de dar con el fundamento. Lambert lo expresa claramente cuando dice que el fundamento “o bien no se descubrirá nunca o sólo en el futuro” (*Br*, AA 10: 108). Dicho de otra manera, hay que, si no renunciar al fundamento, sí dejarlo a un lado. Pensemos que algo así es la reducción del fenómeno. Por eso Lambert llega a decir que espacio y tiempo son apariencias reales, toda vez que lo que tiene lugar en ellas “se rige por la apariencia [esto quiere decir que es lo que se ve, ni más ni menos: JGF] con tanta precisión y constancia como puedan hacerlo las verdades geométricas” (AA 10:

111). De este modo se cumple la que bien podríamos considerar como *premisa fenomenológica*, que consiste en suponer que, sin salir de tales apariencias, tiene que poder encontrarse “algo más que la sola apariencia” (AA 10: 110). Otro modo de expresar una tal premisa es que lo que se muestra es *fundamento de sí*. En el mismo sentido hay que hacer notar que Lambert habla de la verdad de la apariencia en tanto que “para nosotros”, *für uns* (AA 10: 109), lo que no es una declaración idealista sino una apreciación coherente, fenomenológicamente hablando, con la renuncia al fundamento.

Aunque Lambert entiende que hay algo verdadero en la apariencia, para él esto verdadero queda de parte del pensamiento. Kant no seguirá este camino. En la *Crítica* vendrá a dar cuenta de la sensibilidad como condición de tales verdades, en esa particular síntesis de pensamiento y sensibilidad que es el uso matemático. Para Kant el problema no va a ser sólo que se ha dejado fuera a la sensibilidad a la hora de comprender la verdad, y con ella también la apariencia. El problema es que esto ha sucedido porque no se ha comprendido rectamente la sensibilidad. No se ha tenido en cuenta que también alberga condiciones formales de la experiencia, y no sólo del conocimiento matemático (en relación al cual, como veremos en los *MA*, se revelará toda su potencia fenomenológica), y que esto es posible precisamente porque rinde un objeto que es finito. No se ha reconocido que su *potencia de verdad*, si puede decirse así, está no sólo en lo observado sino incluso en lo sentido (que es, como recuerda Kant en B 68, la dificultad de “toda teoría”).⁵ No obstante, reconocer la capacidad de la apariencia de acoger la forma, ésa es la aportación de Lambert.

2. LA DOBLE FAZ DE LA FENOMENOLOGÍA

En Kant el sentido de la fenomenología tiene que ver con la interpretación de la sensibilidad. Pensemos que, toda vez que el problema de la síntesis no está todavía en el horizonte de la *Dissertatio*, la fenomenología esbozada aquí tiene que ser leída contando con esta falta. Sin embargo, tanto la herencia de Lambert como el modo genuinamente kantiano de comprender la sensibilidad hacen de la fenomenología una doctrina de la sensibilidad genuinamente crítica.

Para Lambert la fenomenología es negativa por cuanto tiene que depurar la ilusión. En el caso de la fenomenología de Kant, la cuestión no está tanto en distinguir la verdad y la apariencia en lo que se muestra como en reconocer y en separar el distinto rendimiento de la sensibilidad y el entendimiento en el conocimiento. En los años setenta, aun cuando el conocimiento no se comprende todavía como síntesis, ya se ha hecho presente el problema fundamental así como el modo de este problema. El problema de la metafísica es que confunde el conocimiento sensible y el conocimiento intelectual (en la *Dissertatio* aparece un primer esbozo de las antinomias). El modo que adopta este problema es el de la figura lógica de la *subrepción* (en el período crítico, la figura que asumirá la problematicidad de la metafísica será la de la dialéctica; ahora veremos por qué). Para evitarla debe ponerse coto a cada uno de los términos que se confunden de de la sensibilidad. Por eso hace falta un saber de los límites de la sensibilidad, que es la fenomenología, cuya contraparte será un saber de los límites de la razón, que queda de parte de la metafísica (*Br*, AA 10: 129). Esta división conforma el proyecto crítico

que Kant expone en la carta a Herz de febrero de 1772. Sin embargo, aunque Kant no tiene todavía clara esta estructura en la *Dissertatio*, los principios del mundo sensible ocupan ya una parte separada, por lo que la tarea que consiste en trazar metódicamente la distinción entre lo sensible y lo inteligible está ya decidida. Esta es la razón de que la fenomenología presente una doble faz.

Por una parte, la fenomenología es una ciencia “meramente negativa” (carta a Lambert de 1770; cf. AA 10: 98). Kant concibe la fenomenología al tiempo como una parte que puede separarse de la metafísica, pues la verdad del fenómeno puede ser desglosada, pero también constituye una parte que debe separarse de la metafísica, que es donde toma su cariz negativo, pues la confusión entre fenómeno y apariencia es algo inalienable. Podría decirse que en Kant *el punto de partida de la fenomenología no es el error sino la confusión*.⁶ La fenomenología, pero también el fenómeno, deben entenderse *ab initio* y de consuno con el doblez del límite y del trabajo del límite. La fenomenología es *meramente* negativa toda vez que el límite restringe al tiempo que asegura. Como luego para la crítica, la primera evidencia de la fenomenología es la constatación del gozne desquiciado entre conocimiento sensible y conocimiento intelectual. La fenomenología, igual que la crítica, es un trabajo del límite que busca poner en claro la distinción perdida. El límite es ante todo preciso y no debe ni trastabillarse ni fluctuar (debe buscar una delimitación cuya seguridad sea equiparable a una “certeza geométrica”; cf. *Prol*, AA 04: 317). Para lograr esta claridad deben asegurarse las distintas facultades y sus fuerzas. En esto reside el doblez de la noción de límite. La posición de un límite *encierra y restringe un espacio tanto como lo asegura*. El tercer Capítulo de la Analítica trascendental, como también la entera *Crítica*, confirman este extremo. La “doctrina de la sensibilidad” (así es llamada en la *Crítica*: B 307) es una doctrina que excluye la apariencia negativa, pero precisamente a cuenta de a cuenta de sostener el fenómeno y su verdad (*KrV*, B 307). Como Kant ya deja claro en la *Dissertatio* (AA 02: 411), en la confusión entre conocimiento sensible y conocimiento intelectual no sólo pierde la metafísica sino también la fenomenología. La fenomenología no es una objeción a la sensibilidad; tampoco una rectificación del conocimiento sensible. La fenomenología es una *fundamentación* del conocimiento sensible y, hasta donde tenga que hacerlo contra el dogmatismo racionalista, también es una *rehabilitación* de aquél. Ahora bien, sostener, como hace Lambert, que la fenomenología es una lógica de la ilusión conduce a oponer contradictoriamente el fenómeno y la apariencia, lo que priva a ambos de cierta consistencia, que a nuestro juicio es rigurosamente fenomenológica. En efecto, Kant reconoce algo más que la distinción entre apariencia y error o ilusión. El fenómeno se convierte en Kant en algo irreducible; pero la ilusión, también.

Por otra parte, la fenomenología es una “ciencia enteramente particular”. Kant habla de una fenomenología sin más, überhaupt (AA 10: 129), o también de una *phaenomonologie generalis* (como dice en una carta a Lambert de 1770; AA 10: 98). ¿Por qué? Para empezar porque la sensibilidad rinde un conocimiento verdadero (*MSI*, AA 02: 397). Este rendimiento tiene todo que ver con el conocimiento matemático y con su reconocida condición formal. Pero también tiene que ver con el hecho de que su consistencia guarda un vínculo indisoluble con la realidad, que es por lo que Kant habla de mundo (sensible). Por ello resulta relevante que la sensibilidad pueda ser aislada, porque así demuestra que puede ser el fundamento de una

ontología posible. De hecho, la forma que descubre la fenomenología habilita la presencia de los objetos de la naturaleza (*MSI*, AA 02: 404-405).

Convengamos que algo del carácter rigurosamente fenomenológico que Kant anuncia en su concepto de fenomenología, tanto como en el de metafísica, está en la *ambigüedad* del juego entre conocimiento y objeto de conocimiento. El fenómeno es una presencia habilitada por un ámbito, para empezar el de las intuiciones puras, que son formas o ámbitos formales (Kant llama en la *Dissertatio* “Todo formal” a espacio y tiempo –AA 02: 402). Este rango fenomenológico supone que ser conocido es idéntico a ser patente. Tal es sentido último de una reducción fenomenológica, término que vamos a tener a partir de ahora en un significado inédito en Kant, su significado *avant la lettre*, si se nos permite expresarlo así, porque, ¿qué si no es el aislamiento de la sensibilidad como forma del conocimiento sensible? El hecho de la posibilidad, que la posibilidad se revele como un hecho inalienable y reconocible, éste sería el modo específico en que Kant lleva a cabo un trabajo fenomenológico. Esta ambigüedad tendrá su formulación expresa en la *Crítica*, concretamente en el principio supremo de los juicios sintéticos *a priori* (A 158/B 197). Pero lo que nos interesa es que *lo que da razón de la misma es algo que se impone y que no puede ser reducido*. No se trata de que estemos ante los objetos dados, pues valdría lo mismo para los principios formales del entendimiento (al menos esto es así en la *Crítica*); está en juego *un modo, que es a un tiempo fáctico y primitivo, de imponerse la forma*. El trabajo que vamos a llamar fenomenológico queda definido en primera instancia por el tema, que es el conocimiento sensible y su objeto, el fenómeno. Sin embargo, lo rigurosamente fenomenológico que se inicia con este trabajo es el modo y manera en que va a enfrentar en general el conocimiento y el objeto de conocimiento, que constituye una particular renuncia al fundamento, según lo hemos expresado anteriormente. Es decir, lo que en Kant especifica esto fenomenológico es su rango metódico. Por eso vamos a encontrarnos con que esta caracterización de la fenomenología en los textos precríticos es la misma caracterización que recibe la entera *Crítica* (que, recuérdese, es un tratado del método), a saber, la de ser una “ciencia particular” (A 11, B 24) de utilidad “puramente negativa” (A 11, B 25)⁷, como si aquella fuera su esbozo ésta.

3. LA OBSTINACIÓN FÍSICA DEL FENÓMENO

Kant siempre ha separado el fenómeno de la ilusión, tanto en los textos precríticos como en los posteriores. Pero si ha mantenido esta terminología, que vincula el conocimiento con la presencia fáctica y con la mostración, no es porque esté haciendo una transliteración de un término antiguo, sino porque en él se encuentra un pensamiento y un sentido que sólo esta palabra puede albergar (*cf.* A 313/B 369; A 21/B 36, nota).⁸ Entonces, ¿por qué sostiene Kant este término? El sentido que Kant reconoce en el término *phenomenon* tiene que ver con *el carácter inalienable de la presencia, con su condición de aspecto inalienable*, más que con la condición de remisión, que es la que se considera habitualmente, y donde las lecturas encuentran una gran dificultad. Por eso Kant va traducir el vocablo por *Erscheinung*, para poder jugar con el doblez de la noción de apariencia.⁹ Concretamente con la posibilidad de considerar otro modo de presencia, igualmente inalienable, que llamará *Schein*, y que vincula con la idea de ilusión.

En la *Dissertatio* la *apparientia* mienta el aspecto no lógico del fenómeno. La apariencia es aquello que, en el fenómeno, no es pensado (*MSI*, AA 02: 394). El fenómeno es la presencia no mediada, la aparición. Esto vale tanto para *Erscheinung* como para *Schein*. En un sentido, *Schein* mienta una presencia que es apariencia, entendida como eso que se muestra o que se aparece a nosotros, lo que “nos parece”, o simplemente “parece”, pero sin que suponga engaño alguno. Este sentido se solapa al de fenómeno cuando mienta este aparecer no problemático. Esta equiparación se puede confirmar en varios textos y apunta a la particular condición inalienable, *cuasi*-evidencial, que tiene la mostración o el aparecerse y que constituye el punto de partida de toda fenomenología (aquí nos movemos en el sentido lato de fenomenología). Lo primero que queremos poner en claro es que hay un sentido del fenómeno, que vamos a llamar apariencial, y que no delata tanto su verdad como su condición inmarcesible. Tomemos para empezar (ahora volveremos sobre este texto) la equiparación que hace Kant entre fenómeno y apariencia. En el *Preischrift* Kant se sirve de la expresión *Apparenz* para abundar en la condición inmediata y no problemática que tiene *Schein*.¹⁰ El fenómeno es “una cosa se me aparece, *erscheint mir*” (*FM*, AA 20: 269), que aquí tiene el sentido riguroso del aparecerse o mostrarse inequívoco de un cosa sensible. Kant también lo llama “fenómeno físico” (*ibidem*). La apariencia/fenómeno es “la representación de los sentidos” (AA 20: 269), que obran como fuerzas físicas de representación y que, por ende, *rinden solos efectos*.¹¹ Esto es así no sólo cuando hablamos de la materia de los fenómenos sino, tal y como supone la doctrina de la autoafección, también cuando hablemos de las “formas de representación”, según expresión de B 70, que también obran efectos.

Este sentido representacional y puramente apariencial es el *sentido físico* del fenómeno. Es el sentido que Kant recoge en *Anth.*, donde se sirve de la expresión “apariencia de los sentidos”, *Sinnenschein*. Esta apariencia es la *species* o *apparientia* (*Anth.*, AA 07: 146), es decir, es lo *adspectabile* y no lo engañoso de la apariencia (Kant también utiliza el término *Anschein* para referirse al mismo).¹² Por eso los ejemplos de esta clase son las apariencias que tienen que ver con la luz, como que la luna parezca mayor cuando está cerca del horizonte, que el mar nos parezca menos alto cuanto más próximo (*KrV*, A 297/B 354), o que, en su trayectoria, los planetas parezcan tan pronto avanzar como retroceder (*Prol.*, AA 04: 290-291; en *MS* –AA 06: 354– llamará a esta apariencia *Phänomen*). En estos casos –todas las ilusiones ópticas son de esta clase–, estamos ante engaños de los sentidos, pero no ante apariencias sino ante fenómenos (la causa del engaño de los sentidos es un “verdadero fenómeno”: cf. *V-Anth/ Collins*, AA 25: 45-6). Guardando este mismo sentido apariencial tenemos que el arco iris, y con él las gotas de lluvia, también la misma luz (A 45-6/B 62-3), no son ilusiones sino “meros fenómenos”, que quizás es la expresión más ajustada para designar este sentido de apariencia/fenómeno. Nótese que en el texto de la *Anth.* antes referido Kant se servirá de los mismos dos ejemplos de los que se sirve en el comienzo de la Dialéctica trascendental para ejemplificar, no tanto la ilusión, *Illusion* (en el texto de la *Crítica* se trata de introducir la noción de ilusión trascendental), como su carácter inalienable, que es a lo que a nuestro juicio apunta este sentido físico y no problemático de apariencia.¹³

El carácter físico de la apariencia alcanza por igual a la clase o modo de conocimiento. Que la luna parezca más grande cuando sale es una apariencia que no puede evitar “incluso el astrónomo” (A 297/B 354). El sentido rigurosamente fenomenológico de fenómeno, que

está también en el carácter inalienable de la apariencia, significa que no hay *nada detrás del mostrarse*. Por eso se trata del mismo aspecto sensible cuando hablamos del arco iris que cuando lo hacemos de las gotas de lluvia. En realidad se trata de una *reducción del fenómeno*. Todo lo que se encuentra en momentos distintos de la investigación de la naturaleza (o de la “investigación física”: A 693/B 721) es fenómeno. La sensibilidad no puede ser trascendida, ni en las investigación de la naturaleza ni tampoco, en cierto modo, en la investigación de la propia Facultad, digamos en la investigación crítica (la paradoja del sentido interno es la constatación de esta imposibilidad –luego diremos algo sobre ella). Ciertamente, el conocimiento empírico puede progresar hacia un grado cada vez menor de percepción, hasta la “más profunda exploración” (A 45/B 62), pero la sensibilidad “permanece siempre la misma en cuanto al modo”, *Art* (ÜE, AA 08: 208; *KrV*, A 277-8/B 333-4). Por lo que hace a nuestro estar ante los fenómenos, la observación, *Beobachtung*, es el particular modo de enfrentarlos. La observación es el modo de dar con, *auffinden*, los fenómenos (la expresión está en A 278/B 334) en cuanto fenómenos; el modo de habérselas con ellos en tanto que presentes en la naturaleza (*cf.*, p.e., A 613/B 641; A 469/B 497, etc.), que es lo que Kant llama en algún lugar investigación fisiológica (A 550/B 578). Éste es el sentido que también tiene observar en la antropología (*ídem*)¹⁴ y que, como no podía ser de otro modo, alcanza igualmente a la astronomía (A 663/B 691). Si se quiere, incluso, la observación es el modo de habérselas propio de toda teoría (en el sentido del conocimiento o noticia de la naturaleza y no en el de doctrina; *cf.* p.e. *EEKU*, AA 20: 199). Pero observar significa que tiene que haber una posición. Los fenómenos se muestran de modo diverso según la situación o emplazamiento, *Lage*, de la cosa respecto a los sentidos (A 45/B 63). Este emplazamiento tiene que ver con el espacio y con la posición del cuerpo en el espacio, que es donde debemos buscar la obstinación física.

Por el momento baste con insistir en que la apariencia presenta una condición o respecto físico. En este respecto, físicamente hablando, los fenómenos pueden descomponerse (A 278/B 334), lo que quiere decir que se pueden buscarse otras posiciones para observarlos, ganando así nuevos fenómenos. No se trata del análisis matemático sino de una descomposición empírica, como *un recurso de la investigación física de la naturaleza*. Por ejemplo, acortando la distancia entre el punto de observación del arco iris y el punto de observación de la gota de lluvia, se puede “conocer *más cerca*” a ésta (*Prol*, AA 04: 354; el subrayado es nuestro), pero no más allá. Este es el saldo que arroja la segunda antinomia matemática, la imposibilidad de encontrar lo simple en la experiencia, lo cual, como veremos, tendrá su importancia en los *MA*. La *solitud del fenómeno*, sin embargo, tiene que alcanzar también al distanciamiento respecto de las cosas. La primera antinomia es la que arroja el saldo de la fenomenidad de cualesquiera lejanías a las que podamos llegar en una investigación empírica que nos aparte de un lugar o tiempo determinados. Es cierto que el fenómeno parece comprender una remisión que parece más clara cuanto menos sea la distancia; pero ello se debe a que no se comprende cabalmente como mostración en general sino como como mostración de algo (cuando la mostración no se comprende ontológicamente sino sólo ópticamente), que es lo que parece estar más cerca cuanto menor sea la cosa observada, como si en la cercanía llegáramos al límite que separa al fenómeno de lo que se muestra.

El fenómeno así entendido es inequívoco. La verdad, al menos tal y como se caracteriza en la Lógica transcendental, no está todavía en juego (A 293/B 350). Esto vale tanto para la verdad en su sentido meramente lógico como para la verdad transcendental. Kant dice en varios lugares que los sentidos no engañan. Los sentidos son merecedores no sólo de una justificación sino aún de una apología (*Anth.*, AA 07: 14e ss.), tanto como el idealismo lo es de una refutación (B 274 ss.). El fenómeno, entendido como objeto logrado de los sentidos, se presenta siempre ya como una realidad consistente, bien que limitada a la sensibilidad. Los objetos sensibles se revelan como objetos de conocimiento precisamente en la medida en que en ellos se descubre que hay orden. Son objetos que se dan por medio de una receptividad (la sensación constituye no sólo el índice material de la misma sino su somera indicación modal, como presencia de un efecto) y que se dan siempre de una determinada manera. Nótese que para que el darse de los objetos, su darse como fenómenos (como los *Erscheinungen* de B 34), no sea sólo una expresión vacía o meramente tautológica (dado es lo mismo que sentido y sentido es lo mismo que dado) la sensibilidad tiene que ir de consuno con un particular modo que distinga y permita reconocer ese darse. Digamos que tiene que venir acompañada de una cierta figura. Lo que se da tiene que hacerse presente con un cierto aspecto, como algo que *se da a ver*, que es en lo que consiste a la postre el fenómeno. No se trata tanto ni únicamente una presencia ahí, mostrenca, sino que se trata de una presencia asequible. Este modo es lo que alberga la forma de la intuición. Pero la figura no es otra cosa que diferencia; un trazo que distingue y que hace asequible algo como algo. La forma de la intuición consiste en el modo sensible de esa diferencia, concretamente el modo de estar cabe ciertas relaciones (B 67). El objeto no está dado sin más; *guarda* relaciones que son las que nos permiten reconocerlo. Por eso resulta infructuoso intentar apartar la intuición interna de la aspectualidad de todo fenómeno. La forma de la intuición interna también es un modo de receptividad. Por eso no basta la sensación, o mejor, por eso la sensación tiene siempre ya relevancia para el conocimiento, porque va de consuno con este modo de presencia reconocible para nosotros. Pero, ¿de qué relaciones, *Verhältnisse*, hablamos?

La relación de fuera/al lado (A 23/B 38), es decir, el modo de la tridimensionalidad de los fenómenos en el espacio, o de la relación de antes/después (A 31/B 47), que constituye el modo de la unidimensionalidad e irreversibilidad de los fenómenos en el tiempo; también la de la simultaneidad. Estas relaciones tienen que ser debidamente separadas de las relaciones lógicas de subsunción o de predicación, que es a lo que se aplican básicamente las dos Exposiciones metafísicas. Pero también hay que separar lo que corresponde a eso que no es relación. Kant desglosa esto en el comienzo de la Estética transcendental sirviéndose de dos binomios, el de los conceptos de reflexión de materia y forma, donde la sensación queda de parte de la primera y la intuición pura de parte de la segunda, y el binomio *a posteriori/la priori*, que ha sido develado por el enfoque o el análisis transcendental del conocimiento de la *Einleitung*. Una de las principales dificultades a la hora de entender esta separación, si es que se quiere ganar un sentido inalienable de la fenomenidad, es que el desglose se hace cabe uno y el mismo objeto de la sensibilidad, que es el fenómeno. El análisis del comienzo de la *Crítica* ha mostrado que para que haya conocimiento empírico tiene que haber conocimiento *a priori*; que la experiencia, hasta la más común, va de consuno con la forma de la experiencia, que constituye un hecho, *Thatsache*, inalienable (B 5). Este mismo vínculo tiene que darse en el caso de la intuición. De

la misma manera que el binomio *a priori/a posteriori* no es más que una distinción que sirve al análisis que es la crítica, pero que no es una conclusión o un resultado sino una herramienta, la distinción entre materia y forma, que parece pesar sobre la intuición de un modo más evidente si cabe, debe ser igualmente reconsiderada como una distinción que no puede desglosarse mas que para el propósito del análisis (no es un concepto de reflexión de los que se sirve el racionalismo, aunque bien podría considerarse como un concepto de reflexión específicamente crítico). Decimos que parece más evidente porque la sensación queda como materia del fenómeno, vinculada a la experiencia y a la intuición que se da en la experiencia, la intuición empírica, mientras que la forma parece quedar más acá de la experiencia, en el lugar de la intuición pura, que constituye una instancia independiente y cuyo rendimiento, concretamente su rendimiento en el conocimiento matemático, no es necesariamente la experiencia. El mismo razonamiento se hace con el conocimiento transcendental, que, en este caso gracias al tiempo, parece quedar más acá de toda experiencia. Pero esto no es así y *Kant no se desdice en ningún lugar de que el fenómeno sea el objeto de una intuición empírica*, a la que pertenece igualmente, a su aparecer queremos decir, la forma. Los principios de la geometría tienen certeza, *Gewissheit* (B 64, etc.), tanto como la tiene la experiencia (B 5). *Kant tampoco dice en ningún lugar que la intuición pura no pertenezca a la forma de una facultad que es receptividad y que por consiguiente pueda tenerse al margen de la sensación*. Por eso en la segunda edición Kant introduce la doctrina de la autoafección, que no hace sino rectificar otro binomio igualmente malentendido, y que también suele estar presente en el juego de ecos que se establece entre otros binomios, que es binomio *externo/ interno*. Porque este binomio parece asegurar más intuitivamente que ningún otro la separación del binomio materia/ forma, donde externo quedaría de parte de la materia mientras que interno lo haría de parte de la forma (formalizando así preferentemente el tiempo como intuición fundamental mientras que el espacio queda restringido, cuando menos ontológicamente), cuando estos conceptos de reflexión no pueden distribuirse según el sentido, externo o interno, sino que tienen que poder reconocerse igualmente en cada uno de ellos (de ahí lo paradójico de la paradoja del sentido interno, que revela que hay igualmente una materia del sentido interno, cuyos fenómenos están sometidos a la misma idealidad que los fenómenos externos).

Otra de las distinciones que se ponen aquí en juego no está en Kant mismo y sólo se refiere a ella episódicamente. En los *Prolegomena* Kant recuerda que su doctrina de la idealidad transcendental no se compadece con la distinción de Locke entre cualidades primarias y secundarias (AA 04: 289). Mientras que para los idealistas sólo las cualidades secundarias pertenecen a la apariencia de las cosas en sí, cuyas propiedades específicas encontramos en las cualidades primarias, Kant subvierte esta diferencia al incluir en el fenómeno también las cualidades primarias, que son las que conciernen a todo lo que pertenece al espacio. Entre estas cualidades secundarias están aquellas que tienen que ver con la sola sensación como el color (A 20-21/B 35), el calor o el sabor (AA 04: 289; A 29/B 45), que son sólo modificaciones de un sujeto que pueden ser distintas para otro sujeto (A 29/B 45). Las cualidades primarias, por su parte, son las que contienen todo lo que inhiere, *anhängt*, al espacio, según expresión de los *Prol.* Estamos ante ese *otro* modo de relación que queda fijado formalmente en el fenómeno. Estas cualidades son universales y aparecen con cualesquiera fenómenos. Las cualidades primarias

son: la “extensión” del fenómeno, su presencia mostrenca, diríamos (cuyo conocimiento lógico requiere de un principio transcendental del entendimiento, sólo que entonces hablamos de magnitudes extensivas y no de simple extensión o de “magnitud originaria”, según vimos antes –*cf. KrV, A 411-2/B 438-9*); el “lugar”, *Ort*, que mienta la condición posicionada de toda extensión; la “figura”, *Gestalt*, que mienta la definición o delimitación del fenómeno; pero también, según el texto de los *Prol.*, la impenetrabilidad o materialidad, que significa que el fenómeno siempre se hace presente en algún modo físico y que va unido a la figura.¹⁵

De acuerdo con esto debe matizarse la idea de que la ilusión no está en la facultad que rinde el fenómeno sino del posible juego que los fenómenos puedan dar a otra facultad. Los fenómenos todavía no son nada, y demandan una lectura (*Prol. AA 04: 312-3*). Por eso Kant se refiere al juicio, *Urteil*, como al lugar de ese trastocamiento (*cf.*, p.e., B350/A293). El fenómeno se distingue señaladamente de experiencia, que será el producto de esta lectura (lo mismo que, dicho sea de paso, se distingue la crítica respecto de la metafísica o la matemática o la ciencia natural), pero tampoco podrá reducirse a ella. La lectura exige cierta distancia, un punto de vista. Ciertamente no es lo mismo la distancia del esquematismo del entendimiento que la del esquematismo de la razón. El texto de la experiencia posible no es el mismo texto que el de la experiencia del físico o que el texto de la experiencia del naturalista. Pero en ambos casos el fenómeno demuestra un riguroso aparecer que es inalienable y con el que tienen que habérselas ambas facultades. El fenómeno no contradice ni se opone en ningún sentido a la experiencia, ni tampoco a la apariencia o a la ilusión; simplemente *queda más acá*. El ejemplo de las asas de Saturno que Kant añade en la nota de B 69-70 confirma que el fenómeno necesita todavía de un engarce, que es de carácter lógico, que sólo se podrá hacer desde cierta distancia. Mientras que lo que se observe de este planeta (con los límites de los instrumentos de observación) no se atribuya, *beigelegt werden*, al objeto en sí (mientras no se haga de ellas parte del conocimiento del objeto planetario), tenemos que hablar sólo de apariencia, *Schein*. La apariencia indica que tenemos un aparecer reconocible y estéticamente inalienable, pues las asas se presentan como ocupando el espacio y como dotadas de una figura. Pero también tiene una consecuencia fundamental para la doctrina del juicio. Kant dice que no hay ilusión hasta tanto no se atribuya esto observado al objeto sino sólo al sentido. Ahora bien, *atribuir estos predicados al sujeto y no al objeto significa que puede tener lugar algo así como una atribución sin categoría*. Esta distinta relación, con el objeto o con el sentido, apunta a una distinta relación o vínculo del sujeto consigo mismo, que es donde va a estar la clave de toda apariencia, pues, en efecto, la apariencia consiste en “que la condición *subjetiva* del pensar [*mutatis mutandis*, del intuir: JGF] sea tomada por el conocimiento del objeto” (A 396). Una relación que, como decimos, no consiste en el esquematismo. Sea como fuere, por ahora queremos apuntar que lo que se muestra en cuanto tal, las dos formas que sobresalen de la figura redonda del planeta, lo mismo que el olor o que el color de otros objetos, no dejan de ser lo que Kant llama en este texto “predicados del fenómeno”, *Prädikate der Erscheinung* (B 69, nota). Estos predicados no son predicados lógicos sino sensibles, esto es, son o bien modificaciones de la receptividad, como el color, el sabor, etc., o bien son modos o hechuras de la receptividad, como la figura, la extensión, etc. Predicados en cualquier caso, por ende susceptibles de alguna clase de operación lógica.

4. LA COSA EN SÍ Y SU ALCANCE METÓDICO. SENTIDO EMPÍRICO DE LA DIFERENCIA FENÓMENO/COSA EN SÍ

En las dos primeras Antinomias se demuestra que ninguna parte del espacio o el tiempo puede ser incondicionada. Esto constituye una prueba indirecta de la Doctrina del Idealismo trascendental (A 534/B 506), pues confirma que espacio y tiempo no constan de partes; ni tienen una parte señalada como parte absoluta (el límite o el comienzo), ni tampoco ellos mismos constituyen totalidades absolutas. En la Estética trascendental no aparece la noción de incondicionado, que pertenece al uso de la razón entendida como facultad específica, ni tampoco podrá encontrarse en la prueba de su rigurosa condición formal y trascendental. Es cierto que algunos autores han sostenido que las intuiciones puras son el realidad ideas. Sin embargo, debe distinguirse entre la naturaleza de la intuición, que Kant separa cuidadosamente del concepto, y la noción de finalidad, que es con la que se vincula a la postre lo incondicionado y la idea. No es que la intuición no pueda vincularse con la finalidad y con la economía de la razón; esto es lo que sucede en la matemática aplicada (cf. *KU*, AA 05: 366) y también en la física. Se trata más bien de que, para asegurar este posible vínculo, la intuición tiene que sostenerse separadamente de cualesquiera facultades lógicas. Este sostenimiento se lleva a cabo en la Estética trascendental, que es una parte separada de la doctrina de los elementos.¹⁶ En la Estética las intuiciones puras son aseguradas como magnitudes originarias, lo que quiere decir que no pueden reducirse a número (sea finito o infinito), pues no constan de partes que puedan ser contadas (es en la síntesis y en el conocimiento empírico donde nos hemos con estas partes, que es lo que son las intuiciones empíricas). Este malentendido tiene lugar en la Dialéctica, que considera a espacio y tiempo como agregados de partes, donde la dificultad está en saber si constituyen una serie infinita o no (*KrV*, A 411-2/B 438-9), es decir, si admiten una parte incondicionada a la que no alcanzaría la síntesis, o si lo incondicionado es el conjunto mismo de partes. En cambio, desde el punto de vista del conocimiento sensible empírico (el que concierne a la Estética), no está en juego una tal serie ni la síntesis que la determina (y en cuya determinación consiste el conocimiento de las magnitudes) sino sólo el aseguramiento de cualesquiera objetos que se presenten como fenómenos, simplemente como objetos de una síntesis posible. Está en juego el aseguramiento del conocimiento sensible en cuanto tal, sin más.

Por eso el fenómeno es aquí “un objeto indeterminado de la intuición empírica” (A 20/B 35). Porque todavía no se trata de decidir qué sea, para lo cual hace falta el concepto, sino simplemente *que sea fenómeno*. La razón –nos referimos al Apéndice de la Dialéctica trascendental– opera regulativamente orientando al entendimiento en la búsqueda de conceptos empíricos. Se trata de dar con nuevos objetos; es decir, ir ampliando el conocimiento de la experiencia (la idea tiene un carácter heurístico: *KrVA* 671/B 699). Pero aquí el negocio es otro. *Se trata más bien de ampliar la experiencia para el conocimiento*, dando siempre con nuevos fenómenos y con nuevos predicados. Por eso espacio y tiempo son representados (B 40) o han de ser pensados (AA 20: 419) como rigurosas magnitudes *infinitas*, lo que significa que no pueden determinar nada de la magnitud de los fenómenos, ni siquiera de la suma de todos ellos (el mundo), sino tan sólo apuntalarlos como objetos de una posible medición (que sería la síntesis que los rinde como objetos de conocimiento y no sólo como meros objetos sensibles).

La infinitud del espacio y el tiempo, lo que haya de entenderse como todo, *Ganzen*, infinito, no es más que “la relación con la unidad dada”. Esta relación constituye a la unidad *sin más*, como la unidad de este o aquel fenómeno, singularmente por tanto, y no en su relación con este o aquel número de unidades (A 431-2/B 459-60). El carácter de *dado* de una tal infinitud significa que el tiempo de la sucesión, el tiempo que habilita el conocimiento de las magnitudes en plural (o *quantitates*), en fin, el *tiempo sometido del esquematismo*, está fuera de juego; el carácter dado hace que todas las partes del espacio sean “simultáneas” *ad nauseam* (B 40).¹⁷

Pues bien, la cosa en sí es el *respecto inasequible que asegura la fenomenidad del fenómeno*. La cosa en sí, lo mismo que el fenómeno, no pertenece al discurso de la ciencia natural sino al de la filosofía crítica. Para poder entender el conocimiento matemático de la naturaleza y su condición de actividad inalienable, Kant refiere un particular sentido de la distinción entre fenómeno y cosa en sí, que llama *empírico*. En la misma investigación que lleva adelante la ciencia natural la diferencia entre fenómeno y objeto en sí mismo juega a su favor. La filosofía trascendental tiene en su mira las distintas ciencias de la razón, no sólo como disciplinas en las que apoyar sus propios análisis (no son sólo ejemplos), sino también como ejercicios de conocimiento racional de la naturaleza que la filosofía trascendental debe asegurar y promover (la crítica también es una suerte de terapéutica de la razón).

Comencemos dando cuenta de este particular uso de la cosa en sí y de la forma de la intuición. El hecho de no poder trascender la experiencia cuya mostración ocupa a la filosofía trascendental es un acicate para la física. La cosa en sí asegura la “investigación fisiológica” a que nos hemos referido antes y revela un particular uso de razón. En este sentido debe entenderse el controvertido texto de A 45-6/B 62-3.¹⁸ En relación a la materia del fenómeno, la cosa en sí asegura que todo fenómeno no pueda ser reducido a algo que no se muestre. En la experiencia sólo hay objetos de experiencia, cuyo índice de finitud es precisamente el que son fenómenos. *Pero* hablamos sólo de conocimiento empírico. Decimos esto porque, como veremos al hablar de la prueba, suele pensarse que Kant también habla de un conocimiento trascendental, en el sentido de un conocimiento que tiene como tema la subjetividad trascendental y sus operaciones, cuando la filosofía trascendental y su discurso es siempre y únicamente un discurso a propósito del conocimiento empírico.

En este texto Kant se sirve de la oposición entre fenómeno y objeto en sí. No es una diferencia trascendental sino la diferencia tal que puede ser utilizada a favor de la experiencia. Por eso Kant habla aquí de diferencia empírica, no tanto para distinguir dos diferencias cuanto para precisar el solo nivel en el que podemos servirnos empíricamente de ella (el otro uso, el crítico, es el que domina en el resto de la obra). Esto significa que la diferencia arbitra y orienta la investigación empírica de los fenómenos (o si se quiere, que arbitra y orienta la experiencia de la investigación). Kant distingue entre “lo que sobreviene sólo de modo accidental” al sentido humano y “lo que depende esencialmente de la intuición del mismo”. Lo primero apunta a eso que diferencia ópticamente a los fenómenos como distintos objetos de conocimiento. No se trata sólo del color o de las sensaciones de los sentidos; también del grado de la sensación, de la fuerza que tenga, etc., que constituye un índice fenomenológico de la distancia (dispone de maneras diversas al objeto en el espacio) y que orienta igualmente la investigación. Por otra

parte está lo universal de la intuición, que no es la forma misma de la intuición (como decimos, el objeto de conocimiento transcendental es el tema de un modo inédito de conocimiento, que es la crítica, en cierto modo un no-tema), sino el conocimiento por medio de conceptos universales de los fenómenos (los conceptos físicos de velocidad, distancia, etc., que constituyen eso universal del conocimiento de un cuerpo). Pero lo que nos interesa es que Kant también formula esta diferencia en términos fenomenológicos. Concretamente como la diferencia que hay entre el “fenómeno del objeto en sí mismo” y el “objeto en sí mismo”. Es un texto controvertido pero nos interesa porque expresa en términos fenomenológicos la *irreducibilidad empírica* del fenómeno.

Podría parecer que aquí Kant está subvirtiendo la distinción al aceptar que es posible un conocimiento del objeto en sí mismo, pero no es así. “Si nos quedamos en esta diferencia (como sucede comúnmente) y no se considera aquella intuición empírica [cuyo objeto propio es el fenómeno: A 20/B 34] a su vez como mero fenómeno” entonces es cuando se arruina la distinción transcendental, que es la que sostiene a la cosa en sí como correlato absoluto del fenómeno (o viceversa). La diferencia es meramente empírica, señala Kant, lo que debemos entender en el sentido de que es una diferencia física. Empíricamente conocemos un objeto cuando lo podemos determinar por medio de los predicados universales de la forma de la intuición; esto es, cuando sabemos de su figura y de su magnitud (o de su posición). Es el conocimiento de las cualidades primarias. Por eso, porque hay determinación, no tenemos una “cosa” sino un “objeto”. Pero todavía hay cualidades que pertenecen a lo que sólo es subjetivo en el sentido de que no puede ser determinado por la forma de la intuición, que serían cualidades como el color, el sonido o el calor (A 29/B 44). Es el conocimiento de las cualidades secundarias. Ahora bien, lo que vincula a unas y a otras es una distinción relativa, digamos *absolutamente relativa*, pues quiere nada más asegurar dos niveles de conocimiento, que *siempre haya esos dos niveles* relativamente uno del otro y de que nunca, cuando se haya ganado un conocimiento universal (por haber dado con la figura y la extensión de un fenómeno), se pueda renunciar a seguir buscando en otros fenómenos otros objetos en sí mismos.¹⁹ En la expresión “fenómeno del objeto en sí mismo” se encuentra una suerte de *genitivo indefinido* que sostiene la diferencia. Como hemos dicho arriba, el arco iris nos lleva a un objeto en sí mismo que es la gota de lluvia, que por su parte es un fenómeno de otro objeto en sí mismo que es la fluidez, que a su vez es el fenómeno de ciertas fuerzas (MA, AA 04: 523 ss.), etc.; pero también en sentido contrario podría seguirse la secuencia, y podríamos buscar fenómenos dentro de la misma gota de lluvia, etc. La condición de en sí, pero como *en sí del fenómeno* (y no al contrario), funciona por tanto como el acicate para la búsqueda del fenómeno al reducir todo a experiencia.

5. LA COSA EN SÍ Y EL ASEGURAMIENTO DE LA FINITUD. LA DEMOSTRACIÓN TRANSCENDENTAL COMO PRUEBA FENOMENOLÓGICA

En cuanto al aseguramiento de la validez, recordemos que el conocimiento transcendental es el conocimiento de la validez del conocimiento, que no sólo supone un vínculo inalienable entre el conocimiento *a priori* y la experiencia sino que sostiene ese vínculo sobre la base

de la finitud, y así el conocimiento transcendental viene a definirse como el conocimiento de *nuestro modo de conocer* objetos en tanto que sea posible *a priori* (B 25). La diferencia entre el fenómeno y la cosa en sí funciona como restricción absoluta del fenómeno y de la fenomenidad del fenómeno, asegurándolo en tanto que objeto de conocimiento posible, esto es, al menos “para nosotros los hombres” (B 33). Como han apuntado los comentaristas, en la segunda edición de la *Crítica* Kant vincula la noción de transcendental con esta, vamos a llamarla así, *cláusula de finitud*. Por eso la diferencia entre fenómeno y cosa en sí es una “diferencia transcendental” (A 45/B 62), no sólo porque haga una cesura entre términos que no deben confundirse (confusión que también mienta el término transcendental) sino porque traza el límite de la finitud que asegura el conocimiento *a priori*. Como la diferencia *entre algo y nada* en punto al conocimiento. Este es el rendimiento del discurso crítico y a este fin sirve la diferencia. Por ahora baste con reparar en que este aseguramiento se logra considerando que hay una cosa u objeto que no tiene vínculo alguno con ese nuestro modo de conocimiento, con la sola facultad de conocer y no con el objeto, que también es algo de lo mentado por la noción de transcendental (*Prolog.*, AA 04: 293). Por eso, toda vez que la mismidad estética pertenece a una sensibilidad inalienable en la que nosotros reconocemos la presencia de las cosas, la única y verdadera alteridad (de esa mismidad) tendrá que ser la de la cosa en tanto que no vinculada con nosotros, que es lo que mienta el en sí, “sin relación a *nuestro* sujeto” (la expresión está en A 48/B 65; el subrayado es mío).

Pero, ¿en qué consiste este aseguramiento?, ¿y qué es ese no-vínculo en el que se sitúa la cosa en sí?. Porque si la cosa en sí es la contraparte del fenómeno, ¿no es al fin y al cabo una suerte de tautología? La cosa en sí, como en general todos los recursos retóricos de la *Crítica*, tiene un rendimiento demostrativo. Kant ha tematizado la cuestión de la demostración en varios lugares de la primera *Crítica*.²⁰ Lo propio de las demostraciones transcendentales es que son circulares (*KrV*, A 736-7/B 764-5). Los principios transcendentales son el fundamento de la posibilidad de lo que sucede en la experiencia. Pero para probarlos como principios transcendentales hay que suponer aquello de lo que son fundamento, es decir, hay que suponer la experiencia posible de la que son los principios. Luego, si el principio “hace posible su fundamento de prueba”, *Beweisgrund*, que es la experiencia posible, ¿en qué consiste la prueba?, ¿qué es ese suponer el fundamento?. La prueba consiste en una suerte de *retroceso* en el que se gana el fundamento de lo que debe ser probado. La demostración transcendental consiste en ganar el fundamento como fundamento. Repárese en que no se trata de la sola mostración del fundamento desde lo fundado, que lo reconoce apodícticamente. Lo que importa de la demostración transcendental está en el proceder mismo de la prueba; la prueba es el camino, el retroceso hacia lo que funda eso fundado. Ahora explicamos esto. Pero debemos tener en cuenta que si esto es así ello se debe a que lo que ha de probarse no es ni una verdad fáctica ni una verdad lógica o matemática, sino la verdad transcendental, donde es la especificidad de lo probado la que demanda esa misma peculiaridad en la prueba. Pues bien, lo que ha de probarse no es sino el hecho de que hay conocimiento *a priori*; la verdad transcendental de los conceptos a priori consiste en la necesidad de la relaciones posibles entre los fenómenos que expresan (A 221-2/B 269), es decir, consiste en la necesidad de la experiencia posible. Debe probarse la necesidad de una posibilidad; que es lo mismo que decir que debe probarse el hecho de una

validez, que la validez es un irreducible (en eso consiste su facticidad), ora a la experiencia (verdad empírica) ora al pensar o a la intuición pura (verdad lógica y verdad matemática). Pues bien, mostrar el hecho de que el fundamento es el fundamento de una posibilidad, mostrar este hecho inédito, en eso consiste la demostración transcendental.

En realidad, la prueba consiste nada más que en acotar el caso, es decir, consiste en revelar el *factum* de la posibilidad, que la posibilidad es un tal hecho. Pero por eso mismo, como no hay una remisión a nada que no esté siempre ya en juego, la demostración consiste en realidad en mostrar que es la única posible demostración. Esta es la razón de que podamos explicarla también como una suerte de acotación o de exposición, pues no sólo debe mostrar que el fundamento es fundamento, sino que para ello tiene que mostrar igualmente que no se puede hacer de otro modo. El conocimiento es la prueba y la prueba es el conocimiento. Mostrar la irreducibilidad de la prueba del fundamento, bien podría ser otro modo de explicar la demostración transcendental. Si, por ejemplo, se quiere buscar el fundamento de los distintos procesos psicológicos que constituyen el conocimiento lógico, sólo se tiene que proceder hacia atrás, en pos de las causas naturales en las respectivas facultades. Esto no sería una demostración transcendental sino una “derivación fisiológica”, que es el modo de proceder del empirista (A 87/B 119). Tampoco valdría como demostración la explicación o definición del fundamento, que haría una tautología de la prueba (cf. p.e. A 244/B 302). La dificultad que tiene que proceder crítico obedece a que la propia razón tiene que dar cuenta de sí misma aunque debe intentarlo sin terminar en un enunciado meramente explicativo (como cuando se intenta hacer comprensibles las categorías desde la autoconciencia: cf. B 422). La dificultad que enfrenta la crítica consiste en no caer en los ampulosos circunloquios de la Ontología (A 247/B 303). Por eso ante todo importa acotar que se trata de algo que no es un hecho de experiencia, pero que no puede considerarse o descubrirse fuera de la experiencia, y que éste es el único modo de conocer el fundamento. Reconocer el hecho singular de una validez, que hay conocimiento *a priori*, reconocerlo como posibilidad, es lo mismo que suponer su fundamento de prueba. “Para que ciertas sensaciones sean referidas a algo fuera de mi (...), al igual que para que para que pueda representarlas unas fuera de y junto a otras sensaciones, por tanto no sólo como distintas sino en lugares distintos [para que haya el orden de relaciones que reconozco en los fenómenos externos], para ello tiene que ponerse a la base la representación del espacio” (A 23/B 38). Como es sabido, Kant llama a esta particular prueba *deducción*. La deducción conduce de la posibilidad al fundamento de posibilidad (y no al fundamento de realidad, o causa, en cuyo caso deberíamos hablar de derivación, *Ableitung*). Es el aseguramiento de la posibilidad, en qué consiste la validez que sea el caso (sensible o intelectual), lo que nos devuelve a su fundamento y lo hace además de un modo irreducible. En esto consiste la prueba. Por tanto, como decimos, el fundamento no se gana en una evidencia inmediata sino en un proceder que asegura la condición de lo fundado en sí mismo (en el proceder mismo).

Ahora bien, para poder sostener el hecho del conocimiento y del proceder de conocimiento que sea el caso como un hecho irreducible el núcleo de la prueba debe ser *la relación que guarda el conocimiento* (o la acción, o la interpretación, etc.) *con nosotros* y tal y como podamos reconocerlo en nosotros. La prueba se orienta hacia el sujeto de un modo irreducible (no como sujeto psicológico, hemos dicho, ni como sujeto meramente lógico), y

en ello consiste ese su cariz fenomenológico. *No se trata de dar con el fundamento del hecho*, digamos con el por qué conocemos; esto lo reduciría y con ello también a nosotros, convertidos en sujetos psicológicos, o también en sujetos metafísicos. *Se trata más bien de mostrar que un tal hecho es el fundamento de lo que somos y lo que nos constituye, que es lo que demanda la prueba, tanto como lo que la sostiene*. Esto es al fin y al cabo una analítica de las Facultades. No sólo la descomposición de cierta economía de las fuerzas de representación sino también, siempre y al mismo tiempo, *el mostrar que a ese nuestro ser le va este su ser*, si se nos permite decirlo a la Heidegger. La circularidad de la demostración es característica de todo el proceder crítico y revela que estamos ante un procedimiento genuinamente fenomenológico, pues lo que está en juego es el conocimiento de nosotros mismos o *Selbsterkenntnis*,²¹ un conocimiento en el que, de alguna forma, nos ganamos y nos hacemos.

En el caso de la Estética está en juego que hay forma de la intuición y que esta forma habilita la presencia de los objetos que nos hacen frente en la experiencia. Todo esto sólo puede lograrse por medio del reconocimiento de nosotros mismos como seres que conocemos sensiblemente. Podría parecer que el nudo de la dificultad está en determinar nuestra posición en relación a las intuiciones puras; pues siendo éstas formas *a priori*, ¿en qué manera estamos concernidos por ellas? El caso que se vuelve relevante en la Estética trascendental (y en cuyo volverlo relevante consiste la prueba, etc.) no es otro que *el hecho de encontrarnos* en el espacio y en el tiempo, que nos proveen de relaciones inalienables e inmediatas (en A 23/B 38 Kant habla del lugar, *Ort*, como el emplazamiento “en el que yo me encuentro”, *befinde*). Este hecho no consiste simplemente en que reconocemos que hay fenómenos exteriores. No es la relación externa al sujeto lo que constituye formalmente la intuición. También tiene que proveer esa relación de una forma en la que situarse los distintos objetos unos fuera de otros. De este modo los objetos de la experiencia son discernibles. La forma de solucionar cualquier tentación idealista es que la misma forma de la intuición sirva para que el sujeto se discierna a sí mismo, como ser en el mundo diríamos, porque sólo así podrá discernir y no sólo imaginar. Así se distingue el sentido, *Sinn*, de la imaginación, *Einbildungskraft*, porque el sentido “es ya en sí mismo referencia, *Beziehung*, de la intuición a algo real fuera de mí”. No hay sentido externo, esto es lo que quiere decir Kant, sin experiencia externa, que es el *factum* inalienable. La experiencia, y con ella el fenómeno, suprime la invención, esta es la clave (*KrV*, B XL, nota). Pero también es cierto que de mí mismo “sólo hay una única experiencia” (B XLI, nota). El sentido interno se distingue también de la imaginación, pero no correlativa o paralelamente, sino por lo mismo, esto es, por el hecho de que guardamos un vínculo con lo externo también en la experiencia interna. Kant insiste en que la experiencia interna está ligada “inseparablemente” a la experiencia externa. La experiencia externa hace posible la figuración, *Einbildung*, como cualquiera de las demás experiencias internas. La experiencia interna no contiene menos el vínculo con la determinación de algo real que la experiencia externa, pues toda experiencia consiste en la “determinación de mi propia existencia” (B XLI). No está en juego la mera conciencia de mi representación, que sería el punto de partida de la tesis idealista. La experiencia interna, el que hecho de que sea *empíricamente consciente de mi existencia*, hace imposible que me zafe de la experiencia externa y de *mi existencia como objeto* de experiencia

cuando conozco. El conocimiento de la experiencia no puede trascender la experiencia del conocimiento.

Esta es la doctrina del “doble Yo” (*FM*, AA 20: 268; *Anth*, AA 07: 134, nota), como se la ha llamado, que no debe comprenderse, que ante todo no debe comprenderse, como una mera distinción analítica, sino más bien como *una auténtica complicación existencial*, si se nos permite decirlo de esta manera. En realidad se trata de una ambigüedad fértil, que afecta al conocimiento empírico tanto como al conocimiento *a priori*; como también, incluso, al conocimiento transcendental (y por eso el conocimiento de sí que es la crítica de la razón no puede zafarse de la experiencia de la metafísica ni de otras ciencias de razón). En el caso de la Estética transcendental (lo propio podría decirse de la Lógica transcendental), no está en juego sólo la Facultad ontológicamente relevante para el conocimiento *a priori*; también tiene que estar dada, de modo igualmente fáctico e irreducible, la condición óptica de ese *factum*, pues sin el hecho de la experiencia no tendría lugar el hecho de la validez. “¿Qué son las intuiciones puras? Formas de la sensibilidad, de los *sentidos* externos y del interno” (*FM*, AA 20: 339; el subrayado es mío). Más aún, es en esta misma condición óptica donde podrá reconocerse aquella condición ontológica, que es a lo que venimos apuntando con la obstinación física del fenómeno. De ahí la paradoja del sentido interno. No podemos dejar de encontrarnos ni de tener conciencia empírica de nuestra existencia cuando acontece el conocimiento *a priori*. La economía formal de las Facultades no puede zafarse de la experiencia. De ahí lo subversivo que supuso ya introducir un sentido interno, pues revela que también hay una apercepción empírica.

Pero vengamos sobre la cosa en sí. La cosa en sí constituye el aseguramiento tanto de la experiencia como de la posibilidad de la experiencia que, como decimos, van de consuno. Lo paradójico del sentido interno es que impide que nos conozcamos a nosotros mismos de otro modo que como fenómenos. La paradoja estriba en que contraviene la noción racionalista de sí mismo, que es precisamente la instancia apartada de toda sensibilidad. Con el resultado espurio de opacar la instancia que precisamente es la única que puede ser conocida con certeza. El realismo transcendental no pertenece sólo al sentido externo; también cabe un realismo transcendental del sentido interno. La cosa en sí hace frente también a éste (aunque en este caso también se presente como “objeto transcendental”: A 379-380). La fenomenidad del fenómeno impone el sentido y la receptividad como instancias fenomenológicamente inalienables de todo reconocimiento. Ni siquiera a nosotros mismos podemos conocernos si no es como fenómenos. La sensación interna no se zafa ni de la experiencia ni del fenómeno. La ipseidad es una vana ilusión del lógico o del metafísico. O si es algo logrado, no es un conocimiento propiamente dicho. Como expone Kant en los Paralogismos según la primera edición, la inspección lógica puede habérselas con los conceptos, que se le presentan de modo transparente (A 401-2), pero sólo proporciona un conocimiento de tales conceptos, lo que llamará en B 409 una “exposición lógica”, pero no un conocimiento de un objeto en sentido propio, en este caso un conocimiento del sujeto (se trata de una representación “totalmente simple”; *Anth*, AA 07: 134, nota). Tal es el precio de la transparencia. Por eso *la filosofía transcendental*, que sí quiere ser un conocimiento de uno mismo, *se topa irremediabilmente con la psicología empírica y con la antropología* que la

acoge (según A 849/B 877). Esto es importante porque revela que la prueba, como en general el método de la crítica, está siempre al cabo de la experiencia.

Podemos decir que la cosa en sí asegura óntico-ontológicamente el fenómeno. La condición empírica inalienable del conocimiento va de la mano de este aseguramiento, pero también la condición de hechura, *Beschaffenheit*, o índole, *Art*, que tiene la intuición. La hechura es la confirmación del rango óntico-ontológico de la intuición, que es la facultad que rinde una validez sensible específica. Como señala Kant en varios lugares, no hay ninguna razón para tener una intuición espacial, con sus tres dimensiones, o una intuición temporal, que sólo tiene una. El hecho de tener esta y no otras formas de intuición es insondable (B 145-6). La cosa en sí asegura la forma como la forma de una receptividad que *recibe y dispone así y no de otra manera* lo que se da en-y-como experiencia, y en donde también el sujeto se reconoce, así y no de otra manera, en-y-como experiencia, en este caso marcada por las relaciones espaciales y temporales inalienables. Es decir, *la finitud de la forma de la intuición consiste en que se genera en la propia experiencia* (la solución de Kant, en la que no podemos detenernos, es la de una epigénesis de las facultades: cf. B 167). Éste es el desarrollo de la cláusula de finitud a que nos hemos referido antes y el verdadero sentido de ese reconocimiento que queremos apuntar como genuinamente fenomenológico. *Que nosotros los hombres somos capaces de una validez en el conocimiento sólo y en la medida en que no podemos trascender y trascendernos en la experiencia*, que, como dice Kant en *KU* (AA 05: 174), es nuestro único suelo o un territorio. Por eso ni la materia ni la forma pueden trascenderla, y por eso la cosa en sí funciona para ambas como término de contención, o como instrumento de reducción, tanto da, que asegura la finitud de la sensibilidad en su doble condición receptiva y formal.

La cosa en sí ha venido a malentenderse como sustancia. Es claro que la expresión “*an sich*” tiene un carácter operativo cuyo sentido se juega en el mismo discurso crítico, tanto en su retórica, pues no es lo mismo “cosa” que “objeto”, como en su lectura, pues aunque obedece a una y la misma economía de la finitud y de su demostración, no es igual cuando está en juego el conocimiento sensible *tout court*, que es cuando Kant habla de “cosa en sí”, que cuando se pone en juego el entendimiento, que es cuando se mienta al “objeto transcendental” o también al “objeto en sí mismo”.²² No deja de sorprender que entre los comentaristas haya podido entenderse que, en algún sentido, la cosa en sí se refiere a una realidad pareja a la del fenómeno (y viceversa). Porque a poco que se considere el sentido que tiene el conocimiento transcendental, es decir, a poco que se considere el riguroso sentido que tiene el conocimiento *a priori* como reverso de la experiencia, el realismo de la cosa en sí no tiene razón de ser. Lo único que pretende el conocimiento transcendental es saber que hay conocimiento *a priori*, en qué consiste, y cómo obra a favor de la experiencia. Por eso decimos que *detrás de la cosa en sí hay más bien otra obstinación, que vamos a llamar obstinación transcendental*. La obstinación por el fenómeno y por su independencia.²³

Pero lo propio que se ha hecho con la sensibilidad a través de la noción de fenómeno debe hacerse también con el entendimiento y con su objeto propio, que es el noúmeno. Kant insiste en que el noúmeno es un objeto meramente pensado por el entendimiento que surge por oposición al fenómeno como objeto meramente sentido por la sensibilidad. Siendo la

contraparte de los fenómenos pensados por medio de la unidad de las categorías (A 248), la independencia que tienen que sostener tiene que ver con la síntesis trascendental. Como ésta es una síntesis sensible, el noumenon es el objeto desvinculado de la sensibilidad misma y así aparece la noción de intuición intelectual. Kant apreció una importante diferencia de matiz a la hora de pensar esta no vinculación. Retóricamente, no es lo mismo un juicio negativo que aparta el noumenon de la intuición sensible y un juicio infinito que lo que hace es situarlo como objeto de una intuición intelectual (nos referimos ahora a la distinción entre noumenon en sentido positivo y en sentido negativo de B 307). Como Kant ha señalado, el juicio infinito es un juicio afirmativo que supone que hay un campo de objetos de intuición, que se puede dividir al menos entre objetos de la intuición sensible y objetos de la intuición no-sensible (cf. A 72-3/B 97-8). Tomado, en cambio, como parte de un juicio negativo, el noumenon cumple una función restrictiva y de contención. Ahora bien, como el objeto de conocimiento necesita no sólo de la categoría sino también de la intuición, el noumenon en sentido negativo queda también como eso que en el fenómeno “corresponde” a la cosa en sí, pero que es sólo y nada más que “lo que no se muestra” (A 251). Esto es, el noumenon en sentido negativo es lo que *no se muestra a nosotros*, en lugar de ser lo que se muestra a otra clase de intuición. La cosa en sí se convierte entonces en “objeto trascendental”, que es el nombre más próximo al sentido que tiene como limitador del conocimiento intelectual, pues pensar es siempre pensar objetos, pero que mantiene la no vinculación con la sensibilidad y con la intuición sensible, que es el rédito de la obstinación del fenómeno. Kant expresa esta idea por medio de la noción de “algo en general” (A 252), o también como “una representación de un objeto en sí mismo” (B 306). Pero en ambos casos se trata de una representación que *limita igualmente la sensibilidad y ajusta la intuición a la finitud de la receptividad* (A 251).

El noumenon asegura algo más que la sensibilidad. También asegura al entendimiento. En este caso no se libera al fenómeno como objeto posible sino al objeto en general como el objeto posible del pensar en general. Es decir, la forma del entendimiento que es la categoría queda asegurada en tanto que forma. En este caso debería hablarse de *un rédito lógico* de la que hemos llamado obstinación trascendental. El noumenon segrega positivamente (no el noumenon en sentido positivo) el objeto en general así como la “categoría pura” que aparece en la primera edición (A 248/B 305). Igualmente rinde la *synthesis intellectualis* que Kant introduce, junto con la paradoja del sentido interno, en la segunda (B 150 ss.). Esta forma de obstinación irá acompañada de un índice fenomenológico paralelo, que en este caso no tendrá que ver con el fenómeno sino con el acto de pensar y con la sola receptividad de ese acto. La “intuición empírica indeterminada” o la “percepción indeterminada” de la nota de B 422-3 mientan esa particular facticidad de algo que es “dado al pensar”, que no rinde conocimiento alguno (no rinde experiencia, como sucede cuando está implicado el sentido interno) sino únicamente el hecho de que el pensar es una forma inalienable de estar en el mundo, que es lo que significa “lo empírico” sin más, el índice mundanal en cuanto tal de todo pensar. Se trata de asegurar una fenomenología del pensar, cuyo rendimiento señalado va a estar en el conocimiento práctico. Pero no podemos detenernos en esto.

El reconocimiento del sujeto como sujeto lógico no puede eludir la experiencia. Por eso en la segunda edición aparece la paradoja del sentido interno, y por eso lo hace expresamente

en el seno de la Deducción trascendental de las categorías. Aquí el fenómeno y la experiencia interna van de consuno con la síntesis trascendental. El rendimiento que viene acompañado de experiencia no es el rendimiento de las formas de la intuición sino el de las categorías y su esquematismo. Como han señalado casi todos los comentaristas, se trata del mismo acontecimiento de la síntesis de la imaginación. En todo caso, el horizonte de la autoafección es de una nueva refutación del “*idealismo psicológico*”, tal y como dice Kant en la nota añadida en B XXXIX. Es una refutación que se enfrenta básicamente al malentendido de un sujeto pensante que se considera no vinculado con el mundo externo pero que, toda vez que tiene en la sensibilidad el índice fundamental de su finitud, tiene que revertir sobre el sentido y sobre su diferencia respecto de la imaginación, tal y como vemos en esta nota. En cualquier caso, señalemos por último que en la segunda edición se impone como figura esencial del reconocimiento, a una con el acontecimiento de la autoafección, la figura del “ser pensante finito” en oposición al ser intuitivo infinito (B 71-2). Es otro modo de aseguramiento que hemos llamado antes óptico-ontológico. En este caso se pone en juego de modo expreso la oposición entre receptividad del sentido y espontaneidad del pensar, con que estipuló desde el comienzo la finitud del hombre (las primeras líneas de la Estética trascendental), pero que no aparece en el juego que dan fenómeno y cosa en sí en esta primera parte de la Doctrina de los elementos. Sea como fuere, decimos que Kant se va a servir de *la teología natural como horizonte de reconocimiento de la finitud* (la teología trascendental sólo puede ser dialéctica y no da este juego), jugando con la oposición absoluta entre intuición sensible o receptiva e intuición intelectual o creadora. Donde el ser pensante finito, tal es la lección fundamental de la teología natural, es aquel que también es *objeto para sí mismo* (B 72).

6. LA RAZÓN Y LA FENOMENOLOGÍA DEL PUNTO DE VISTA

Buscamos en el fenómeno un índice fenomenológico inalienable. Aunque la noción de fenomenología cambia, bien puede considerarse que va a ir precipitando un principio metodológico que consiste en la renuncia al fundamento. Esto, sin embargo, no significa la renuncia a la experiencia. *La renuncia supone una particular torsión sobre el propio sujeto*, que es un movimiento genuinamente fenomenológico *avant la lettre*, pero de tal manera que no le devuelve sobre sí mismo sino que le devuelve al mundo, que es el genuino ámbito en el que sólo puede comprenderse el hombre. La filosofía trascendental no puede zafarse de la experiencia, bien que no para quedar reducida a ella, sino, antes bien, para sostener el quicio en el que hemos insistido todo el tiempo entre el conocimiento *a priori* y el conocimiento empírico. Esto tiene consecuencias tanto para las operaciones fundamentales del conocimiento *a priori* como para las distintas disciplinas que se ocuparán de ellas. El juego de contención del fenómeno por parte de la cosa en sí constituye un modo particular de reflexión que se apoya en la obstinación física del mismo así como en el carácter inalienable y fáctico de la aparición y de la mostración. En ello nos parece que Kant atisba una particular forma de fenomenología, digamos el concepto duro de fenomenología. Sea como fuere, ahora, para terminar, vamos a ocuparnos de un desarrollo específico de la fenomenología en los *MA*. Ciertamente no es el concepto de *Phänomenologie* con el que Kant nombra la cuarta parte de esta obra, aunque tenga todo que ver con ella, ni

tampoco es el sentido duro que hemos esbozado en la sección anterior, aunque también tenga que ver con esa particular obstinación de la experiencia. Nos referimos al modo cómo Kant se sirve del espacio absoluto como punto de vista para considerar el movimiento. Un modo en el que se trasluce claramente una suerte de fenomenología de la percepción (y del cuerpo), pero también y muy particularmente de la visión y del espacio.²⁴ Esta fenomenología desarrolla de modo consecuente y en cierto modo última eso que hemos llamado obstinación física del fenómeno y de la apariencia.

Kant se ha servido en numerosos textos de la figura del punto de vista. Varios comentaristas se han ocupado de esta cuestión. Hemos visto cómo Kant vincula la fenomenología con el método de los astrónomos, que consiste justamente en sostener y en comprender la apariencia desde sí misma. La idea de *Standpunkt* busca justamente *sostener una posibilidad anhipotéticamente*, puesto que la posición mentada es una posición de perspectiva (Kant a veces lo equipara a un *Gesichtspunkt*), que no consiste en nada más que en disponer algo de cierta manera para su observación. La posición es soberana, ciertamente, aunque limitada. El punto de vista es una posición relativamente absoluta, si puede decirse así. Por tanto, con la noción de punto de vista va de consuno la idea de finitud y precariedad de la razón, que tiene que bastarse a sí misma y que también tiene que sostenerse a sí misma. En la *GMS* leemos que “la filosofía se encuentra de hecho situada en una posición, *Standpunkt*, precaria, que debe ser firme aunque no pueda pender de nada en el cielo ni apoyarse en nada en la tierra” (AA 04: 425). La contrafigura de esta posición precaria sería la metafísica, cuya posición es firme, pues no es un punto de vista sino la mismísima sustancia (sustancia es aquello que no es un punto de vista, lo hipotético absoluto). Por eso en ella la razón tampoco es precaria sino que ella misma es sustancia, es *res*; ni tampoco lo es su proceder, que es un descenso certero (deducción) desde la posición asegurada del principio.

En el texto referido recién no se trata tanto de la autonomía de la razón en sentido propio (el texto de la *Grundlegung* sí se refiere a esta particular precariedad de la moral), como al hecho de que la razón tiene que habérselas consigo misma, pero sólo desde sí misma, sin fiar nada a posición alguna que no sea la suya. Porque la razón, y esta es la clave, se enfrenta a sí misma y es capaz de elaborarse y de conducirse, o perderse, a sí misma. En cierto modo, en el procedimiento fenomenológico Kant busca ubicar a la razón en el solo, pero también precario, ámbito de mostración, pues en ese ámbito anhipotético la razón queda franca para sí misma y para su propia consideración y trabajo. Esto no la libera de los supuestos pero sí hace que los supuestos sean sólo eso, supuestos, en cuyo trato tiene que moverse la razón para sostenerse a sí misma y asegurar su vida. Volviendo sobre la *Grundlegung*, en una de sus apariciones más frecuentes la noción de *Standpunkt* sirve para separar el mundo sensible y el mundo inteligible, y con ellos los dos posibles aspectos de la causalidad natural y de la libertad (*GMS*, AA 04: 452, 455). Por eso en los *Fortschritte* Kant dirá que uno de los dos pilares fundamentales en los que se hunde la crítica es la doctrina de la idealidad de espacio y tiempo (*FM*, AA 20: 311), que bien puede considerarse, si se nos permite decirlo así, como la doctrina kantiana del punto de vista.

Esta doctrina sostiene que la razón es la facultad capaz de tomar y sostener posiciones, pues el lugar de la razón es el límite (el pivote) entre ellas. Por eso muchos términos fundamentales (entendiendo con ello que son los que dan cuenta del fundamento) son ambiguos (en B

306 habla de *Zweideutigkeit*), lo que indica una falla fundamental, que es la de la finitud. Esto es claro en el caso del término “transcendental”, que alberga justamente la posibilidad de que la razón se sitúe en su propio ser finito, capaz de conocer *a priori* pero incapaz de hacerlo al margen de la experiencia (B 25), o que olvide este ser y pretenda conocer más allá de sí misma (A 56/B 81). Pero el mismo caso es el de “objeto”, cuya ambigüedad también es manifiesta (al fin y al cabo, la distinción entre fenómeno y noumeno, tal y como la expresa en la Lógica, y concretamente tal y como aparece en la segunda edición, abunda en la idea de que el entendimiento puede ponerse en dos sentidos o relaciones, *Beziehung*, distintas: B 306-7). Podríamos decir que la ambigüedad, lo mismo que la metáfora y que otros recursos, está en el nervio de la obra crítica, a la que debe reconocerse la retórica como uno de sus rasgos fundamentales. Recuérdese que uno de los primeros ensayos de Kant sobre la razón fue la dilucidación de su uso simbólico, concretamente en los *Träume*, que luego reafirmó en el período crítico, y que reconoce expresamente a la base de la producción misma del lenguaje (*KU*, AA 05: 352-3).²⁵

Pero volvamos sobre la razón. La razón es ante todo una facultad o una fuerza de representación que se sitúa en esa posición, como un poder que guarda distancias respecto de sí y que se guarda en esas distancias. La operación que ejecuta esta particular posición-y-relación es la de enjuiciamiento, *Beurteilung*. Ésta es la operación fundamental de la crítica. La crítica a las tres metafísicas especiales señala que han tomado lo que es sólo un punto de vista por una posición absoluta. Es el mismo error, sólo que en el extremo opuesto, cometido por el empirismo y el naturalismo al tomar la experiencia como la totalidad absoluta. El aseguramiento del fenómeno es el aseguramiento de la posición o perspectiva ante la experiencia y la filosofía crítica es el posicionamiento de la razón en el lugar desde donde poder enjuiciar a la metafísica, como recuerda en los *Prolegomena* (*VAProl*, AA 23: 57). La razón es la facultad de la reflexión, o lo que es igual, es la *facultad de la distancia pero también del descentramiento* (incluido el del lenguaje, como acabamos de apuntar). Al fin y al cabo, ¿no contienen las tres máximas del sentido común (AA 05: 294-5) una particular fenomenología de la reflexión y de la razón como capacidad de posicionarse?

7. LA OBSTINACIÓN MATERIAL DEL FENÓMENO Y EL PROBLEMA DE LA MATEMÁTICA

Pero aquí queremos apuntar el modo en que esta condición se pone en juego en los *MA* al hilo de la particular obstinación del fenómeno que encontramos en ella, que es la del movimiento. Kant indica que el concepto sobre el que se levanta la metafísica de la naturaleza corpórea es el concepto de materia, que, paradójicamente (tratándose de una metafísica), es un “concepto empírico” (AA 04: 470). En la primera Crítica formula así esta *perplejidad*: “¿cómo puedo esperar un conocimiento *a priori* de objetos ... en tanto que están dados a nuestros sentidos, es decir, *a posteriori*?” (KrV, A 847/B 875). Los objetos no son los objetos de la naturaleza en general (objetos dados indeterminadamente), de los que se ocupa la filosofía transcendental, cuyos conceptos son las categorías. Pero tampoco son los objetos de la experiencia de la naturaleza, de los que se ocupa la historia de la naturaleza (que son todo lo contrario, los objetos determinados), que maneja los conceptos de las especies. Concretamente Kant dice que

los objetos de esta metafísica son los objetos-del-sentido-externo. Esta especificación no impide que haya un conocimiento *a priori* de los mismos. Más aún, incluso habilita a esta metafísica en el uso de la matemática (porque, como sabemos, la matemática y el uso matemático de razón está proscrita de la filosofía trascendental, cosa que suele olvidarse con frecuencia). Para ello esta especificación debe considerarse como subjetiva. Sabemos que hay conocimiento *a priori* gracias a la hechura subjetiva de las formas de la intuición. Pues bien, ahora es *la hechura del sentido externo* el que habilita un tal conocimiento.

De acuerdo con esta determinación, la materia se define como “extensión inerte e impenetrable” (*KrV*, A 848/B 876). Kant apunta lacónicamente el contenido de esta determinación como eso que es preciso, *nöthig*, para que se nos *dé* un objeto del sentido externo. Esto no lleva a ninguna parte a menos que el fenómeno se revele específicamente como fenómeno externo con sus predicados y con la sintaxis correspondiente. En un texto de la primera redacción de los Paralogismos Kant llama a la condición no-cósica del fenómeno su “cualidad”, *Qualität* (A 385). La materia es sólo un fenómeno, una representación en nosotros, lo que quiere decir que no es sustancia. Ahora bien, para no caer en la pendiente idealista que haría de la materia una sola representación, la materia tiene que hacer posible distinguir a los objetos del sentido externo *entre sí*. La materia tiene que revelarse como auténtica cualidad. Kant expresa esto afirmando que la materia no es una clase de sustancia heterogénea sino que es “la heterogeneidad de los fenómenos de objetos”. Desde el período precrítico Kant ha abundado en esta condición cualitativa de las intuiciones que sirve para constituir a los objetos de la experiencia como singulares. Hemos señalado el lugar, la figura y también las relaciones como los distintivos cualitativos genuinos de la intuición externa. En los *MA* Kant abunda en esta cualificación, pero añade una determinación adicional, que es el movimiento. Por ahora dejemos sentado nada más que esto, a saber, que el movimiento es la “determinación fundamental” de la materia (AA 04: 476) y que lo es justamente por su condición fenomenológica o cualitativa inalienable, “porque en el espacio no puede ser pensada ninguna otra actividad, ninguna otra modificación que el movimiento” (AA 04: 524).

Como es sabido, el fenómeno de la incongruencia aparece en varios textos, aunque precisamente no en la Estética trascendental (lo hace por primera vez en los textos precríticos de *GUGR* y *MSI*, y luego en *Prol*). En el texto sobre las regiones del espacio el objetivo declarado de Kant es apoyar la tesis newtoniana de espacio absoluto. Para lograrlo debe ponerse en evidencia que las posiciones no son simplemente intercambiables y que el espacio alberga posiciones no relativas, posiciones cualificadas o situaciones, que es lo que aquí llama Kant *Gegenden* (AA 02: 377-8). El espacio es discernible (Kant rebate así el argumento de Leibniz; *cf.* A 271-2/B 327-8), y con él los cuerpos que lo ocupan (definidos por su lugar, que Kant también llama posición, *Stelle*; *cf.*, p.e., *Prol*, AA 04: 285-6). Esta discernibilidad es revelada en los fenómenos de incongruencia. Estos fenómenos muestran que el espacio está atravesado por una “diferencia interna” (*GUGR*, AA 02: 382), que es lo contrario de una diferencia reducible o subsumible lógicamente (que sería una diferencia externa). Esta diferencia es “*dari, non intelligi*” (*MA*, AA 04: 484). Por eso lo que se hace presente en ella lo hace singularmente o *in concreto* (*MSI*, AA 02: 403). Los dos ejemplos de incongruencia de que se sirve Kant, que aparecen primero en la *Dissertatio* y luego en los *Prolegomena*, son el de las dos manos y el de dos triángulos esféricos

situados en hemisferios opuestos (en los *MA* se referirá a diferencias que atañen movimientos; cf. AA 04: 484). La incongruencia revela la naturaleza formalmente múltiple del espacio, pues tanto como no se pueden superponer objetos no se pueden confundir dos espacios ocupados. En la *Dissertatio* dice Kant que esto concreto es algo visto o intuido distintamente, *cerni* (*MSI*, AA 02: 402-3). Pero lo que importa es que esto que así se muestra, la diferencia interna o la singularidad, tanto da, se presenta con un evidencia particular. *La diferencia no está sólo en lo que se muestra sino que afecta al mostrarse mismo*, sin el cual no sería nada. La necesidad *a priori* a la que se refiere Kant cuando habla de las intuiciones puras (las segundas notas de sendas Exposiciones metafísicas) está en la mismísima presencia de la representación como tal representación, en *su consistencia fenomenológica como fenómeno verdadero*, que arroja lo que Kant llama en *GUGR* la “experiencia más evidente”, *augenscheinlichsten Erfahrung* (AA 02: 383).

Como han señalado numerosos comentaristas, aquí está en juego la presencia y la verdad del organismo. El conocimiento *a priori* que es posible a partir de algo dado *a posteriori* con que Kant nos arrojaba a la perplejidad al final de la primera *Crítica*, no es sino el conocimiento *a priori* que es posible por nuestra condición de cuerpos orgánicos que nos proveen de una experiencia espacial inalienable. Los organismos nos proveen de *una experiencia que, en cierto modo al menos, no puede ser reducida al tiempo*. Esta es la clave. En los *MA*, sin embargo, todavía no está (o no es necesaria) esta particular referencia (sólo hay referencias ocasionales a los organismos vivos), que tiene su más cumplido desarrollo en el *Opus postumum*.²⁶ Pero lo que nos interesa es que sí se pone en juego una particular fenomenología del cuerpo que está básicamente vinculada al espacio visual en esta obra, en donde vamos a confirmar la obstinación del fenómeno así como la función de la razón como facultad de la distancia.

Para empezar, consideremos el espacio de una metafísica de la naturaleza corpórea, así como el papel del tiempo. El espacio que está en juego aquí es un espacio sentido. Si la materia de la intuición externa es la sensación y en toda experiencia algo tiene que ser sentido, entonces el espacio en el tiene lugar la materia tiene que ser él mismo material y susceptible de sensación, tiene que ser *empfindbar* (AA 04: 481). Kant entiende que la materia de la intuición externa es lo “Propiamente-Empírico” de la misma. Por eso el espacio presente y reconocible de este modo es el *espacio empírico*. Todavía no está en juego la intuición interna, sino el vínculo expresamente fenomenológico de la materia con el espacio, que es donde el movimiento se revela como fundamental. En efecto, la materia es “lo movable, que es sólo es posible en el espacio” (AA 04: 543). En relación a la apercepción sólo reconoce una suerte de “fuerza fundamental”, que puede remitir y disminuir su grado, pero que no consta de partes ni puede ubicarse en el espacio (AA 04: 543). Incluso en relación a la apercepción parece que el espacio sentido va a ir ganando terreno. En los *MA* Kant sólo reconoce una suerte de “fuerza fundamental”, que puede remitir y disminuir su grado, pero que no consta de partes ni puede ubicarse en el espacio (AA 04: 543). Esta idea aparecerá luego en la segunda edición de la *Crítica* como la Refutación de la prueba de Mendelssohn (B 413-8). Sin embargo, al mismo tiempo se introduce en B la necesidad fenomenológica de la intuición externa y de la sensación como momento necesario de la síntesis trascendental de la imaginación. La paradoja del sentido interno, que aparecerá en 1788 (recuérdese que los *MA* son de 1784), no hace sino confirmar esta prelación del movimiento y del sentido externo, que Kant llega a atribuir al sujeto en esta

edición (B 155, nota), y que aquí es atisbada en el reconocimiento de la apercepción como una fuerza (que no remite a una sustancia sino a una sustancia en el espacio –pues la noción de fuerza, recuérdese, es un predicable).²⁷

Una dificultad es la de si este espacio empírico es un espacio que especifica el espacio como forma pura, o si la sensación no pertenece al espacio puro en algún sentido. Según hemos analizado el sentido del conocimiento transcendental, de consuno con el conocimiento *a priori* se da una experiencia de las facultades, y por ello la filosofía transcendental tiene siempre como contraparte la *antropología*. La psicología empírica, en efecto, sería la disciplina que debe ser evitada si se quiere asegurar una filosofía de las facultades. Pero la antropología, en su sentido pragmático queremos decir, es un conocimiento de otro calado. De un calado empírico, en efecto, pero también de un calado genuinamente fenomenológico, pues, para empezar, se trata de conocer lo que el hombre puede hacer de sí mismo. La antropología en sentido pragmático es el conocimiento de *los fenómenos de sí mismo que el hombre puede producir*. Esto significa que hay un conocimiento particular de ese sí mismo que no se limita a la psicología empírica, pues tiene que poner en juego el hacer del hombre, y no de la naturaleza, *en sí mismo y en el mundo* (*Anth*, AA 07: 119-120). En efecto, la antropología rescata una noción de apariencia muy fructífera, la de fenómeno en el mundo, ubicado en lo “exterior”, y que en esa medida puede ser observado y comprendido. También es por eso que no será posible una metafísica de la naturaleza pensante, pues lo empírico en ella no es fenomenológicamente reconocible en el mundo (y por eso, cuando se quiera considerar al hombre como fenómeno sólo quedará la posibilidad de una antropología). Pues bien, nuestra tesis es que algo de lo mismo sucede con la geometría respecto de la metafísica de la naturaleza; es decir, algo de la obstinación física de los fenómenos es rigurosamente matemático. Por eso importa tener al espacio empírico no por una concreción del espacio puro, sino como el modo en que se presenta siempre fenomenológicamente cualquier cuerpo en el espacio.

¿También cuando se trate de la geometría pura? Hemos señalado que uno de los ejemplos de incongruencia es entre dos triángulos esféricos situados en hemisferios opuestos. Esto significa que podemos construir figuras en el espacio, como cuando generamos un triángulo, pero no podemos construir el espacio mismo. El ejemplo que se suele aducir de la nota de B 155 habla del acto de *describir* el espacio, pero para indicar que la actividad misma de la imaginación, y con ella el esquematismo, no se puede zafar de la autoafección (B 155). En este texto no es la geometría la que tiene que ser sometida a la facticidad del espacio sino el tiempo. Sólo cuando entre en juego el movimiento entendido como cambio de lugar, por tanto únicamente cabe el espacio empírico (según lo llama Kant en la conocida recensión sobre Kästner), es decir, sólo cuando estemos ante un espacio sentido se podrá evaluar la relación de la geometría con la ciencia de la naturaleza.

Hemos visto cómo había una cierta ambigüedad entre las cualidades primarias y las secundarias, que indican que la sensibilidad y sus condiciones no pueden zafarse de los sentidos y las suyas. Esta ambigüedad tiene su juego cuando hablamos de objetos de la sensibilidad o fenómenos, esto es, cuando estamos ante objetos de la intuición empírica. La extensión, por ejemplo, no significa sino que todo fenómeno es una magnitud extensiva y que su figura ocupa

un espacio; pero cuando tenemos un cuerpo extenso, que es lo que nos va a proporcionar la intuición empírica y el sentido, entonces entra en juego la impenetrabilidad, que nos pone ante eso que hemos llamado obstinación física del fenómeno, el hecho de que sentimos el cuerpo en el espacio porque nosotros nos sentimos en el espacio. La geometría, en efecto, tiene en cuenta la multiplicidad de una intuición sensible en general, y puede exhibir *a priori* una figura, pero no obstante no puede zafarse de las condiciones particulares de la intuición y del sentido, como la de la incongruencia que hemos señalado antes. Desde el momento en que tenemos tres dimensiones, aunque la posición desde donde se traza la figura o se hace la descripción es ciertamente *ad libitum*, el lugar desde donde se genera la figura es fundamental, y por eso las reglas de una construcción son en cierto modo instrucciones de una operación en la que se manipula el espacio, pero sólo hasta cierto punto. Podría pensarse que esto es así en el caso de la geometría aplicada. Pero no es así.

La discusión sobre la distinción entre geometría pura y geometría aplicada suele soportar un equívoco fundamental; las expresiones *puro/aplicado* vienen a entenderse de modo que lo aplicado, sea la geometría o la metafísica de la naturaleza, es el resultado hacer recaer lo puro, la filosofía trascendental o la geometría pura, sobre la experiencia, pues al fin y al cabo el espacio y su forma es el fundamento de la geometría pura, que tendría así en la geometría aplicada algo así como su desarrollo empírico. El equívoco estriba en entender como parejas correlativas la de filosofía trascendental/ metafísica de la naturaleza y la de geometría pura/geometría aplicada. El texto de A 165-6/B 206-7, que ultima los Axiomas de la intuición, es utilizado con frecuencia como la confirmación de este extremo. Pero aquí se dice sólo que la geometría necesita de la experiencia para lograr validez objetiva, *no que la experiencia esté constituida por las mismas operaciones de síntesis que operan en la construcción de conceptos*. La geometría pura gana validez en la experiencia, pero la validez no es lo mismo que el conocimiento empírico (sólo en la matemática, donde cabe la evidencia, la validez es lo mismo que el conocimiento, pues lo que se conoce matemáticamente son los objetos en sí mismos). La síntesis trascendental de la imaginación produce las categorías de cantidad, pero no construye los conceptos matemáticos. Lo que sucede es que las construcciones geométricas, lo mismo que las categorías, no pueden subvertir la forma de la intuición, a la que tienen necesariamente que conformarse (al fin y al cabo las condiciones de posibilidad de la experiencia se generan en la experiencia), aunque no puedan producirla. Los axiomas de Euclides son una confirmación de esto, pero también lo son los Principios del entendimiento. Ahora bien, esto es una cosa y otra distinta que el conocimiento matemático y su uso específico se identifiquen con el conocimiento de las intuiciones puras y de su forma, que es el conocimiento filosófico.²⁸ Esto es lo que Kant ha tipificado como el equívoco de la filosofía platónica, que ha llamado fanatismo, *Schwärmerei*, cuando la razón confunde los conceptos del conocimiento *a priori* (en Platón ideas) con los conceptos de los objetos mismos de la experiencia (*cf. Refl* 6051, AA 18: 437).²⁹ Para que el conocimiento matemático pueda tener un rendimiento positivo en el conocimiento empírico hace falta que el fenómeno se sostenga a sí mismo, fenomenológicamente, renunciado al fundamento. La matemática sólo se podrá avenir al conocimiento metafísico de la naturaleza corpórea, precisamente en tanto que conocimiento de las apariencias.

En la metafísica de la naturaleza corpórea es el espacio empírico el que decide el uso de la matemática. Como vimos al analizar el concepto precrítico de fenomenología, la influencia del método de los astrónomos revelaba la necesidad de renunciar al fundamento metafísico. En la filosofía trascendental se logra esto por medio de las contrafiguras del fenómeno que son la cosa en sí y el noumeno. En la metafísica de la naturaleza corpórea (la única metafísica de la naturaleza), el movimiento marca fenomenológicamente todos los principios así como el particular uso de la facultad de pensar que los propicia. Es decir, el espacio sentido, la posición inalienable del sujeto en el espacio, es lo que decide el sentido y la interpretación de la fenomenidad. Repárese en que el movimiento es un índice fenomenológico inalienable precisamente porque se gana en relación al espacio absoluto. De la misma manera que la cosa en sí constituye el límite irrebalsable que asegura el fenómeno, el espacio absoluto hace lo propio con los fenómenos de los cuerpos.

En la Foronomía se trata de establecer los principios del movimiento sin atender nada más que a la cantidad, es decir, se trata de aquello que se pueda establecer *a priori* de la dirección y velocidad (de su relación con el espacio) en cada cuerpo y en su composición. La relación de cambio de posición es siempre relativa, porque todo espacio empírico es siempre relativo a otro espacio distinto y mayor. El movimiento de un cuerpo puede ser el movimiento de su espacio o bien puede ser el movimiento del espacio del observador. Es decir, todo movimiento tiene que poder pensarse en relación a un espacio que lo comprende, el cual a su vez siempre podrá pensarse en relación a otro espacio mayor, etc. Es por tanto indecible qué es lo que se mueve (AA 04: 488). Lo que sí se puede saber es que hay movimiento así como algunas de sus cualidades, como la velocidad y la dirección. Esta *indiferencia de la sustancia* demuestra que el movimiento es un genuino fenómeno en el sentido que antes hemos esbozado, donde lo que se impone no es el solo cambio de relación, no la determinación del sujeto de ese cambio (al haber pura correlación no hay sustancia que valga). Vale la pena reparar en que lo que conduce al espacio absoluto es el espacio empírico. De la misma manera que la contraparte de la intuición empírica es la cosa en sí, el movimiento no puede pensarse si no es desde más allá del espacio empírico, que funciona simplemente como punto de fuga con el que sostener el fenómeno en sí mismo, que aquí, decimos, no es otra cosa que el cambio de relaciones, es decir, la relatividad misma de todo cuerpo en el espacio.

De este modo se confirma lo que sabemos de la condición de posibilidad de la experiencia, a saber, que no podemos dar con “ningún límite extremo de la experiencia posible” (AA 04: 488). Esta negativa se alcanza aquí a partir del espacio empírico. Lo que en la *Crítica* era el resultado de una particular elaboración del límite inalienable de la receptividad (con el juego fenómeno/cosa en sí), aquí la razón se las ha con el límite del movimiento, lo que quiere decir que se enfrenta a la finitud del sentido externo, o lo que es igual, a la finitud del hombre como ser en el mundo material. El resultado que arroja es ciertamente paradójico. El principio que ultima la Foronomía afirma que la ubicación de un cuerpo móvil en un espacio en reposo o en un espacio en movimiento es arbitraria, *nach Belieben* (AA 04: 487). La receptividad aquí no compromete al sujeto, como sí sucede con el esquematismo. Esto es así porque el tiempo es irrelevante. La síntesis trascendental de la imaginación no es la operación constitutiva de este conocimiento *a priori*.³⁰ Kant se refiere a que la operación lógica que permite relativizar

el movimiento (lo mismo que la fuerza) es la de los juicios alternativos. No se trata de la disyunción, que supone la determinación objetiva de los opuestos (uno u otro de los predicados rinden concuencias para la constitución del objeto de experiencia). Se trata de la posición arbitraria de dos predicados, es decir, de la posibilidad de alternancia de posición de los mismos (AA 04: 555-556). Por eso decimos que no hay un compromiso con el tiempo sino con el espacio, pero justamente como el espacio sentido que nos ubica en el mundo. La razón se muestra así como una fuerza del punto de vista o de la perspectiva. El pensar es la distribución variable de las fuerzas de representación entre sí, su juego, toda vez que estas fuerzas están en un movimiento, un *Gemüthbewegung* lo llama Kant (KU, AA 05: 334), movimiento que puede configurarse y reconfigurarse.

Por eso es posible la construcción de los conceptos, esto es, la construcción matemática de los conceptos, pues lo que se anticipa no es el compromiso del sujeto de conocimiento con la experiencia sino más bien su compromiso con su propia finitud como sujeto en el espacio y en el mundo, que es *un compromiso de relatividad absoluta*. La matemática sirve reglas, pero reglas que sólo sirven para ordenar de un modo rigurosamente equitativo los cambios en el fenómeno, al que somete a equivalencias de reciprocidad. Es así como puede eludirse la sustancia. (Esto también será cierto en el caso de los principios metafísicos de la dinámica y de la mecánica, pues la constitución fenomenológica del fenómeno pasa por la noción de fuerza. Pero aquí no podemos ocuparnos de cómo sucede esto.)

Tampoco está justificado pensar que el hecho de que la matemática asegure la cientificidad de todo saber supone que la tarea de la primera *Crítica* es una fundamentación de las ciencias racionales (y que por tanto hay una continuidad natural entre la filosofía trascendental y la metafísica de la naturaleza). Las construcciones de que se sirve la metafísica de la naturaleza corpórea estipulan más bien todos los índices de finitud del encontrarnos en el espacio, precisamente debido a su arbitrariedad. Por eso lo que interesa de la geometría no es sino las líneas y las propiedades de las líneas, así como las operaciones que pueden hacer con ellas, que son puramente formales. Lo que se descubre a la postre en la matemática es una *finalidad formal*, según la llama Kant (KU, AA 05: 362-3), es decir, *una finalidad descubierta en el fenómeno* pero que no tiene que ver con su producción como objeto de la naturaleza, que es lo que haría de ella una finalidad material o real.

Esta noción de fenómeno nos devuelve sobre la idea de obstinación física a que nos referimos al comienzo. La Fenomenología de los *MA* como cuarto momento de los principios, precisamente el de la modalidad, sería la confirmación palmaria de este hecho, cuando el conocimiento de la materia es la mismísima cualidad de las líneas que describen o cualifican el movimiento: recta, curva o “contramovimiento”. Es decir, cuando *el conocimiento*, tal y como sugirió en su momento la figura de la revolución copernicana, *se convierte en una suerte de fenomenología del espectador, Zuschauer* (MAN, AA 04: 555).

RESUMEN: El propósito de este trabajo es exponer el vínculo entre la fenomenología tal y como fue planteada en los textos precríticos y la noción de fenómeno que aparece en la primera *Crítica* y en los *MA*. Mostraremos que, primero, la *phaenomenologie* es un modo de investigación de lo que hay que renuncia al fundamento. En segundo lugar, el método que Kant vincula a este fenomenología es una suerte de reducción, la cual, de acuerdo con el propósito de la filosofía trascendental, es el único modo que puede dar cuenta de el hecho específico que enfrenta la crítica, esto es, el hecho de la validez del conocimiento. La reducción consiste aquí en descubrimiento de algo que es una posibilidad, el conocimiento *a priori*, no una cosa. Tercero, en la etapa crítica el fenómeno presenta una doble ‘obstinación’ como objeto genuinamente estético: físicamente es una apariencia que no puede soslayarse; transcendentamente está limitado por la cosa en sí, que no puede identificarse con causa o fundamento alguno, ni físico ni metafísico. Por último, el fenómeno constituye un modo de presencia irreducible a la lógica pero susceptible de un particular uso de la facultad de pensar, el matemático, en el que no interviene la síntesis trascendental de la imaginación.

PALABRAS CLAVE: Fenómeno, fenomenología, metafísica de la naturaleza, método trascendental, cosa en sí.

ABSTRACT: The aim of this paper is to show the relationship between phenomenology, as it has been explained in Kant's precritical writings, and the concept of phenomenon which appears in the first *Critique* and in the *MA*. We will argue that, first, *phaenomenologie* is the very investigation which gives up the ground, *Grund*. Secondly, the method which Kant links to this phenomenology is a kind of reduction; this reduction, according to the aim of transcendental philosophy, aims to give account for the very fact which addresses the critic, that is, the validity of knowledge. Reduction is here just the discovery of something, *a priori* knowledge, which is not a thing but a possibility. Thirdly, in the critical period phenomenon shows, like a genuinely aesthetic object, a double ‘obstinacy’: physically phenomenon is an appearance that cannot be ignored nor reduced; transcendentally it is limited by the thing itself, which cannot be identified with any cause or ground, neither physical nor metaphysical. Finally, phenomenon is a mode of presencing which cannot be reduced to logic. It is linked to a particular use of the power of thinking, the mathematical use, which does not involve the transcendental synthesis of imagination.

KEYWORDS: Phenomenon, phenomenology, metaphysics of nature, transcendental method, thing-in-itself.

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NOTAS

1 Este trabajo compromete otros dos más en proceso de elaboración. El primero consta de tres partes y se ocupará del vínculo que guarda el concepto de fenomenología y sus recursos tal y como los encontramos en Husserl y Heidegger y el del propio Kant. El segundo abundará en la noción de fenomenología del cuerpo, especialmente en la fenomenología de la visión, que a nuestro juicio también está presente en la noción de método de la entera filosofía kantiana.

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3 El objeto de este trabajo no es la relación de Kant con Lambert. Los artículos de Piché referidos en la bibliografía (2003, 2004) se hacen cargo sobradamente de esto. La conclusión es que "la «fenomenología general» expuesta en la *Dissertatio* de 1770 sólo tiene una relación indirecta con el método fenomenológico que se utilizará en la filosofía crítica." (PICHÉ, 2004, 49). Este autor demuestra el influjo del método tal y como lo concibe Lambert (el de los astrónomos) y la noción kantiana de fenómeno y fenomenología, revela la relación de la noción de fenomenología de Lambert con la dialéctica en general, y con las antinomias en particular, y reconoce la comparación entre apariencia e ilusión óptica (2003, 124; 2004, 54). Sea como fuere, aquí nos hemos limitado a un par de atisbos que nos permitan esbozar el sentido genuinamente kantiano de fenómeno y fenomenología en la filosofía teórica, dejando aparte la justedad de su relación.

4 Lambert, J.H. *Neues Organon*, Prefacio, pp. xi-xii. Citado por PICHÉ (2004, p. 54).

5 Esto, como veremos, es el problema fundamental de la fenomenología en Kant: si y cómo el fenómeno revela la posición en sentido fuerte del hombre en el mundo. Algo más que como observador, pero también algo menos que como observado.

6 El verdadero punto de partida de la fenomenología, no menos que de la crítica, es la necesidad sentida en las interminables batallas de la metafísica de asegurar la razón y sus intereses; es la necesidad de conservar la racionalidad frente al prejuicio y la superstición; es la necesidad de asegurar a la filosofía frente al despotismo de las escuelas, primero, y de las demás Facultades, ahora en el espacio ampliado de la Universidad; etc. En fin, es *una necesidad que nace de los peligros que amenazan a la razón en el mundo*.

Formulado de una manera más precisa, pero también general (válida para la fenomenología lo mismo que para la entera filosofía), lo primero es el obstáculo, el impedimento. En lo que sigue confirmaremos este extremo.

7 Pero la fenomenología, al menos en esta ubicación en el horizonte del proyecto crítico, va a desaparecer. Problemas ya reconocidos en el escrito precrítico así como otros nuevos, para empezar el descubrimiento de la síntesis, complican el horizonte de la crítica; luego la precisión de la noción de “dialéctica” como modo específico de transgresión. Las antinomias son la parte de esta dialéctica desarrollada primero (están presentes en la *Dissertatio*). Sin embargo, sólo están las antinomias matemáticas, porque en ellas se produce una subrepción de los principios de la sensibilidad, que son los que tiene que asegurar la fenomenología. Todavía no se han puesto en juego los paralogismos, que son la última sección de la Dialéctica trascendental concebida por Kant (los comentaristas datan la presencia de los paralogismos a finales de la década de los setenta), toda vez que tienen que ver con el malentendimiento de la lógica y con el interés de la razón por el alma (este interés es lo que introduce el genuino concepto de dialéctica que todavía no está en la *Dissertatio*), pero también y sobre todo con la cuestión del conocimiento de uno mismo, que bien puede considerarse como una fórmula de la tarea de la crítica en general. Como veremos, la dificultad localizada en el texto precrítico es la de la que luego Kant llamará “anfibología”, que es una subrepción de sensibilidad y entendimiento. La anfibología sólo merecerá un Apéndice, pues no ataca al problema mismo de la síntesis, inédito para el dogmatismo racionalista y para su intelectualismo, que es el verdadero objeto de esta sección. La fenomenología luego entrará de lleno en est la crítica de la razón, bien que no implicada con la metafísica en sentido estrecho, es decir, con el interés de la razón por el tránsito de lo sensible a lo suprasensible, que será lo específico de la dialéctica. Kant la desplegará en la Estética trascendental, pero también aparecerá implicada, y esto es muy importante, en la crítica de la síntesis propiamente dicha, que es el negocio de una parte de la lógica trascendental, la analítica trascendental. Estos, podríamos decirlo de esta manera, son los hitos de esta *complicación de fenomenología y crítica* en la *KrV*.

8 Cuando Kant recupera a “los antiguos” (A 21/B 36, nota; B 113, etc.) o a “las escuelas antiguas” (*MSI*, AA 02: 392; *Log*, AA 09: 28, etc.), no se trata sólo de contravenir *retóricamente* al presente (“los tiempos de Leibniz y Wolff”, la Academia, “los modernos”). También se trata de un recurso *metódico*. Recuérdese que la historia de la razón pertenece al método. La historia, en efecto, alberga cierta “sabiduría” (*KU*, AA 05: 182). La historia funciona como una suerte de *paso atrás en punto a la cosa misma*, en esa búsqueda del sentido que pueda albergar todavía, ora el término ora el principio. Los vocablos antiguos dan a pensar algo que el lenguaje ha conservado, precisamente en tanto que es un lenguaje que guarda una distancia que nos aleja de la familiaridad que tienen las fórmulas y vocablos próximos. Esto, ciertamente, aproxima a la filosofía de Kant a la hermenéutica. Sobre el uso kantiano de los términos filosóficos pasados *cf.* BEADE (2011, p. 83).

9 Como ha señalado Duque (1987, p. 60), la traducción, ya convertida en estándar, de *Erscheinung* por “fenómeno” hace que se pierda su aspecto dinámico. Tanto la idea de remisión como la de acción de darse a ver algo se pierden. Pero sobre todo se pierde su ambigüedad. No obstante todo ello, nos serviremos del término “fenómeno” para significar “*Erscheinung*”.

10 Duque comenta en su edición de los *Fortschritte* (DUQUE, 1987, nota 18, p. 60) que el uso del latinismo *Apparenz* tiene, como suele ocurrir, una carga peyorativa. Ciertamente Kant también habla de apariencia para referirse a las ilusiones de los visionarios, las apariciones, pero si lo hace es en tanto que hay algo que se presenta como si fuera no tanto una cosa real como un objeto externo (*TG*, AA 02: 362) y dotado de extensión y figura (AA 02: 364-5). En fin, cuando la apariencia es el aparecer de una “cosa material” (*ídem*). Por su parte, Prauss comenta que en este texto el término *Apparenz* sirve como “aclaración adicional” de *Erscheinung*, cuya condición específicamente sensible se quiere apuntar aquí (PRAUSS, 1971, nota 28, p. 79).

11 Más adelante veremos qué significamos con esta expresión. Porque hay algo en el efecto que no se puede reducir a la noción de causa con la que está vinculado categorialmente, que es cuando funciona con vistas a un conocimiento de los objetos de la naturaleza en su decurso. El efecto también se puede presentar irreduciblemente.

12 *Cf.* *FM*, AA 20: 269. Aunque Kant no hace un uso unívoco del término *Anschein*, ante todo quiere significar el aspecto con el que algo se muestra, lo que parece inequívocamente, y que puede ser un engaño (en este sentido *cf.* *KrV*, A 2-3/B 6) o no.

13 Nótese que mientras que el texto de la *Anth.* pertenece a una defensa de la sensibilidad (§§ 9-11), el otro texto, que encontramos en la introducción a la dialéctica, pertenece a una recusación de la ilusión (A 60-1/B 85). Además, en la *Anth.* Kant necesita de una noción rigurosamente fenomenológica de fenómeno, pues todos los desvaríos sólo podrán ser descritos como fenómenos en este preciso sentido. Por eso, al sentido físico que mentamos habría que añadir un sentido antropológico.

14 En la *KrV* Kant dice que el trabajo antropológico consiste en observar (A 550/B 578). Como es sabido, la antropología se especifica justamente como un saber basado en la observación. En lo que sigue volveremos sobre este sentido específicamente antropológico de observar y sobre el concepto de fenómeno asociado, pero ahora apuntemos que esto sitúa a la antropología como un saber del mundo, que es el punto de vista pertinente para entender esta observación. “La ciencia del hombre (*anthropologia*) guarda semejanza con la fisiología del sentido externo en la medida en que en ambas los fundamentos del conocimiento proceden de la observación y a experiencia.” (*V-Anth/ Collins*, AA 25: 07). En lo que sigue volveremos sobre esta idea.

15 En el texto de la primera edición de la *Crítica* Kant no refiere la impenetrabilidad entre las cualidades secundarias, como sí hace en los *Prolegomena*. Puede que sea una incoherencia, o quizás sólo un trémolo del pensar (pues el cambio, casi imperceptible, que aparece en los *Prol* no se transportó al texto de la segunda edición de la *Crítica* con el que entra en conflicto). En cualquier caso, es claro que los *Prolegomena* aparecen dos años después de la primera edición de la *Crítica* y tres años antes que los *Metaphysische Anfangsgründe*, que preceden un año a la segunda edición de aquella. Por tanto en el período que marca la elaboración de la distinción entre los principios transcendentales de la naturaleza y los principios metafísicos. El cambio a que nos referimos es el de

que algunas de las cualidades secundarias tal y como aparecen en la Estética transcendental se convierten en cualidades primarias. En los *Prolegomena*, es claro, Kant busca contravenir el idealismo de Locke, para lo cual afirma que también las cualidades primarias “se cuentan entre los meros fenómenos”. Pero importa esta oscilación entre los dos textos precisamente porque confirma que se está produciendo un afianzamiento de la sensibilidad y de su condición fenomenológica inalienable, que alcanzará incluso a la lógica, como sucede con la paradoja del sentido interno.

16 La interpretación de las intuiciones como ideas está en autores como Wohlfart (nos referimos a su trabajo “Ist der Raum eine Idee? Bemerkungen zur transzendentalen Ästhetik Kants”, *Kant-Studien*, 71, 2, 1980). Pero la verdadera cesura en términos hermenéuticos tiene que hacerse entre la posibilidad de una estética transcendental *tout court* y la posibilidad de una lógica transcendental, también sin más. Heidegger, primero, y otros, después, han insistido en vincular el trabajo de la imaginación como facultad raíz y por ende también como facultad ejecutiva tanto en la Estética como en la Lógica. Sin embargo, aunque es cierto que las funciones obran conjuntamente en la habilitación del conocimiento empírico (y que, como en la paradoja del sentido interno, reverberan en la Estética y en la Lógica por igual), también es cierto que lo hacen separadamente cuando se trata de los conocimientos racionales puros, como son el conocimiento matemático y el conocimiento filosófico.

17 En el mismo sentido afirma en el texto sobre Kästner que el geómetra considera el espacio de modo derivado, lo que quiere decir que es un espacio disponible para su producción o descripción, mientras que el metafísico lo piensa como dado (AA 20: 419). La facticidad del espacio no se deriva de una presencia sino más bien de un modo de representación o de consideración del espacio. Esto ha hecho pensar a algunos comentaristas que la imaginación está detrás, pues se trata de un espacio potencial, lo que concordaría con la determinación de *ens imaginarium* que reciben las dos intuiciones puras en el Apéndice de la Anfibología. Luego volveremos sobre esta idea.

18 El texto reza: “Por lo demás, distinguimos en los fenómenos aquello que es esencialmente inherente a la intuición de ellos, y que vale en general para el sentido de cualquier hombre, de aquello que les corresponde a ellos de manera solamente contingente, al no ser válido a partir de la relación, *Beziehung*, de la sensibilidad en general, sino sólo desde una particular disposición u organización de este o de aquel sentido. Y así se dice del primer conocimiento que es un conocimiento que se representa el objeto en sí mismo, mientras que el segundo sólo representa el fenómeno del objeto en sí mismo” (A 45/B 62).

19 La distinción entre objeto en sí y fenómeno del objeto en sí recoge y sostiene esta diferencia, pero relativizándola. En las discusiones sobre este extremo es habitual encontrar las lecturas que embocan el problema de la cosa en sí y del fenómeno a partir de la distinción entre un punto de vista ontológico y un punto de vista epistémico (que se resuelve en varias modalidades, aunque todas ellas parten de que el nudo está en la relación entre un objeto externo y unas representaciones internas). Un trabajo específico sobre la relación entre cualidades primarias y secundarias, y que contiene una buena recapitulación de estos planteamientos, es el de Tobias Rosefeldt. También contiene un comentario al ejemplo de las asas de Saturno referido más arriba (ROSEFELDT, 2004, p. 175 ss.).

20 La demostración es el horizonte de la *Deduction* –A 84/B 116 ss.– o su contraparte la *Widerlegung* –B 274 ss.–, pero también cuando se refiere a *Einwürfe* –A 388 ss.–; sobre todo la demostración es la cuestión del apartado de la disciplina dedicado *Hypothese* y *Beweise* –A 769/B 798 ss. y A 783/B 811 ss.–, pero también lo es cuando se tratan los procedimientos de la *Erörterung* –B 37–8–, o en general de las *Erklärungen* –A 727/B 755 ss.–, etc.

21 La expresión “*Selbsterkenntnis*” es utilizada por Kant en la Lógica. El problema del conocimiento de uno mismo va de la mano de la cuestión de la conciencia de uno mismo, *Selbstbeusstsein* (cf. B 294), y también de la intuición de uno mismo, *Selbstanschauung* (B 432), que son los modos señalados de ese conocimiento de sí. En general, sin embargo, la crítica no es otra cosa que el conocimiento del sujeto o también “un estudio de nuestra naturaleza interior”, como dice Kant al final de la Dialéctica (A 703/B 731).

22 Prauss ha hablado de una hipostatización de la cosa en sí. Este autor ha señalado que el sentido de este “*an sich*” va de la mano de un “*betrachtet*” elidido. Con ello se significa que la expresión “en sí” no constituye una determinación “nominal” del nombre “cosa” sino que más bien tiene un carácter adverbial, que matizaría el “*betrachtet*” (PRAUSS, 1970, p. 23). En efecto, no puede ser otra la lectura cuando se trata del discurso crítico, que, como veremos, contiene una particular doctrina de los puntos de vista de la razón. En el caso del texto de la Estética a que nos hemos referido, es claro

23 Para una completa revisión de todos estos planteamientos véase BEADE 2009, 2010, 2013a y 2013b.

24 Como hemos señalado al comienzo, en sendos trabajos nos ocuparemos de la relación entre esta noción de fenomenología, vinculada básicamente con la idea de conocimiento-de-sí, y el planteamiento de la Fenomenología de Husserl y Heidegger, así como de la posibilidad de encontrar una suerte de fenomenología corporal de la visión.

25 Numerosos estudiosos de la obra de Kant han buscado su clave hermenéutica en el uso de la distancia, en cualesquiera de sus figuras. Ciertamente, se trata de una lectura antigua. Concretamente la encontramos en *Die Philosophie des Als Ob* de Vaihinger, que se ocupó de mostrar el rendimiento de las ficciones y de las analogías en el discurso crítico. Pero, como ha señalado Ribeiro Dos Santos, faltó a este autor tener en cuenta el juicio reflexionante y su genuina economía retórica que es donde nos parece que tiene que situarse la economía los recursos de distanciamiento retórico. Cf. RIBEIRO DOS SANTOS, (2008, p. 42 ss). Para evaluar el uso de la ficción por parte de Kant véase también DUQUE (1985).

26 Para el problema de la corporalidad en el *O.P.* cf. DUQUE, 1988, 2004; y RIVERA, 2005.

27 En la nota de B 422-3 Kant recuerda que lo empírico es “sólo la condición de la aplicación o del uso de la facultad intelectual pura” (B 423). Incluso el pensar en general o sin más va acompañado de una percepción indeterminada de su propia actividad, la percepción de que su acto ha sido propiciado por algo dado. ¿Por un movimiento acaso? Lo que es claro es que Kant va a ir encarnando, si se nos permite la expresión, a la aperccepción. Tendencia que se consuma en la llamada *Reflexión de Leningrado*. Vid. la edición de R. Brandt y W. Stark en *Neue Autographen und Dokumente zu Kants Leben. Schriften und Vorlesungen*, Hamburg, Meiner, 1987, pp. 1-30.

28 Friedman (2012) ha identificado los esquemas con las reglas de construcción de las figuras geométricas a partir del texto de A 140/B 180. También ha vinculado estas reglas con la naturaleza de las formas de la intuición, que habilitarían aquellas reglas como reglas universales. Pero la forma de la intuición no propicia más que la aparición de los objetos en la experiencia, no su conocimiento. Para éste es preciso la síntesis del entendimiento. La objeción fundamental a este planteamiento es que la síntesis de la imaginación que hace posible el conocimiento constituye una síntesis entre las categorías puras y el tiempo, cuando en la geometría el tiempo no decide en absoluto la condición de sus objetos (*MA*, AA 04: 489), como sí sucede en los objetos de la experiencia. La construcción de una figura no es la aprehensión de un cuerpo en el espacio, toda vez que en la primera el tiempo no es esencial mientras que la segunda constituye justamente la operación que conoce el objeto como *magnitud* extensiva.

29 En la Estética se plantea el extravío de los filósofos metafísicos de la naturaleza, que convierte a la intuición en una realidad que tiene que preexistir a lo que engloba. Kerszberg ha tipificado muy bien esta dialéctica como la de una “ontología matemática”. En efecto, el hecho de que las matemáticas puedan construir arbitrariamente sus objetos puede producir una “amplitud inquietante” del espíritu, una “*extravagancia*”, “digna de la metafísica” (KERSZBERG, 1999, pp. 278, 281). Antes hemos hablado de la fenomenidad física como un recurso para sostener la investigación de la naturaleza. En realidad, las dos Antinomias matemáticas no sirven a otro propósito que el de asegurar la idealidad transcendental del espacio para asegurar así el trabajo de esa investigación. La metafísica de la naturaleza supone la renuncia al trabajo y al esfuerzo de conocimiento. Es el peligro que Kant ha tipificado en el Apéndice a la Dialéctica transcendental como *ignava ratio*. Sin embargo, es claro que en la Dialéctica Kant se refiere no tanto a la tentación de los metafísicos de la naturaleza como a la de los metafísicos de las tres metafísicas especiales, que son los de la psicología, la cosmología y la teología racionales. En estos casos lo que está en juego no es tanto la constitución empírica de los fenómenos, su aseguramiento como objetos físicos, cuanto su unificación desde el punto de vista de una *finalidad racional*. Por eso los distintos finales de cada parte de la Dialéctica son *transiciones* desde su propia dialéctica a la siguiente dialéctica (para la transición de la psicología a la cosmología racionales, cf. B 428-432; para la de la cosmología a la teología, cf. A565-7/B 593-5; y, por último, para la de la teología a la investigación finalista de la naturaleza –que sería algo así como la transición desde la teología dogmática a la físico-teología, que Kant ultimaré al final de la *KU-*, en las líneas finales del Ideal, A 639-42/B 667-70, que dan pie a los dos Apéndices). Estas transiciones siguen una secuencia lógica entre silogismos, secuencia en la que se trasluce la *progresión metafísico-racional entre intereses*. Por eso a la razón perezosa le tiene que venir a completar una razón *perversa* (A692/B 720), pues sólo se puede detener el camino por la experiencia si se equivoca y se propone un final anticipado y más sencillo fuera de la experiencia. Es entonces cuando se revelan los intereses metafísicos de cada una de las disciplinas racionales de la Escuela, intereses que *no podían aparecer en una Estética transcendental*.

30 Como ha señalado Kerszberg, la particular regresión en pos de espacios relativos no es que “no determine el tiempo de ninguna manera, sino que más bien no requiere del tiempo como su condición de posibilidad” (KERSZBERG, 1999, p. 197). De este modo se comprende mejor aún la dificultad que anida en las antinomias matemáticas. Mientras que en ellas la noción de incondicionado subvierte la condición ideal-transcendental del espacio, en los principios metafísicos “tenemos la libertad de dar media vuelta en medio de una síntesis que prosigue su camino en dirección a lo incondicionado. Esta vuelta justifica la solidaridad de lo absoluto y lo relativo” y confirma la indiferencia que para la física tiene la síntesis transcendental del tiempo.

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KANT ET LE PRINCIPE COSMOLOGIQUE

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Une des conséquences les plus remarquables du renversement impulsé par Copernic à l'astronomie fut la perte de la priorité des questions cosmologiques pour la science de la nature. Koyré l'explique remarquablement : "la disparition, à l'intérieur même du raisonnement scientifique, de toute considération à partir du Cosmos"². C'est ainsi que Husserl, réfléchissant à ce qui rattache les idéalités mathématiques de la science au monde de l'intuition, découvre un sens de la totalité déjà valable en propre pour ce monde de l'intuition : tous les étants naturels exhibent par eux-mêmes, en dehors de tout concept, une régulation causale universelle qui est certes assez vague, mais suffisamment structurée pour les relier les uns aux autres en unitotalité (*Alleinheit*)³. La science intervient pour déterminer avec précision ces liaisons causales au moyen des outils mathématiques. Cela consiste à "construire systématiquement, en quelque sorte a priori, le monde, l'infinité de ses causalités, à partir du maigre stock de ce qu'il est possible d'établir dans l'expérience directe"⁴. D'après Husserl, la construction, aussi abstraite soit-elle, serait vouée à rester conforme au style général imprimé originellement au monde par l'intuition d'une uni-totalité.

Si Kant se fait bien l'écho du renversement copernicien lorsqu'il définit la nature comme conformité des phénomènes à la législation de l'entendement, il découvre aussi entre le concept d'unité et celui de totalité un conflit essentiel qui ne transparait pas directement dans la science moderne de la nature. Ce conflit renvoie à une tension entre nature et cosmos, qui rapproche pour les confronter l'une à l'autre l'exigence d'unité, d'une part, qui est un réquisit de l'entendement étendant son emprise sur les phénomènes, et l'exigence de totalité, d'autre part, qui est une hypothèse spéculative de la raison en sa demande d'inconditionné pour l'ensemble des phénomènes. Le conflit entre unité et totalité éclate dans la problématique de l'univers comme objet supposé constructible selon les mêmes méthodes de la science.

Deux acceptions du terme " monde " se croisent dans la philosophie kantienne. L'une consiste à *connaître* le monde, et l'autre à *avoir* un monde. Kant dit explicitement : dans la connaissance on comprend le jeu auquel on a assisté, tandis que dans l'avoir on a joué le jeu en

y participant : “ der Eine nur das Spiel *versteht*, dem er zugesehen hat, der Andere aber *mitgespielt* hat ”⁵. La première acception situe le sujet en retrait par rapport au spectacle du monde : le sujet est repoussé dans un passé qui n’appartient qu’à lui en son pouvoir cognitif de reprise et de reproduction du sensible ; la seconde replace ce même sujet passé dans la capacité qu’il a eu d’agir dans le monde pour transformer son spectacle. Si la connaissance donne au monde une signification cosmologique (le monde comme univers), l’avoir lui donne un sens d’implication existentielle et anthropologique. Nonobstant une distinction apparemment assez tranchée, la question est posée de savoir si les conditions humaines de la vie dans le monde ne déterminent tout de même pas pour une part irréductible les conditions de la pure connaissance. À cet égard, l’avènement de la science moderne porte le témoignage d’une implication nouvelle et inédite de l’homme dans le monde : propulsé hors de sa terre nourricière, l’homme devient à la fois acteur et observateur d’un spectacle du monde coordonné à la fois par des lois mathématiques et le jeu inventif de l’expérimentation. Plus précisément, dans le sillage de la révolution copernicienne, nous sommes enjoint par la philosophie critique à poser la question cosmologique de la manière la plus fondamentale : Comment la science telle que nous la connaissons aujourd’hui, sous la forme d’une mathématisation du réel transmise par Galilée et Newton, est-elle advenue comme une expérience proprement humaine ?

Sous la forme d’une physique mathématique la science revendique son autonomie par rapport à la métaphysique qui l’a précédée. Dans la petite section sur l’histoire de la raison pure qui clôt la *Critique de la raison pure*, Kant soutient que la métaphysique peut à son tour être interprétée comme un rejeton de la théologie. C’est justement quand elle ne retient de la théologie qu’un horizon de pensée que la métaphysique mérite son nom⁶. Il paraît indéniable que les premières réflexions de l’humanité gravitent autour de la condition peut-être supra-humaine de l’humanité. Religion, métaphysique et science s’enchaînent comme autant d’étapes franchies par l’humanité. Le schéma est suffisamment plausible pour qu’on puisse peut-être ajouter avec Heidegger la technique comme dernière étape du processus que nous vivons aujourd’hui, qui est mise en disponibilité intégrale du fonds des choses. Chaque étape nouvelle de la raison réalise-t-elle ce qui s’est d’abord présenté d’une manière immature dans l’étape précédente, comme Hegel a pu le penser par exemple de la philosophie vis-à-vis de la religion, et comme nous pouvons le penser à notre tour de la science à l’égard de la philosophie ? Ou bien plus radicalement chaque moment se substitue-t-il à l’autre, comme l’a dit Auguste Comte, de telle sorte qu’étant aujourd’hui tellement éloignée des dispositions premières de l’humanité, la raison n’est plus entravée par de funestes imaginations et peut exercer en pleine connaissance de cause son talent pour découvrir les vraies lois de la nature ?

Plutôt que de prolonger calmement ou de briser les chaînes de réflexion d’un horizon à l’autre, l’avènement de la métaphysique selon Kant se heurte finalement à un mur dont aucune pensée ne peut se tirer sans dommage, ni en amont ni en aval. La question soulevée par la métaphysique ouvre en effet elle-même sur une série qui ne semble pas pouvoir être refermée : la réalité en ce qu’elle a de plus hautement signifiant est-elle celle des sens ou celle de l’entendement ? Les connaissances à propos de cette réalité viennent-elles à leur tour des sens ou des idées ? L’histoire de la métaphysique est jonchée de partis pris envers l’une ou l’autre de ces interprétations. Tant que chaque parti s’engage dans la voie qui est la sienne contre l’autre,

la pensée agrandit son horizon métaphysique. Mais cet agrandissement peut s'avérer fertile ou paralysant, selon l'usage qu'on en fait. Dédoublée d'une manière récurrente, la pensée est finalement forcée de penser plus qu'elle ne peut penser, jusqu'au point où la raison se trouve minée de l'intérieur par des contradictions avec soi qu'elle a elle-même suscité : telles sont les antinomies cosmologiques de la raison pure. Par exemple la première antinomie pose le monde dans sa totalité comme un inconditionné qui n'est rencontré dans aucune expérience possible, c'est-à-dire une totalité absolue et achevée de la série de ses événements. Quel est le statut de cet inconditionné : le premier élément qui conditionne tous les autres de la série, ou la série entière des conditionnés se conditionnant réciproquement ? Comme les phénomènes sont marqués par leur condition d'apparition dans le temps, cette question peut être traduite plus spécifiquement : le monde a-t-il été créé à partir d'un premier moment, ou bien est-il éternel ? En examinant la preuve de chacune des deux propositions, il apparaît qu'il est impossible de résoudre une fois pour toutes la question de savoir si une série d'instants jusqu'au présent est finie ou infinie, par conséquent il n'y a pas de réponse définie à la question posée. Si la série est finie, elle présuppose un temps vide qui la précède, mais dans ce temps vide aucun moment du temps n'est distinct d'un autre ; si la série est infinie, elle présuppose un temps complètement écoulé à chaque moment. Etant donné ce dilemme, et d'une manière générale, le monde n'est ni fini ni infini : il est sans grandeur déterminée ; il n'est pas non plus un lieu car il est infiniment divisible, comme on le conclut de la deuxième antinomie. La complétude supposée des conditions de l'expérience est équivoque. Or la science refuse de s'arrêter devant un mur soi-disant insurpassable. D'une expérience métaphysique traumatisante, elle tire une nouvelle manière de penser le monde. Du point de vue de la théorie mathématique du continu, en effet, le temps est toujours rempli d'une manière continue, de sorte que la solution à l'antinomie kantienne est finalement trouvée : la série des instants jusqu'au temps présent est infinie. La réponse tient, indépendamment de la question de savoir si le monde avait ou n'avait pas de commencement dans le temps⁷. À la lumière de cette réponse, il apparaît rétrospectivement que demander si le monde a ou n'a pas de commencement est une manière trompeuse de formuler la question propre à la première antinomie cosmologique. Si la vocation de la science est de trancher une indécision métaphysique, la réponse n'emporte-t-elle pas toutefois quelque chose du fonds métaphysique d'où elle provient ?

Le même auteur qui vient de reformuler la première antinomie en est parfaitement conscient, quand il écrit que "au-delà de la connaissance glanée à partir des sciences individuelles, il reste encore la tâche de comprendre (*einsehen*)"⁸, voir d'une manière unitaire. Au mathématicien qu'il est lui-même, Weyl affirme qu'il est bon de rappeler que l'être des choses descend dans des profondeurs auxquelles il ne peut pas parvenir avec ses méthodes. Cet être des choses, la métaphysique s'en occupe, bien qu'à la suite de la découverte des antinomies elle ne peut le faire qu'en balançant d'un système de compréhension à un autre : le sensible donne le ton à l'intelligible, ou inversement l'intelligible au sensible. Malgré ce balancement qui empêche la raison de trouver le repos pour assurer ses visées sur le monde, sans référence à l'indécision métaphysique qui perdure en dépit des "solutions" qu'elles proposent, les connaissances scientifiques ne seraient pas seulement placées devant un dilemme à résoudre : elles tomberaient dans un chaos insensé, passant complètement à côté de ce à quoi tend

effectivement la raison pure. Ce chaos serait celui des connaissances qui, manquant de vue à la fois pénétrante et unifiante, ne se comprennent pas elles-mêmes comme connaissances.

Que les solutions mathématiques aux questions métaphysiques recueillent quelque chose de l'effort métaphysique pour dépasser les limites de l'expérience possible, on s'en aperçoit en amont de Kant : dans la manière par laquelle Newton pense le concept d'espace pour justifier la science mathématique de la dynamique. Géométriquement, depuis le principe galiléen de relativité, l'espace (euclidien) est un ensemble de positions équivalentes et interchangeables. Pour que ces positions deviennent des lieux proprement physiques, sièges d'événements possibles, il faut poser un espace absolu qui les distingue comme telles. En vertu de sa structure dynamique, cet espace absolu est considéré comme la cause des événements observables, et pourtant les corps matériels n'agissent pas en retour sur lui. D'où la justification finalement théologique de l'espace absolu comme organe sensible de Dieu (*sensorium Dei*). Comme Dieu "sent" le monde par le truchement de l'espace, il nous incombe de le dynamiser mais dans un seul sens : de lui vers nous et notre champ d'expérience, et non réciproquement de nous vers lui. La physique retrouve ainsi ce qu'elle doit à la métaphysique, qui est elle-même redevable de l'être des êtres au sens où Aristote définit le nouz en acte: il touche le monde sans être touché par lui.

Si depuis Galilée et Newton la science de la nature est une science mathématique de la nature, Kant déclare précisément que la métaphysique est prête pour dire son dernier mot qui est aussi le premier de la science. Cela n'est possible que si la métaphysique est encore recherchée en évitant de tomber dans ce piège qui consisterait à faire confiance au mathématicien. La thèse et l'antithèse de l'antinomie cosmologique de la raison pure pourraient à première vue s'apparenter aux deux méthodes de la mathématique : d'une côté la méthode synthétique, qui part d'un premier terme ou principe pour en déduire les conséquences en suivant la démonstration, d'un autre côté la méthode analytique qui part de ce qui est à montrer et remonte la série des causes jusqu'au principe. Mais là où le mathématicien est libre de parcourir le chemin suivant l'un ou l'autre sens, le métaphysicien bute sur une différence ontologique qui engage une conception du monde incapable de faire la part entre le vrai et le faux : soit en excès de faux lorsque thèses et antithèses sont toutes deux fausses (antinomies dites "mathématiques"), soit en excès de vrai lorsqu'elles sont toutes deux vraies (antinomies dites "dynamiques") ; chaque proposition dans une antinomie donnée est correcte par rapport à ce qu'elle nie, incorrecte vis-à-vis de ce qu'elle affirme. Pour sa part, le mathématicien confond les règles dans leur usage empirique (tirées de l'expérience ordinaire) avec des axiomes valables indépendamment de cette expérience⁹. C'est pourquoi le mathématicien est tout le contraire d'un philosophe. Il est un artiste ou plutôt un artisan (*Künstler*) de la raison, car sa doctrine est seulement une affaire de talent : il n'a pas vraiment conscience de ce qu'il fait parce que la nature intérieure de son objet, la spécificité de sa méthode et la possibilité même de sa science lui restent étrangères. Dans l'exercice qui consiste à construire le concept dans l'intuition, il est condamné à *voir* ce que pense la pensée, et ce voir le rend aveugle aux premiers principes de sa propre pensée. Par contre le philosophe est le législateur de la raison humaine, dans la mesure où il veut comprendre la relation de toute connaissance aux fins essentielles de cette raison¹⁰. Les fins ne peuvent être trouvées et exprimées que dans les termes d'un inconditionné auquel tend la raison malgré son incapacité à décider ce qu'il en est de l'être de cet inconditionné. La métaphysique se fait l'écho du désir

irrépressible qui serait le nôtre de s'élever et de s'approcher d'un monde idéal (suprasensible), corrélat hypothétique du savoir qui devient science quand ses divers moments dans le monde sensible sont organisés d'une manière systématique. La question typiquement transcendantale consiste à comprendre comment l'inconditionné inaccessible à la raison persiste en retour dans les horizons de pensée ouverts par la science mathématique de la nature, quand bien même la science déciderait d'abandonner l'effort pour remonter jusqu'à lui.

C'est une question où se croisent la problématique de la nature et celle du cosmos. Kant la pose déjà dans son œuvre précritique, où il rejette une suggestion suivant laquelle les forces de la nature fonctionneraient d'une manière essentiellement différente des forces de l'esprit. En un premier effort pour démontrer un principe général de conservation, les deux forces, pense-t-il alors, se retrouvent dans cet unique principe auquel elles participent à parts égales : "la quantité de réalité absolue dans le monde ne change *naturellement* ni en augmentant ni en diminuant"¹¹. Par analogie avec la loi newtonienne de l'égalité de l'action et de la réaction sur les corps en mouvement qui entrent en contact les uns avec les autres, Kant imagine que pour commencer tout l'univers est contenu dans l'âme comme une perception interne mais obscure, et le travail de la pensée réagit sur cette perception pour en dévoiler progressivement la lumière¹². À mesure que l'obscurité des choses est illuminée par la pensée, la lumière de la pensée s'enfonce toujours plus avant dans l'obscurité restante. Renonçant à ce que Kant appelle encore dogmatiquement "la perception infinie de la totalité de l'univers", le point de vue critique établira que ce double mouvement est néanmoins cerné et entravé par les limites de l'expérience possible, et ces limites sont celles-là même de la raison pure. Le tout n'est jamais absolument apparence, mais seulement unité collective de toute l'expérience possible. Il relève de la loi de l'entendement par le fait qu'il est unité, mais il s'en écarte par le fait qu'il est une collection, un agrégat pour lequel il faut encore se demander si une loi d'enchaînement lui correspond effectivement. C'est pourquoi la raison ne peut commencer avec le tout qu'en s'en formant une *Idée*, c'est-à-dire une représentation subjective pour laquelle la réalité objective ne peut jamais être complètement confirmée par une expérience, même si elle tend vers une telle confirmation. Il s'agit donc d'un concept essentiellement problématique et pourtant décisif. Décisif en ce sens qu'il veut dire "quelque chose d'ultime et d'universel" pour toute pensée concrète qui se trouve ainsi guidée, comme l'explique Heidegger, et cependant inaccessible à la démonstration de sa justesse au moyen d'une intuition qui serait adéquate à l'intention de signifier quelque chose de déterminé¹³.

Or, une histoire conceptuelle de l'idée d'univers est elle-même au cœur de ce concept problématique. Cette histoire est lisible aussi bien en amont qu'en aval du questionnement kantien telle que Kant lui-même l'a pensée. L'Idée rationnelle va éclater pour ainsi dire au grand jour comme un caractère inhérent à toute pensée cosmologique, et ce caractère est d'autant plus prégnant que la cosmologie revendique les droits d'une discipline scientifique à part entière.

En aval, la cosmologie contemporaine n'est certes plus kantienne au moins dans ce sens précis : l'Idée n'est plus un problème général de la raison, elle se décline plutôt en problèmes spécifiques que la science cosmologique s'enorgueillit de considérer à l'écart de toute métaphysique. Telle est la conséquence du besoin qui s'est fait jour au vingtième siècle

de considérer l'univers comme un objet "normal", comparable aux objets dont s'occupe la science de la nature dans sa pratique habituelle. Même si la théorie parvenait à montrer qu'il existe un instant où l'univers entier est venu à l'existence, cet événement devrait être considéré comme tout aussi naturel que l'existence éternelle le serait si l'univers existait en effet depuis toute éternité. C'est pourquoi, dans l'hypothèse où l'univers a une origine temporelle, l'esprit scientifique recommande désormais de ne pas confondre cette origine avec une *création*, car celle-ci sous-entend immanquablement une cause extérieure : au contraire de l'origine ou de l'éternité, la création serait un pseudo-problème pour la cosmologie physique¹⁴. L'antinomie du fini et de l'infini devient ainsi le lieu de la raison scientifique, qui abandonne à la métaphysique ou même à la théologie une "idée" (comme celle de création) indépendante de ses prérogatives. Kant rétorquerait sans doute que la création est une pseudo-solution au problème persistant qu'est l'Idée elle-même, mais cela est vrai aussi de l'origine ou de l'éternité comme le montre la première antinomie cosmologique. Pour prendre le seul cas de l'origine, la raison y est obligée de penser plus qu'elle ne pourra jamais penser, et ce plus ne renvoie pas nécessairement à une cause extérieure mais à une autre face de la raison.

L'universalité de l'idée rationnelle d'univers ressort même d'autant plus clairement qu'on croit pouvoir la décliner en idées spécifiquement appropriées à la méthodologie scientifique. Dans la cosmologie relativiste, en effet, l'indépendance de l'idée d'univers vis-à-vis des données de l'observation n'a cessé de se renforcer, au point de suggérer explicitement la priorité de cette idée sur le monde sensible, aussi docile qu'il soit vis-à-vis de cette méthodologie. Contrairement aux autres sciences exactes, tous les résultats en cosmologie relativiste sont dérivés plus ou moins directement de certains principes *indépendants* de la théorie de la relativité, comme par exemple le substrat spatio-temporel uniforme ou la propriété d'isotropie. On parle généralement d'un "principe cosmologique", qui stipule que notre vision limitée et partielle de l'univers n'est en rien particulière ou singulière : l'univers est partout le même à une échelle suffisamment grande, en droit sinon en fait. Mais la science de l'univers se trouve alors dans la situation d'embarras qu'éprouvent les nouveaux riches. La théorie semble se retourner contre elle-même, quand on s'aperçoit que la relativité générale est compatible avec un nombre sans cesse proliférant de modèles possibles : la théorie permet une quantité sans limite de possibilités qui ne sont pas réalisées dans la nature. Le choix parmi tous les modèles en présence repose sur la spécification des conditions aux limites, qui elles-mêmes dépendent de la métrique spatio-temporelle encore inconnue. La seule voie praticable consiste à partir d'une famille de métriques plus ou moins plausibles, chacune munie d'un petit nombre de paramètres, et ensuite tenter d'ajuster d'une manière optimale les valeurs de ces paramètres en les accordant aux valeurs tirées de l'observation astronomique. Alors que Kant avait songé à une antinomie indépassable entre deux représentations seulement (l'univers spatio-temporellement fini ou infini), la cosmologie relativiste munie de la géométrie non-euclidienne est dépassée par le nombre en fait infini de candidats possibles parmi les modèles en présence. Certes, ce n'est plus à proprement parler la grandeur de l'univers qui est indéterminée, mais le problème de la spécification du modèle dynamique qui l'est ; néanmoins, il y a un sens en lequel la nouvelle cosmologie laisse encore indéterminée par principe l'idée même d'une grandeur attribuable à l'univers. En effet, la théorie de la relativité générale n'est qu'un outil parmi d'autres pour la

représentation cosmologique : conceptuellement la situation est compliquée par le fait que l'application de la mécanique newtonienne classique et du principe cosmologique permet déjà d'obtenir le résultat principal dans les termes de la géométrie euclidienne, à savoir la théorie de l'expansion de l'univers. Ce résultat assez extraordinaire nous reporte en amont de Kant, non seulement Newton mais aussi la cosmologie de l'Antiquité telle qu'on peut l'interpréter du point de vue critique.

Le ciel étoilé, avec l'ordre remarquable des mouvements des corps célestes qui tranche sur les multiples instabilités de notre environnement immédiat, est un spectacle qu'on ne peut s'empêcher d'abord de prendre comme modèle de toute pensée de la nature, si penser signifie ordonner. Or, prenant à témoin l'histoire de l'astronomie, Kant dit que si le phénomène (*Erscheinung*) est donné (comme la rétrogradation observée des planètes), et que l'on s'en tient à ce donné sans aller jusqu'à chercher un jugement objectif, alors "nous sommes encore tout à fait libres de juger d'après lui de la chose comme nous voulons"¹⁵. Le spectacle des mouvements planétaires n'est tout au plus que la chorégraphie des corps célestes évoquée par Platon, qui se prête à toutes sortes de croyances irrationnelles¹⁶. Si, maintenant, la tendance au jugement objectif s'insinue dans le simple spectacle du monde, la liberté de juger est contrainte de sacrifier son bon vouloir, et la première manifestation de ce sacrifice est de s'en remettre au phénomène pris pour guide en vue d'arriver à la nature objective des mouvements. Ainsi, dans la théorie astronomique de Ptolémée, les rétrogradations observées des planètes peuvent être déterminées objectivement par le calcul depuis la terre prise comme centre, au moyen d'un emboîtement d'outils mathématiques comme les déférents et les épicycles. Mais dans cette théorie la détermination objective par le calcul n'est pas suffisamment contraignante pour produire un lien rationnel entre le phénomène et le réel. On sera toujours libre de se demander quel est le mécanisme qui fait tenir ensemble tous ces rouages complexes pour assurer l'orbite d'une planète, rouages qui s'interpénètrent sans pourtant se gêner mutuellement ; en outre, il y aura une théorie spécifique pour chaque planète, sans qu'on puisse trouver un arrangement systématique pour l'ensemble des planètes. Dans la représentation suivant Ptolémée il n'y a finalement, ajoute Kant, ni vérité ni fausseté : la liberté de juger les phénomènes a été sacrifiée pour rien. Tant que le phénomène est pris pour guide, l'idée se règle sur l'objet, ce qui signifie selon le "renversement copernicien" interprété par Kant, que l'objet est tout aussi bien une chose en soi pensable n'importe comment et non seulement un phénomène. La leçon à retenir de Copernic et sa théorie héliocentrique est que l'objet se règle sur l'idée, parce que le jugement objectif prend les devants sur les phénomènes, il les plie suivant sa loi, ce qui empêche de les prendre pour des choses en soi qui détermineraient le jugement objectif pour ainsi dire à son insu. La raison s'accorde alors une liberté qui n'est plus à la traîne des phénomènes mais au contraire en avance sur eux. Cette stratégie de domination sur les phénomènes ne dénote-t-elle pas sournoisement l'occasion d'un retour sous de nouveaux atours au jugement selon notre bon vouloir ? Il n'en est rien, car les phénomènes ne sortent pas indemnes de cette opération : les planètes ne rétrogradent plus, elles "semblent [*scheinen*] rétrograder" ; la rétrogradation est une apparence illusoire, contrecarrée par une "apparence vraie" (le phénomène des planètes en mouvement régulier autour du soleil) qui n'apparaît à proprement parler qu'à la raison pure.

La physique moderne arrive à une représentation objective des mouvements planétaires au moyen du concept de gravitation universelle qu'elle prend pour règle unificatrice. Toute la question est de savoir jusqu'où s'étend le pouvoir qu'a l'entendement de légiférer sur les phénomènes en avance de l'expérience. Grisée par son premier succès, et en vertu de la même nécessité que lui confère son pouvoir législateur, la faculté de l'entendement, devenant celle de la raison englobante, s'intéresse au monde comme ensemble de tous les phénomènes¹⁷. Il y a certes indécision dans le système ptoléméen quant à savoir s'il est vrai ou faux, tant que l'entendement n'intervient pas au-devant des phénomènes et qu'il reste à leur traîne ; mais si la mécanique de Newton indique bien la présence d'un entendement aux commandes de l'unité objective parmi les phénomènes, elle ne le fait que dans les limites qui sont les siennes, à savoir les lois du mouvement qui prévalent dans le système solaire. Qu'en est-il de ces lois au-delà du système solaire, et finalement du "tout" qui englobe tous les systèmes : cet englobement est-il à son tour systématique ? Pour s'y retrouver, la raison pose que l'enchaînement de l'expérience déjà acquis selon la loi de l'entendement est une partie du tout pour lequel elle cherche la représentation adéquate. D'où la question : quel est le phénomène qui correspond à cette exigence de la plus grande unité possible ? Ici la raison paie le prix de la nouvelle liberté qu'elle s'est octroyée en avance sur les phénomènes : elle la retrouve dans l'ensemble des phénomènes comme une liberté excessive. Telle est l'antinomie cosmologique. Si je pose par exemple la question de savoir quel phénomène correspond à l'idée d'une origine spatio-temporelle de l'univers, ce phénomène devra conditionner tous les autres, c'est-à-dire qu'il n'est lui-même conditionné par rien, ce qui le place en-dehors de la série des phénomènes à laquelle on s'intéresse justement ; si par contre je demande quel phénomène correspond à la série totale de l'univers, sans origine ni fin, c'est le phénomène de notre monde actuel qui devient irréprésentable, puisqu'une série successive passée de phénomènes, mais infinie, ne pourra arriver jusqu'au moment présent. C'est dire que le tout est devenu deux fois une apparence trompeuse, que Kant appelle une "apparence dialectique" : une apparence joue contre l'autre, sans que ce jeu réglé produise un enchaînement des phénomènes en une expérience. Le jeu n'aurait des chances d'aboutir à un tel enchaînement que si la thèse et l'antithèse de l'antinomie étaient mutuellement exclusives et épuisaient toutes les alternatives¹⁸. Or, l'opposition dialectique transforme les propositions contradictoires en une paire de contraires, qui sont tous les deux faux : cette opposition "dit quelque chose de plus qu'il n'est requis pour la contradiction". Tant que ce plus reste inaperçu en tant que condition de l'expérience, et que l'opposition entre les deux grandeurs est simplement contradictoire, le monde lui-même est en surplus par rapport à la série des phénomènes, qui devient série entière des phénomènes : une chose en soi. Bien qu'impensable en tant que telle, il y a au moins une particularité de la chose en soi qui affleure dans les conditions de l'expérience : elle demeure en l'état, que la régression vers elle soit finie ou infinie dans la série des phénomènes.

Afin de conjurer cette présence pour ainsi dire intouchable, Kant prétend que l'argument de la première antinomie fournit également une preuve indirecte de l'idéalité transcendantale de l'espace et du temps. Du point de vue critique, cette idéalité est le seul surplus acceptable compatible avec le concept de monde. La démonstration, dit Kant, consiste à apercevoir un dilemme dont on ne sort pas : "Si le monde est un tout existant en soi, il est ou fini ou infini". Les deux cas étant faux, "il est donc faux aussi que le monde (l'ensemble de tous les phénomènes)

soit un tout existant en soi. D'où il suit par conséquent que les phénomènes en général ne sont rien en dehors de nos représentations », ce qui ne signifie rien d'autre que leur idéalité transcendante¹⁹. Dans l'exposition métaphysique de l'Esthétique Transcendantale, l'espace et le temps sont pensés dans leur représentation originare comme des intuitions pures a priori. Cela signifie en particulier pour l'espace qu'il est représenté comme « une grandeur infinie donnée », parce que comme horizon de manifestation de tous les phénomènes, au contraire d'un concept général, il est capable de contenir *en lui* une multitude infinie de représentations²⁰. Le concept permet de penser des caractères communs entre diverses représentations, mais pas une simple juxtaposition de parties coexistant à l'infini. Comme intuition pure a priori, l'espace est une totalité absolument englobante, et pourtant ouverte au progrès illimité de l'intuition. Il s'agit de la sorte d'accepter un dilemme qui éclate au grand jour dans la Dialectique Transcendantale. En effet, du point de vue de la raison qui exige de considérer l'espace et le temps conceptuellement comme des objets de connaissance (des grandeurs extensives), une grandeur infinie donnée est finalement impossible, aussi bien du côté des conditions de l'expérience que du côté des propriétés d'une série en tant que telle. Dans la preuve de la thèse de la première antinomie, Kant donne d'abord une définition de la série infinie du point de vue de nos capacités : elle consiste dans le fait qu'elle ne peut jamais être complétée par l'intermédiaire d'une synthèse successive²¹. Il se pourrait néanmoins que la série soit en fait infinie, bien que nous soyons incapables de la compléter. Kant remarque donc dans la démonstration de la thèse de la première antinomie qu'il existe une manière de définir la série infinie qui ne fait pas appel à notre capacité d'en synthétiser les parties successives : c'est la manière dogmatique, suivant laquelle « il n'y a pas de nombre qui soit le plus grand possible, puisqu'on peut toujours encore y ajouter une ou plusieurs unités. Donc, une grandeur infinie donnée est impossible, et par conséquent aussi un monde infini »²². Le philosophe dogmatique en appelle à un nombre qui est le plus grand possible, ce qui est une contradiction. Le philosophe transcendantal lui oppose que le nombre plus grand possible est encore relatif à l'unité choisie pour le mesurer : l'idée de l'infinité en son vrai concept transcendantal est que l'infini est plus grand que tout nombre. Mais si l'infini dont il est question ici est celui de l'intuition a priori et non d'une grandeur extensive, il faudrait aussi rappeler qu'il est néanmoins englobant. Donc, en faisant appel au nombre pour penser cet englobement, le philosophe dogmatique est encore plus dogmatique qu'il ne le croit, mais d'un autre côté la démonstration transcendantale de l'impossible grandeur infinie donnée (comme grandeur extensive) n'est toujours pas absolument conclusive, bien qu'elle soit la seule tenable.

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Le conflit irréductible entre unité et totalité traverse finalement toute l'œuvre de Kant, comme on s'en aperçoit en remontant jusqu'à son œuvre cosmologique majeure de la période précritique : l'*Histoire générale de la nature et théorie du ciel*. Le titre même de l'ouvrage indique déjà qu'il s'agit de penser conjointement la nature et le cosmos.

Notons que Kant n'a jamais cessé d'explorer les implications de son modèle précritique d'univers, modèle auquel il tenait visiblement ainsi qu'en attestent de nombreux textes

critiques et même post-critiques. L'univers est comparable à un gigantesque spectacle qui révèle les puissances intérieures de la nature. Au-delà de Newton, mais à partir de lui, Kant théorise un modèle d'univers dynamique qui reproduit à toutes les échelles de grandeur le schéma du système solaire. Un fait considéré comme fondamental est la "connexion graduelle" des déterminations des planètes (rapports de densités, masses, intervalles, mouvements) : fait fondamental en effet, car Kant va l'étendre à toutes les parties de l'univers²³. En suivant ce fil conducteur, l'univers se prête à une double organisation : d'une part une séquence indéfinie de structures galactiques répliquant à toutes les échelles la plus petite structure visible (notre système solaire), et d'autre part une séquence indéfinie de formations galactiques nébuleuses à partir d'un matériau originaire uniforme. Par le jeu des seules lois de la mécanique, l'univers devient comparable à une bulle d'ordre en expansion à partir d'un centre dans un chaos infini. Cette double organisation est nécessaire pour éviter l'aporie de tout univers newtonien statique, incapable de trouver un compromis entre mouvement et équilibre : comment éviter un effondrement général par l'effet de l'attraction universelle, si ce n'est par un équilibre miraculeux entre toutes les distances qui séparent les corps célestes ? À cette nécessité dans l'organisation de l'univers, Kant juxtapose le fait accidentel que notre terre n'est pas très éloignée du supercentre de l'univers, de sorte que l'apparence d'un système d'ordres emboîtés systématiquement les uns dans les autres jusqu'aux confins de l'univers n'est qu'une illusion locale. L'ordre observé n'est pas nécessairement un échantillon fidèle du tout. Traduit théoriquement, cela signifie que le concept dynamique ne subsume pas tous les phénomènes parce que l'univers est divisé en deux chaos, l'un qui s'organise continuellement et extensivement à partir d'un point central, l'autre qui attend perpétuellement d'être organisé. L'univers est à la fois unité et totalité, sans qu'il soit jamais stabilisé en une uni-totalité.

En montrant ainsi tout à la fois l'absence et la nécessité de concepts totalisants dans la science moderne de la nature, l'hypothèse dynamique de la *Théorie du ciel* est au cœur d'une tension inhérente à toute pensée cosmologique. Dans son propre contexte, l'hypothèse dynamique paraît très moderne par un côté, et dépassée par un autre côté. Moderne, l'hypothèse l'est par le fait que la constitution systématique de l'architecture cosmique détermine le choix des conditions initiales, qui ne sont donc pas arbitraires comme dans la physique locale. Dépassée, l'hypothèse l'est par le fait qu'elle envisage une seule constitution systématique à toutes les échelles de grandeur. De notre point de vue contemporain, l'usage heuristique de l'analogie est aveuglant, car des changements qualitatifs de structure apparaissent en passant de l'échelle mésoscopique à l'échelle macroscopique.

Or, lorsqu'il reprend sa problématique depuis le point de vue critique, Kant introduit un *principe cosmologique* (*kosmologischen Grundsatz*) qui donne finalement tout son sens aux conditions et aux limites d'une notion comme celle d'uni-totalité. Ce que la *Théorie du ciel* attribue à la structure évolutive de l'univers lui-même, la critique l'attribue aux conditions du progrès de la connaissance du cosmos au moyen du principe cosmologique, qui est un principe régulateur de la raison. Le principe a d'abord un sens négatif : par ce principe "il n'est *donné* aucun maximum à la série des conditions dans un monde sensible considéré comme une chose en soi"²⁴. Mais ensuite Kant lui trouve une valeur heuristique : "ce maximum ne peut être *donné comme tâche* que dans la régression de cette série". Tâche elle-même problématique,

puisque le principe est une règle qui “impose une régression à laquelle il n’est jamais permis de s’arrêter dans un inconditionné absolu”²⁵. Nous sommes au cœur de la difficulté : le principe cosmologique prescrit une régression indéfinie dans la série des conditions de phénomènes donnés, de telle sorte qu’il faut “toujours s’enquérir d’un membre plus élevé de la série, que ce membre puisse ou non m’être connu par l’expérience”²⁶, et pourtant ces conditions ne s’additionneront jamais dans le monde comme tout (qui à proprement parler n’est rien). La série indéfinie doit être traitée comme n’étant pas finie, bien que nous ne puissions pas savoir si en soi elle n’est effectivement pas finie ; pourtant je dois continuer à m’enquérir d’un membre de la série alors même qu’il peut me rester inconnu par l’expérience, peut-être parce qu’il est quelque chose en soi. C’est pourquoi le principe cosmologique n’est ni un principe d’entendement ni un principe de raison dans son usage logique. Il ne va pas au-devant de la possibilité de l’expérience en légiférant sur elle, comme l’exigerait un principe d’entendement. Il n’exige pas non plus de *trouver* l’inconditionné qui doit achever la connaissance conditionnée de l’entendement²⁷, comme l’exigerait un principe de raison dans son usage logique, mais seulement de le chercher ; s’il était trouvé, cet inconditionné ne constituerait la connaissance de ce qui se tient au-delà de l’expérience que par analogie avec ce qui se tient en deçà (modèle cosmologique précritique). Au-delà des limites de l’expérience possible, les phénomènes ne jouissent pas d’une autonomie vis-à-vis de nos capacités cognitives, comme s’il suffisait de regarder plus loin pour les rencontrer tels qu’ils sont en soi. Conformément à la légalité de l’entendement, il n’y a pas de rencontre avec le phénomène brut – le phénomène qui n’est pas encore tombé sous la coupe de l’entendement – sans que cette rencontre soit suscitée, ce qui enlève justement au phénomène en question sa dimension de donnée brute. Mais selon le principe cosmologique le même objet en attente d’être phénoménalisé garde une chance de montrer à l’entendement quelque chose qui n’est pas *entièrement* de l’ordre de la rationalité logique²⁸. C’est pourquoi le principe “postule *comme règle* ce qui doit arriver (*geschehen soll*) de notre fait *dans la régression* et *n’anticipe* pas ce qui est donné en soi *dans l’objet* antérieurement à toute régression”. Une règle qui n’anticipe pas le donné est une règle empêchée de faire son travail. Pourtant elle subsiste comme règle : son avance dans la sphère du donné indique en même temps un retrait vers les conditions de son action. Le principe est une règle en ce sens qu’il régule la manière dont il faut instituer (*anzustellen*) la régression elle-même. Il définit la condition pour qu’un mouvement de pensée soit poursuivi au-delà et dans le prolongement des facultés cognitives, qui constituent leur objet comme phénomène précisément par leur propre mise en mouvement (renversement copernicien).

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Or, instituer la régression vers les conditions inconditionnées de l’expérience suivant le principe cosmologique, n’est-ce pas lui impulser une certaine *finalité* qui choisit une direction parmi d’autres encore possibles pour s’orienter au-delà de l’expérience possible ? Comme le principe cosmologique ne relève à proprement parler ni de l’entendement ni de la raison, il ouvre en effet sur la faculté de juger.

À ce moment charnière de la *Critique de la raison pure* où il est question de distinguer rigoureusement entre phénomène et chose en soi, vers la fin de l'Analytique Transcendantale, Kant présente une sorte de résumé de ce qui a été fait et de ce qui reste à faire : "l'entendement, qui est simplement occupé à son usage empirique et ne réfléchit pas sur les sources de sa propre connaissance, peut très bien réussir, mais il est incapable d'une chose : se déterminer à lui-même les limites de son usage, et savoir ce qui peut se trouver au-dedans ou au-dehors de sa sphère entière"²⁹. L'entendement dans son usage empirique ne pourrait être déterminant quant aux limites de cet usage. Or, ce qui tient dans ou au-delà de l'horizon dans son usage empirique ne relève pas directement des objets, mais des *questions* sur la nature de ces objets : sur la ligne d'horizon affleure le caractère problématique de la chose en soi. Si ces questions sont ignorées, l'entendement "n'est jamais sûr de ses droits et de ses propriétés, mais il ne peut s'attendre qu'à de multiples et humiliants rappels à l'ordre, lorsque (comme il est inévitable), il transgresse sans cesse les limites de son domaine". La transgression a lieu tout le temps, en conséquence du fait qu'il manque à l'entendement un principe déterminant des limites. Comment la réflexion sur les sources de la connaissance va-t-elle nous préparer à la détermination de ses limites ? La réponse, selon Kant, ne pourrait être basée sur une simple exposition de ce qui est vrai, mais seulement de ce que l'on désire savoir³⁰. En réfléchissant sur son propre désir de savoir, la raison sera en mesure de délimiter ce qui se tient au-dedans et ce qui se tient au-delà de sa sphère. Dans l'entendement il y a une poussée intérieure qui l'emporte au-delà de son usage empirique, et cette poussée est une injonction (ou impératif, *Geheiß*) de la faculté de juger³¹ ; en réponse à cet impératif, la raison se fait un devoir de maîtriser la poussée par le questionnement en retour sur les sources du jugement. Admettons que le désir de savoir se conforme au mode "copernicien" de penser, suivant lequel la nature est ajustée à notre puissance cognitive de déterminer ses objets. Aucune règle ne permet encore de savoir si cet ajustement est ou n'est pas limité d'une certaine façon ; mais le jugement déterminant est au moins limité par son incapacité à fixer ses propres limites, c'est pourquoi il en appelle de lui-même au jugement réfléchissant, qui cherche les limites tout en demandant si des limites existent.

La loi de la nature, dont l'entendement se porte garant, consiste précisément à dire : rien n'arrive sans une cause suffisamment déterminée a priori³². Mais aucune cause n'est suffisamment déterminante au point d'empêcher un premier commencement par liberté qui brise l'enchaînement universel. La brisure laisse un espace pour la réflexion qui cherche librement l'universel qui lui correspond, au lieu de subsumer les phénomènes sous l'universel donné. De ce point de vue, l'enchaînement universel est seulement présumé bien qu'il soit toujours une loi naturelle.

Le jugement réfléchissant est à l'œuvre dans l'antinomie cosmologique de la raison pure, où la recherche d'un universel correspondant à l'idée de tout est incapable de se fixer au moyen d'une causalité universelle. Voyons-le dans le cas de la première antinomie. La loi naturelle de causalité y est neutralisée deux fois. La thèse réfléchit à cette chose impossible qu'est un temps infini déjà écoulé, pour conclure que "un agrégat infini de choses effectives ne peut être considéré comme un tout donné, ni par conséquent comme *donné en même temps*"³³. Comme la règle de causalité impose la simultanéité de toutes les parties d'un tout, le monde est limité dans l'espace. De son côté, l'antithèse réfléchit au monde fini et cherche une relation de ce

monde à l'espace extérieur vide dans lequel il est plongé, pour conclure qu'une relation de quelque chose à rien n'est pas un objet d'expérience. L'espace vide bloque la recherche toujours possible de nouveaux membres dans la série des objets d'expérience, ce que demande justement la règle de causalité. Dans la thèse aussi bien que dans l'antithèse, la règle de causalité identifie ses propres limites, mais échoue à les reconnaître : dans la thèse la réflexion sur la causalité ne débouche sur rien, tandis que dans l'antithèse la réflexion est conduite par une foi aveugle dans cette même causalité.

Poussée par l'entendement, la raison réfléchit à ce que l'entendement ne peut réfléchir, à savoir la détermination de ses limites. Mais cette réflexion ne décide rien entre deux déterminations possibles, chacune aussi problématique que l'autre. Il reste au jugement réfléchissant à réfléchir la possibilité même d'une détermination. La raison est alors poussée à son tour au-delà de la condition de connaissance, et bascule dans le registre de la seule condition à hauteur de sa liberté : une condition de vie.

Dans une autre œuvre précritique qui reprend déjà les lignes directrices de la *Théorie du ciel*, Kant admet que l'existence même des choses naturelles reste toujours fondamentalement contingente. En outre, de très nombreuses connexions soumises à des lois différentes à l'intérieur d'une même chose témoignent également d'une unité contingente et particulière : par exemple la connexion entre les éléments comme l'air, la terre et l'eau. L'unité nécessaire prévaut pourtant lorsqu'un même principe commande la conformité de différentes choses à des lois qui impliquent à leur tour l'intervention d'autres lois ; par exemple la forme ronde d'une planète et son mouvement autour du soleil. Les lois universelles de la nature inorganique se prêtent donc à l'unité nécessaire³⁴. En ce qui concerne les êtres vivants, par contre, les mêmes types de connexions ne nous empêchent pas d'ignorer ce qui assure leur unité interne : cette unité reste contingente, même si elle semble résulter d'un accord avec une grande sagesse. Dans la *Critique de la faculté de juger*, Kant affirmera sans ambages que le concept de fin naturelle est tout simplement étranger à la science. Même si la science de la nature se conformait entièrement aux limites imposées par la raison, si elle ne se laissait pas entraîner par une fin objective avant d'avoir réfléchi aux conditions objectives de toute finalité, elle manquerait encore l'essence de la finalité naturelle. S'il est jamais trouvé, le principe qui finalement unira mécanisme et finalité ne pourra pas du tout être utilisé comme une *explication*³⁵. En effet, une telle explication s'appuierait inmanquablement sur un principe cosmologique *constitutif*, impensable pour nous.

La faculté de juger est pour ainsi dire la faculté originaire de la controverse et de la possibilité de la preuve toujours remise en question. Elle renonce à la subsomption des phénomènes sous un universel donné une fois pour toutes, mais ce renoncement bascule aussitôt en force quasi surhumaine lorsqu'elle s'octroie la liberté de se donner un universel dont on peut au moins conjecturer qu'il s'accorde avec le tout de la nature. Quand notre entendement dit alors : les choses n'auraient pas pu être autrement qu'elles ne sont, il vient à la rencontre du phénomène dans son complet dénuement, non préparé, débarrassé de la gangue qui cache encore sa choséité en soi. Il s'autodépasse et se met dans la peau d'un entendement intuitif non humain pour lequel il n'y a pas de différence entre possibilité et actualité. Par suite,

s'il existe un concept relatif à une sorte d'harmonie préétablie entre l'entendement discursif et le tout de la nature, l'entendement discursif est incapable de se reconnaître dans ce concept, de sorte que celui-ci ne préjuge en rien du contenu des lois empiriques les plus générales qui soient. Ces lois pourraient donc être tout autres que celles qui sont guidées par l'idée que nous nous faisons de la finalité. Contrairement à la catégorie qui unit le divers, le concept de finalité qui tend à enfermer cette unité dans une totalité n'est pas lui-même justifiable comme nécessaire : il n'est justifiable que comme désirable. Certes, tout se passe comme si la liberté que la nature se choisit correspondait à la liberté que nous y mettons au moyen de la finalité soi-disant objective. Si la faculté de juger avait besoin de supposer la non-finalité pour poser la finalité, elle tomberait dans un conflit antinomique du type de la cosmologie rationnelle. Mais elle ne peut qu'imiter un entendement intuitif où la tension génératrice de connaissance proprement humaine entre l'intuition et le concept est abolie. La liberté que s'octroie la faculté de juger pour poser l'universel correspondant au tout de la nature est une liberté pour rien qui soit déterminable objectivement ; elle ne satisfait que le désir lui-même insatiable de savoir.

Au terme de ce parcours autocritique dans le projet critique d'uni-totalité de la connaissance, Kant retrouve la liberté pour rien qui était le point de départ préscientifique de la cosmologie (tant que le jugement objectif n'est pas recherché), et qui s'est maintenu jusque dans l'astronomie géocentrique de Ptolémée (où le jugement objectif est encore à la traîne des phénomènes). Mais le retour au pur et simple spectacle du ciel étoilé ne signifie pas pour autant un pur et simple échec de la raison et de toute finalité pour la faculté de juger. Celle-ci est relancée au-delà de son désir de savoir dans l'expérience du sublime, où elle élabore une nouvelle stratégie d'englobement qui transforme l'échec en inadéquation porteuse d'une appréhension inédite du monde³⁶. Le sublime, en effet, réside dans la présentation d'un concept indéterminé (problématique) de la raison qui est justement celui de totalité. Cet objet informe qu'est le ciel étoilé en son spectacle se prête à une *attirance* vers l'idée de totalité, médiatisée par une présentation de l'illimitation (*Unbegrenztheit*) sensible dans l'objet informe. L'attirance se démarque d'une patiente synthèse régressive vers l'inconditionné qui fait son chemin dans les phénomènes de plus en plus éloignés du champ de l'expérience possible. Dans cette synthèse que la raison voudrait contrôler entièrement, il arrive un moment où sans qu'elle puisse s'en apercevoir le phénomène bascule en chose en soi. Par contre, face au vertige de l'immensément grand, l'imagination qui appréhende successivement les parties d'un tout finit par devenir *oublieuse* des synthèses précédentes. Elle est pourtant encore animée par le dessein de comprendre (*zusammenfassen*) en une seule représentation ce qu'elle a patiemment et successivement composé. Cette persévérance à vrai dire déraisonnable de la faculté de juger surmonte le jeu purement rationnel des synthèses constitutives qui s'abandonnent dans un principe régulateur comme le principe cosmologique. La faculté de juger est certes encore libre de se rappeler à son devoir de raison, donc de retourner vers la recherche des phénomènes qui s'enchaînent dans une expérience possible pour former un ensemble comme les constellations et les galaxies. Mais elle est également libre de s'engouffrer toujours plus dans l'oubli de la nature déjà comprise, pour affronter avec des armes nouvelles la toute puissance résiduelle et infiniment intimidante de la nature. Cette puissance doit bien elle aussi former un ensemble, bien qu'il soit toujours encore en sommeil dans les tréfonds du cosmos.

RÉSUMÉ: Dans la Dialectique Transcendantale de la *Critique de la raison pure*, Kant se réfère à un “principe cosmologique” qu’il considère comme une illustration d’un principe régulateur de la raison. Le sens et la portée de ce principe sont discutés dans le cadre de la première antinomie cosmologique.

MOTS-CLÉ : Cosmologie – phenomena – unite – totalité – finalité.

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NOTES

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2 Koyré (1966, p.15).

3 Husserl (1976, §9, p.36).

4 (*Ibid.*, p.37).

5 *Anthropologie in pragmatischer Hinsicht*, AA 07:120.

6 *Critique de la raison pure*, A853/B881, éd. F.Alquié, *Œuvres philosophiques*, I, Paris, Gallimard, 1980.

7 H.Weyl (1949, p.42 note).

8 H. Weyl (1952, p.10).

9 KrV, A725/B753.

10 KrV, A839/B867.

11 *Principiorum primorum cognitionis metaphysicae nova dilucidatio*, AA 01:407, *Œuvres philosophiques*, I, *op.cit.*, p.146.

12 *Ibid.*, AA 01:408, p.148.

13 M. HEIDEGGER (1992, p.422).

14 A. GRÜNBAUM (1989).

15 *Prolegomena zu einer jeden künftigen Metaphysik*, §13, AA 04 :290, éd. F.Alquié, *Œuvres philosophiques*, II, Paris, Gallimard, 1985, p.60.

16 Platon, *Timée*, 40c.

17 KrV, A334/B391.

18 KrV, A504/B532.

19 KrV, A506-507/B534-535.

20 KrV, B39-40.

21 KrV, A426/B454.

22 KrV, A430/B458.

23 *Allgemeine Naturgeschichte und Theorie des Himmels*, AA 01:240.

24 KrV, A508/B536.

25 KrV, A509/B537.

26 KrV, A518/B546.

27 KrV, A307/B364.

28 Discutant la doctrine cosmologique de Kant, Lévinas pose le problème dans toute son ampleur : “désormais le partiel peut avoir un sens sans la réalité du Tout et l'*apparaître* peut ne plus dépendre de la rationalité logique”, “Totalité et totalisation”, *Dictionnaire de Philosophie* (2000, p.1872).

29 KrV, A238/B297.

30 KrV, A237/B296.

31 *Kritik der Urteilskraft*, AA 05:188.

32 KrV, A446/B474.

33 KrV, A428/B456.

34 *Der einzig mögliche Beweisgrund zu einer Demonstration des Daseins Gottes*, AA 02:106.

35 *Kritik der Urteilskraft*, AA05:413.

36 *Ibid.*, AA05:244.

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KANT'S NEWTONIANISM: A REAPPRAISAL

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1. NEWTONIANISM AND KANT'S QUEST FOR METAPHYSICS

Kant's engagement with physics, and in particular with Newton's physics, crosses the whole of his writings, documenting a lifelong intellectual enterprise which connects the lesser-known writings of the young student to the late private reflections of the great critical philosopher. Indeed physical issues are the main topics of Kant's first published works, from the *Gedanken von der wahren Schätzung der lebendigen Kräfte* (1747) to the magisterial dissertation *De igne* (1755) and his first book, the *Allgemeine Naturgeschichte und Theorie des Himmels* (1755), which is explicitly "based on Newtonian principles". Between 1754 and 1758 Kant published eight shorter writings about physical problems. Moreover concepts and principles of Newtonian physics – such as attractive and repulsive forces, and the law of universal gravitation – play a major role in the early academic writings on metaphysics, the *Principiorum primorum metaphysicorum nova dilucidatio* (1755) and the *Monadologia physica* (1756), which was conceived as a first part of a project concerning "the use in natural philosophy of metaphysics combined with geometry". This intertwining of physics and metaphysics becomes the object of a methodological reflection in the philosophical writings of the 1760s, where e.g. Kant – with reference to Newton's application of negative quantities to the study of attractive and repulsive forces – defends the "important consequences" of applying the propositions of mathematics in philosophy (NG, AA 02: 169.08ff.) and even suggests the adoption of Newton's scientific method as a model for metaphysics (UD, AA 02: 286.08-10).

With the development of critical philosophy, as Kant was appointed as professor of Logic and metaphysics, this engagement with physics is by no means reduced. This is documented not only by the overwhelming quantity of manuscript reflections and the uninterrupted teaching activity on physics, but most importantly by several references to physics in the three

Critiques, a systematic book on the “pure part” of physics – the *Metaphysische Anfangsgründe der Naturwissenschaft* – and more short writings such as *Über die Volkane im Monde* (1784) and *Über den Einfluß des Mondes of die Witterung* (1792). Kant’s close attention to the ongoing developments in natural science is all the more striking if one considers his statements about how busy was his activity in the years of criticism. But the very fact that he devoted his last years (1796-1800) to the unfinished project of a “transition from the Metaphysical Foundations of Natural science to physics” (the *Opus postumum* of the Akademie Ausgabe) can leave no doubt about his conviction of the relevance of physics for his system of philosophy.

Notwithstanding this massive textual evidence the basic motivations behind Kant’s engagement with physics, and with Newton’s physics in particular, have been often misunderstood. To be sure Kant had a largely self-taught and non-professional training in mathematics and physics and Erich Adickes’ pioneering survey of his work as a “scientist” (*Naturforscher*) notably led to highlight his occasional mistakes and to a general dismissive judgment about his being an amateur scientist with an inappropriate inclination to a priori reasoning.¹ Successive scholarship has correctly restored the inseparable connection of physics and metaphysics in both the “precritical” and the “critical” period, but yet the precise role of Newton’s physics for the elaboration of Kant’s *philosophical* ideas has been usually left in the background. Nonetheless it is possible to provide a general characterization of this role: there is indeed a single main motivation, which – in spite of the many theoretical changes – joins the early attempts at introducing action-at-a-distance in a monadological framework to the systematic treatment of “pure” and “empirical” physics in the critical period, and that is the development of a completely new metaphysics of nature. In the precritical works, where metaphysics is supported by independent evidence, this role is limited to an empirical *corroboration* of metaphysical concepts: a typical example is the interpretation of “universal gravity” as the “external phenomenon” of the interaction among substances in the *Nova dilucidatio* (ND, AA 01: 08-13). In the critical system the connection with physics is *essential* to the foundation of metaphysics. Basically speaking the reform of metaphysics can be effected *by means of* a foundation of empirical physics, which moreover – according to Kant – is in itself an intrinsic necessity. This double objective is expressed by the idea of a “pure part” of physics, which is also called “metaphysics of corporeal nature”. As Kant puts it in the *Metaphysische Anfangsgründe*, which expounds this new part of metaphysics and can be considered as the culmination of this lifelong research, the separate exposition of the new metaphysics does not depend only on the “inner necessity to isolate” the metaphysical principles from the mathematical and the empirical premises.

A separated metaphysics of corporeal nature does excellent and indispensable service for *general* metaphysics, in that the former furnishes examples (instances *in concreto*) in which to realize the concepts and propositions of the latter (properly speaking, transcendental philosophy), that is, to give a mere form of thought sense and meaning (MAN, AA 04: 478.15-20).

Kant himself introduces this claim by observing that the aim of general metaphysics does not lie in this “realization”, but is rather “to attain cognition of that which lies wholly beyond the boundaries of experience, of God, Freedom and Immortality”. To show how this intuitive

realization of metaphysical concepts is provided by pure physics alone, and therefore *only* by means of its empirical conditions (intuition of matter in space), is thus a crucial step for Kant's project of applying the traditional ideas of metaphysics in the *completely different* (noumenal) field of practical philosophy. This missing crucial step is also easily characterized: transcendental philosophy has been able to "prove" (*Beweisen*) the objective reality of categories, and this has been possible precisely because this philosophical proof is independent from any particular intuition; nevertheless, because of the same reason, philosophy still needs a sensible intuition of the "real object", in order to provide "sense and meaning", that is a particular reference to pure concepts; and this sensible representation – or "exhibition" (*Darstellung; exhibitio*) – is precisely the task of pure physics.²

In this wider systematic framework, which Kant first expounded in the *Architectonic* chapter of the first *Critique*, we can see how pure physics connects transcendental philosophy to empirical physics. But this is not enough in order to understand how Kant's understanding of *Newton's* physics plays a role for this connection. For the crucial "exhibition" is to be provided by pure physics on the ground of the simple "empirical concept of matter", without entering into further empirical details, thus providing new synthetic a priori (not pure) principles.³ Indeed Kant writes that metaphysics can certainly not "extend natural knowledge (which takes place much more easily and surely through observation, experiment and the application of mathematics to outer appearances)" (MAN, AA 04: 477.26-27). But the point is that, according to Kant, physical theory cannot draw its validity only from empirical grounds, nor can it apply mathematics to phenomena without postulating specific philosophical principles. Physics is rather to be seen as a stratification of concepts and principles, which can (and must) be considered top-down from the most abstract level of transcendental philosophy (with its concepts of quantity, reality, substance etc.) to the more empirical level of experimental physics. To put it in a formula, there is no *merely* empirical physics; there are of course empirical *concepts* and *laws*, which no a priori theory can ever anticipate, but all these concepts and laws cannot be separated from a wider theoretical framework, where they correspond to more abstract categories and principles. As we will see – and this is the point where Newton's theory receives an exemplary role – Kant considers the rational mechanics of the *Principia mathematica* and the fragmentary theory of matter of the *Opticks* as the best examples for the understanding of this point. Indeed Kant spells out this "indispensability claim" in the *Preface* to the *Metaphysische Anfangsgründe*, where he writes that physicists *could not* ever proceed without metaphysics, "albeit unconsciously", and the sentence which expresses this claim makes an implicit reference to Newton's famous rejection of hypotheses in the general *Scholium* of the *Principia mathematica*:

All natural philosophers who have wished to proceed mathematically in their occupation have always, and must have always, made use of metaphysical principles (albeit unconsciously), even if they themselves solemnly guarded against all claims of metaphysics upon their science. Undoubtedly they have understood by the latter the folly of contriving possibilities at will and playing with concepts, which can perhaps not be presented in intuition at all, and have no other certification of their objective reality than that they merely do not contradict themselves. All true metaphysics is drawn from the essence of the faculty of thinking itself, and is in no way fictitiously invented [*erdichtet*] on account of not being borrowed from experience. Rather, it contains the pure action of thought, and thus a priori concepts and principles, which first bring the manifold of empirical representations into the law-governed connection through which it can become

empirical cognition, that is, experience. Thus these mathematical physicists could in no way avoid metaphysical principles, and, among them, also not those that make the concepts of their proper object, namely, matter, a priori suitable for application to outer experience, such as the concept of motion, the filling of space, inertia, and so on. But they rightly held that to let merely empirical principles govern these concepts would in no way be appropriate to the apodictic certainty they wished their laws of nature to possess, so they preferred to postulate such [principles], without investigating them with regards to their a priori sources (MAN, AA 04: 472.13-35).

This crucial passage makes clear how close is the connection between the realization of a “true metaphysics” (alternative to the unsuccessful attempts of Leibniz and Wolff) and the non-empirical justification of Newtonian physics.⁴ Thus one implication of these lines is that Newtonian physics, in Kant’s view, does not form an independent body of scientific knowledge in itself, but intrinsically needs metaphysical principles in order to obtain its intended objective meaning. Indeed Kant usually talks about Newtonian *principles* – which is non-committal about their independent objective validity – and avoids the expression ‘Newton’s physics’, which may suggest a full disciplinary autonomy. And he even argues, in the final paragraph of the *Preface*, that it would be “not unimportant” that the new metaphysical principles may be “brought into union” with mathematical principles in physical treatises (MAN, AA 04: 478.25-31). Kant’s view, as I will show in the next section (§2), is actually stronger, even though here he expresses his proposal to physicists with modesty: in the light of the metaphysical part of physics Newton’s original understanding of the basic concepts and principles of physics has to be significantly *corrected* in many points, and Newton can be shown to have been “at variance with himself”. Therefore we can conclude that the philosophical engagement with the elements of Newtonian physics – that is basic concepts, laws and method – is inseparable from Kant’s general philosophical quest for a new metaphysics and moreover leads to an original reassessment of those very elements.

These points have been often missed in Kantian scholarship, which has been dominated by the idea that Kant would have merely provided a “foundation” or “justification” of Newtonian physics.⁵ It is an irony that the persistent legacy of Kant’s criticism in Neokantian philosophy and thereby in the whole of XXth century epistemology has played a negative role for the correct understanding of this aspect of Kant’s thought, precisely among those who were more interested in the pursuit of his general approach. The basic reason of this is the urgent need to defend criticism in the context of XXth century physics, thereby underscoring the validity of Kant’s approach *beyond* the historically contingent boundaries of the science of his time. For example Cassirer considered the *Metaphysische Anfangsgründe* as a mere “transcription” of Newtonian mechanics, where Newton’s laws of motion would play the role of “determinate expressions [*Ausprägungen*]” of the transcendental *Analogies of Experience*, and therefore as a work of limited interest if compared to the first *Critique*, which could still offer indispensable insight in XXth century physics.⁶ Similarly Gerd Buchdahl, whose work highlighted once more the importance of Kant’s metaphysics of nature among American scholars, considered the reference to Newtonian physics as a contingent circumstance with no “probative” value, which could be systematically cut off from the transcendental foundation of natural science in general.⁷ The occasional talk about Kant’s “foundation” of Newtonian science, suggested by the standard translation of the title of

the *Metaphysische Anfangsgründe*, provides the most recent version of this historically mistaken separation of the physical theory from its philosophical justification.⁸

The basic idea behind these approaches was to separate a general epistemological framework from its strictly scientific content, constituted by the historically given physical theories. A similar approach was also attempted by Kuhn with his theory of paradigms, which he eventually presented as a Kantian “relativized a priori”, since it allows of historically changing sets of principles and theories which are “constitutive of the possible experience of the world”.⁹ According to Kuhn the exposition of a paradigmatic theory can be basically contained in a single book – Newton’s *Principia* are among his examples¹⁰ – and it includes basic metaphysical commitments, which could be contrasted by revolutionary theories, hence forming a full-fledged theoretical system. From the point of view of contemporary philosophy of science Kuhn’s theory has to face many different theoretical problems, such as the problem of connecting different and successive theories without endorsing relativism and the problem of the underdetermination of scientific theories and the existence of empirical equivalents, one of whose consequences is the fact that scientific theories do not constrain a single ontological interpretation. This second kind of problem can usefully introduce the correct understanding of Kant’s original philosophical approach to Newton’s physics, which, as we have seen, does not begin from the admission that the latter is a *given scientific* theory. Indeed Kant’s whole idea of a metaphysical foundation of Newton’s physics, rather than being an idiosyncratic conviction of an academic metaphysician, was certainly corroborated by the fact that there was at his time *no single paradigmatic conception of Newtonian physics*, that is no entirely shared view of the principles of the new physics and the status of its basic concepts.¹¹

Newton himself was responsible for the ambiguity of his theory. On the one hand, as it is well known – and as Kant acknowledges in the above quoted lines from the *Preface* to the MAN – Newton wanted to eliminate all kind of hypotheses from “experimental philosophy” and provided in his “rules of philosophizing” a method for studying phenomena without getting committed to hypotheses about their causes. This methodological approach was primarily designed to defend his introduction of the force of universal gravity, without facing the issue of hypotheses about its cause (“mechanical, physical, or metaphysical”) and the very title of the *Philosophiae naturalis principia mathematica* implies the attempt to avoid the Cartesian, highly hypothetical approach to natural philosophy, with which Newton was very familiar. This experimental and mathematical approach was adopted in the popular textbooks by ‘sGravesande (1720) and Muschenbroek (1734), whose “positivistic” formulation of Newton’s physics, focusing on the “effect” of gravity and leaving open the way to different kinds of hypotheses about its action, played a major role for winning the resistance against gravity among Cartesian mathematicians and physicists and thereby introducing the latter in the Continent (Kant himself was very familiar with these textbooks).¹²

Yet Newton himself, as it is well known, allowed of non-empirical concepts of physics such as absolute space and atomic particles, and made reference to God’s existence and activity for the justification of these concepts. Moreover, he generally held that the very mathematical order of nature depended on God’s wise action and occasional intervention in the motion

of bodies, and even allowed of a possible explication of his more original physical concept, universal gravitation, by means of God's action. Finally, even though these metaphysical issues were meant to remain on the background of proper physical investigation, Newton's theory of matter was itself highly undeveloped and hypothetical, as he made clear in the *Queries* to the different editions of the *Opticks*, where he oscillates between various mechanistic hypotheses about the role of ether and a dynamical approach grounded in the concept of microscopic repulsive and attractive forces – setting the background for an alternative between forces and fluids which crosses the whole XVIIIth Century and is still markedly evident in Kant's writings.

The metaphysical background of Newtonian natural philosophy, even though it was treated in marginal sections of Newton's masterworks, was largely debated in the famous correspondence between Leibniz and Clarke (published in 1717), which sets a fundamental background for Kant's entire natural philosophy. But here Clarke, in clarifying the philosophical and theological background of "mathematical principles" against the charge of materialism, was not defending a commonly accepted view among the Newtonians. For instance Roger Cotes (whose views were, again, quite familiar to Kant) considered attraction as a "primary" property of matter.¹³ The Jesuit mathematician Rudjer Bosovich also moved from the ontological acceptance of action at distance, considering the Cartesian theory of action at contact as contrary to the law of continuity, and attempted to reconcile a "Leibnizian" view about monads with Newton's mechanics by providing a theory grounded on point-like monads as the centres of Newtonian attractive and repulsive forces.¹⁴ This theory itself was subject to different interpretations: it was famously endorsed by Priestley, who considered it as a possible scientific ground of materialism¹⁵, while in Germany it had been reviewed by Mendelssohn, who was rather interested in the defence of a spiritualistic monadology.¹⁶ Kant's own "physical monadology" of 1756 was a similar and independently developed attempt of reconciling the Newtonian and the Leibnizian view.

Indeed this problem of reconciling Newton and Leibniz, and in particular of inserting Newtonian concepts and laws in a monadological background, was central in the context of early XVIIIth century Germany, which sets the closest reference system for Kant's original reception of Newtonianism. Let us briefly consider three cases: Wolff, Maupertuis and Euler.

Wolff, starting from his preface to the translation of the exchange between Clarke and Leibniz (which moreover introduced the technical term of 'materialism' in German philosophy), insisted on the latter's polemical argument about Newtonian principles being conducive to materialism.¹⁸ His own metaphysics, which was grounded on the existence of immaterial souls and simple (point-like) physical elements, would counter this risk, thereby limiting the value of Newtonian principles to the subordinate domain of "applied mathematics": Newton's doctrines, though mathematically valuable, lacked a metaphysical foundation of their basic concepts and principles.¹⁹ Thus Wolff included Newton's *leges motus* in his metaphysical *Cosmologia generalis* (1731) and thereby in a metaphysical framework grounded on the principle of sufficient reason and the existence of immaterial substances. Against this background several academic philosophers adopted different versions of dynamical influx, and – elaborating on a Leibnizian idea – started from the phenomenon of impenetrability for an understanding of monadic

interaction: this was the context for Kant's eventual (and original) introduction of *Newtonian* attractive and repulsive forces in this metaphysical debate.²⁰

Maupertuis, which was appointed President of the Berlin Academy of Sciences and moved to Berlin in 1745, played a major role for the introduction of Newtonianism in Germany. His *Discours sur la different figure des astres* (1732) was the first non-technical endorsement of attraction on the Continent, containing a very clear statement of the “equal unknowability” argument about attraction and impulse.²¹ Throughout his scientific writings, and in particular in his book eventually titled *Système de la nature*, Maupertuis paid remarkable attention to the issue of reconciling Newtonian physics with typically Leibnizian ideas, attributing perception to elementary parts of matter and eventually oscillating between materialism and skepticism regarding the ultimate ground of natural phenomena.²² In 1747 Maupertuis promoted the prize essay completion “on the doctrine of monads” as one of the first official actions of the reconstituted Academy. The resulting debate was precisely the occasion for the composition of Kant's *Monadologia physica*. On the whole Maupertuis remained a constant and explicit reference point in Kant's writings throughout the 1750s and 1760s, where the latter elaborated his new philosophical elaborations of Newton's mathematical concepts.

An alternative approach was represented by Euler, which was the most important physicist of the time in Germany and also a major influence for Kant's early work. Euler tried to develop and expand the core of Newton's mathematical physics in a broadly Cartesian framework, dismissing monads and “active forces” (as contrary to the law of inertia) and admitting impenetrable particles as the grounds of moving force.²³ Even though Euler was mainly a mathematician, he adopted a dualistic metaphysics by resorting to God's creative act as the ground of the existence of souls and impenetrable particles. His theory of a universally distributed ether, filling the spaces between particles of matter and being the substratum of fire and light, was adopted by Kant throughout his whole philosophical career. More generally Euler's physico-mathematical research on continuum dynamics provided an exemplary scientific source for Kant's mature theory of matter, which – contrary to Newton's and Euler's view – was based on the primacy of the fluid and continuous on solid and discrete state of matter.²⁴

As it is shown by the examples of two major scientists such as Maupertuis and Euler the wide diffusion of an “instrumentalist” approach to physics, even though it was practically adopted by most scientists in the second half of XVIIIth Century, was no guarantee of avoiding the metaphysical issues of Newtonian science. Indeed even French physicists such as Lagrange, who would try to dispose of metaphysics in their expositions of rational mechanics and generally had a dismissive attitude towards metaphysics, eventually postulated the objective validity of differential equations, thus implicitly admitting a metaphysical realistic presupposition.²⁵

In the light of this historical context it appears quite natural that Kant could try to connect the need for a deeper philosophical understanding of the most successful physical theory of his time to his general philosophical project of reforming metaphysics. Thus Kant's early attempt of connecting metaphysics and mathematics (in the 1750s) is not adequately described as an attempt at reconciling Leibniz and Newton, but rather as a matter of reforming metaphysics by adopting the *exterior form* of a systematic and demonstrative science, according

to Wolff's example, while rethinking the latter's basic principles in the light of the successful empirical discoveries made by Newton. For this ambitious task both Wolffian metaphysics and Newtonian physics would not appear as paradigmatic sciences, but rather as doctrinal clusters which lack the capacity to provide truly scientific knowledge on their own and therefore still lack an adequate scientific exposition.

Moreover, on the background that we have sketched so far, we cannot be surprised by the fact that Kant rejected many theses that were originally defended by Newton, such as the existence of absolute space, the atomistic composition of matter, the non-essentiality of gravity to matter, the hypothetical status of repulsive force. Kant also proposed a different justification of many concepts introduced by Newton in the definitions of the *Principia*, namely space, time, mass, moving force. On the whole, he shared Wolff's judgment about Newton's physics being "no philosophy", but tried to make sense of it by carefully following Newton's own empirical and mathematical reasoning in the *Principia* and the *Opticks*. It is a remarkable expression of both his critical approach and his allegiance to Newton that Kant – contrary to many enthusiastic Newtonians – questioned the infallibility of the master and eventually recognized the need for a new theoretical organization of the principles of Newton's theory, in which hypotheses would play a minimum role (though not a negligible one, as we will see in the next paragraph).

2. RETHINKING NEWTON: MOVING FORCE AND MATERIAL SUBSTANCE IN THE *METAPHYSISCHE ANFANGSGRÜNDE DER NATURWISSENSCHAFT*

The *Metaphysische Anfangsgründe der Naturwissenschaft* are explicitly presented by Kant as a complement to Newton's *Principia mathematica*, and contain several direct quotations from Newton's book. Indeed Kant's program in this work is precisely to show how Newton's argument in the *Principia* presupposes philosophical (i.e. metaphysical) concepts and principles, and yet does not provide a justification of this presupposition. This conviction will be still crucial for Kant's unfinished project of a "Transition from the MAN to physics": here, in a Draft of Introduction, Kant even argues that Newton, with his title, is in "contradiction with himself", and that the correct title should have been *Scientiae naturalis principia mathematica*, thereby leaving room for the *philosophical* principles (OP, AA 22: 512.08-17). That physics has three kinds of inseparable elements – metaphysical, mathematical and empirical – is a basic assumption of Kant's understanding of physics in the years of criticism, and in the MAN, in particular, it is supported by means of a very detailed and deep understanding of Newton's text and by the detection of occasional inadequacies in Newton's methodological assessment of his own results.²⁶ Nonetheless Kant's claim that Newton's original exposition has to be emended can also be traced back to the underlying systematic function of the "metaphysics of corporeal nature" as a means to provide the exhibition of metaphysical principles (§1). I will show this by considering how the physical concepts of moving force and quantity of substance are introduced in Kant's argument.

Newton's hypothesis of microscopic attractive and repulsive forces for the explanation of different phenomena such as cohesion, capillarity, elasticity, chemical bond was of course very well known and debated since its first publication in the *Queries* of the *Opticks* (in the second, Latin edition of 1706²⁷) and constituted a central issue for Newtonian scientists, since it was partially inconsistent with the hypothesis of ether, first introduced in the *Queries* of the 1717/18 edition for the explanation of different optical, electrical and gravitational phenomena. Kant's attempt to make sense of both hypotheses in a coherent theoretical framework may be considered therefore as merely an example of this Newtonian legacy, lacking moreover significant experimental and mathematical details. But this attempt, in the first full-fledged exposition of the *Monadologia physica*, belongs to the project of connecting the metaphysics of monads to empirical physics and still bears distinct signs of its Leibnizian roots. Repulsive active force is demonstrated as a condition for the filling of space, and this filling is explained as a "sphere of activity" surrounding a point-like monad (MP, prop. VI, AA 01: 480.36-39). The contrary attractive force is needed in order to put a limit to this repulsive action, which would push monads at infinite distances. The volume occupied by the monad is determined by the different laws of the respective forces. Repulsive force, being diffused in a three dimensional volume, is proportional to $1/r^3$, whereas attractive force, being dependent on the distance, is proportional to $-1/r^2$, where r is the distance from the monad. This dynamic interplay results in a status of equilibrium, corresponding to the boundary of corpuscles (prop. XII), which are the material substances of Newtonian mechanics. The latter's "quantity of matter" depends on a specific *vis inertia* (prop. XI), while their aggregation results in the formation of "ether" or "fire matter" (prop. XIII). In this perspective, the *Monadologia physica* builds a bridge between the *Nova dilucidatio* and the empirical hypotheses of *De igne*, the *Allgemeine Naturgeschichte* and *Neuer Lehrbegriff der Bewegung und Ruhe*, where forces, ether and inertia appear in a physical context.²⁸

This early dynamical theory is still quoted by Kant in the prize-essay of 1764 as an example of metaphysical argument (UD, AA 02: 286-288). The reason of its abandonment is the development of Kant's critical arguments against the objective validity of the cosmological concept of simple substance, whose ultimate exposition is to be found in the discussion of the *Second Antinomy*. In this process Kant recovers the distinction between the Wolffian and the original Leibnizian monadology (e.g. KrV A 439/B 467; A 442/B 470). The former is grounded on "physical points", which are spatial but unextended and therefore cannot be the object of empirical intuition; the latter is grounded on the pure intellectual concept of a simple substance, which cannot be localized in space (being space the form of sensible objects) and whose basic attribute is representation. The latter view, according to Kant, is a more consequent metaphysical doctrine, because it is purely intellectual, but nonetheless non-spatial monads cannot be an object of cognition either.

In the light of this revolutionary framework, in the *Metaphysische Anfangsgründe*, Kant has to completely rethink his physical dynamism. He starts from the empirical concept of matter, which contains the concepts of movability, extension, impenetrability, and inertia; then he analyses this concept "[1] in relation to the pure intuitions in space and time, and [2] in accordance with laws that already essentially attach to the concept of nature in general" (MAN,

AA 04: 472.9-11). This means that [2] the basic properties of matter have to be “carried through all the four of the indicated functions of the concepts of understanding (in four chapters)” (MAN, AA 04: 478.07-08) and [1] that the understanding has to “trace back all other predicates of matter belonging to its nature to this [motion]”, as the “basic determination of something that has to be an object of the outer senses” (MAN, AA 04: 476.09-13). The result is an inquiry into the possibility of mathematical physics: “in order to make possible the application of mathematics to the doctrine of body, which only through this can become natural science, principles for the construction of the concepts that belong to the possibility of matter in general must be introduced first”.²⁹

This complex stratification of theoretical levels, which connects the general functions of the understanding to the empirical concept of matter, hence leading to the formulation of new synthetic a priori (but not pure) principles, can be detected in each of the four chapters of the book.³⁰ The *Dynamics* chapter, in particular, regards the construction of the empirical concept of impenetrability, which is empirically given by means of the sense of touch (MAN, AA 04: 510.04-11). It corresponds to the category of quality and (on the transcendental level of “general metaphysics”) to the concept of the “real” in the phenomenon (KrV, A 166/B 207). The corresponding metaphysical concept, which connects the transcendental level to the doctrine of bodies, is the “filling” of space, which appears in the first *Definition* of the *Dynamics* (MAN, AA 04: 496.07-09). This concept, “in accordance” with the *Analytic of Principles* has to have both an intensive and (being in space) an extensive magnitude – thereby excluding the simple monad. Its treatment “in relation to the pure intuitions of space and time” will consist in an investigation of the condition of this filling, that is resisting a penetrating motion, as different from the more general, merely geometrical concept of “occupying a space” (MAN, AA 04: 497.02-13). This leads to the introduction of a fundamental repulsive force of matter in *Theorem 1* – which I will analyse in a moment – and thus first establishes a possible connection of impenetrability with a mathematical law.

But before going on with this survey of the *Dynamics* chapter we have to take into consideration a crucial passage in the *Preface* of the work, regarding the “excellent and indispensable service” which metaphysics of corporeal nature does for the general metaphysics: that is, to put an end to the “well-known disputes, or at least obscurity, in the questions concerning the possibility of a conflict of realities, of intensive magnitude, and so on, in which the understanding is taught only by examples from corporeal nature what the conditions are under which such concepts can alone have objective reality” (MAN, AA 04: 478.10-15). As it is suggested by the reference to intensive magnitude, the example chosen by Kant regards in particular the task of the *Dynamics* chapter, hence the connection of impenetrability to a possible mathematical construction. To be sure, the explanation of the properties of substance by means of a real conflict was already a central point in Kant’s metaphysical inquiry since the essay on negative magnitudes (and here Kant also made a direct reference to the importance of applying Newton’s theory of negative magnitudes to attractive and repulsive forces: AA 02: 169.13-17). But this task, as Kant has made clear in the *Amphiboly*, must be now realized without resorting to monads, that is by allowing of (1) merely spatial distinction between substances, (2) “real opposition [*Widerstreit*]” between their properties, (3) the primacy of

outer relations (in particular “forces, that are active in space”) and (4) of space and time over the determination of substances by inner properties (See KrV, A 263/B 319-A 268/B 324). Thus the *Dynamics* chapter can be seen as an application of this transcendental “reflection” on the concepts of metaphysics, which are now ultimately rooted in the revolutionary content of the *Transcendental Aesthetic*. In the second edition of the *Critique* Kant will close the circle, as it were, by writing in the second *General Remark* to the *Aesthetic*: “everything in our cognition that belongs to intuition [...] contains nothing but mere relations [*Verhältnisse*], of places in one intuition (extension), alteration of places (motion), and laws in accordance with which this alteration is determined (moving forces)” (KrV, B 66-67). Let us now consider, in the light of this “relational” background and the relevance of the issue of the conflict of realities, the introduction of repulsive and attractive forces in the *Dynamics* of 1786 and how the implicit metaphysical background of this chapter influences Kant’s rethinking of Newtonian physics.

In *Theorem 1 (Lehrsatz)* Kant argues that “Matter fills space, not through its mere existence, but through a particular *moving force*” (MAN, AA 04: 497.15-16). The *Proof* – as we now expect – connects this property to the concept of motion, arguing as follows: penetration into a space is a motion; resistance to motion is the cause of its diminution or change to rest, which – according to *Phoronomy’s* single *Theorem*, which has been proved by means of pure intuition – can only be effected by a motion in the opposite direction. Now, since matter (empirical datum) resists the penetration by other matters in the space that it fills, this resistance is the cause of the motion of the latter in the opposite direction. But the cause of a motion is a moving force, thus matter fills its space through a moving force.

In the first *Remark* Kant immediately confronts an alternative view, defended by “Lambert and others” (AA 04: 497.30ff). According to this view matter fills space by means of an original property of “solidity” and thus can be attributed the property of resistance already by means of its concept, merely in accordance with the law of contradiction. But the admission of absolute solidity was also very common among physicists. Newton’s “solid and massive particles” created by God can be included in this hypothesis, and this may indeed be considered as one example of how Kant intends to emend Newton’s justification of first principles by means of induction.³¹ More recently, Euler had defended a similar claim, also defending (similarly to Lambert) the reverse view that moving force is grounded on impenetrability.³² In the *Remark* Kant is primarily concerned with the mistaken idea that the “principle of contradiction” may be sufficient to explain resistance: here he is making reference to the different foundation of physical cognition provided by his esteemed colleague Lambert in his *Architectonic*, where solidity is a fundamental ontological concept which underlies the axiomatization of the concept of moving force.³³ But the core of his argument, as the following lines make clear, regards not merely Lambert but more generally the way physicists connect impenetrability to mathematical constructions. Kant’s objection is as follows:

Here the mathematician has assumed something, as a first datum for constructing the concept of matter, which is itself incapable of further construction. Now he can indeed begin his construction of a concept from any chosen datum, without engaging in the explication of this datum in turn. But he is not therefore permitted to declare this to be something entirely incapable of any mathematical construction, so as thereby to obstruct us from going back to first principles in natural science (MAN, AA 04: 498.09-15).

This argument is directed against the apodictic certainty of the hypothesis of absolute impenetrability, and therefore seems merely to argue for the *possibility* of the dynamistic view. Kant is aware that his dynamism does not correspond to the most common view among physicists and this *Remark* is probably meant to address this problem and open the way to a better acceptance of the new hypothesis. In the *General Remark to Dynamics*, which discusses the connection between the *a priori* demonstrative section of the chapter and empirical physics, Kant discusses at length the contrast between the “dynamical” construction of different densities of matter by means of an originally different degree of repulsive force and the “mechanical” method of explanation, grounded on atoms (endowed with “absolute impenetrability”, “absolute homogeneity” and “absolute insurmountability” of their cohesion) and interposed vacuum.³⁴ In these passages Kant is describing the “solid, massy, hard, impenetrable, movable particles” endowed with active powers of the *Opticks*, therefore the concluding charge that to admit absolute impenetrability is “to rest on the pillow of occult qualities” (AA 04: 532.18-19) presents a first striking criticism of Newton. It must be remarked, though, that this is according to Kant a criticism inspired by the example of Newton himself, which is presented in a physical lecture as representative of the “dynamical method of explanation” (as contrary to the mechanical method followed by Descartes)³⁵ and hence would have been here led to an inconsequence by mechanistic philosophers. Indeed Kant’s criticism is only apparently Leibnizian in inspiration³⁶, and is rather grounded on the same argument that has led to the rejection of monads in the *Amphiboly*: the absolute (vs relational) character of solidity.

In order to understand the non-hypothetical status of Kant’s alternative explication of density, which requires a combination of *two* fundamental forces, we have to come back to the demonstrative section of the *Dynamics*. In *Lehrsatz 5* Kant introduces the fundamental attractive force, as a necessary limiting factor to the action of repulsive force (again, the proof is basically grounded on the construction of an opposite movement, which has to contrast repulsion, and whose cause is attractive force). In *Lehrsatz 7* he argues that this force acts immediately at distance and in the *Remark 2* he explicitly claims that Newton, when he denied that gravity is an essential property of matter, was set “at variance with himself” by the attacks of the mechanistic philosophers: for he could not have established that the attractive force of the planets is proportional to their quantity of matter without assuming that they “attracted other matter merely as matter, and thus according to a universal property of matter” (AA 04: 515, 32-37).³⁷ Again Kant boldly contrasts the dominant view in physics and, with a second (now explicit) criticism of Newton, concludes *a priori* that the essentialist view must be true. Building on this new *a priori* foundation of the theory of gravitation, in the *Preface* to the second edition of the *Critique* Kant will even write that “the central laws of the motion of the heavenly bodies established with certainty what Copernicus had assumed at the beginning only as a hypothesis”, thus elevating the Copernican hypothesis to apodictic certainty.³⁸

Having thus introduced his two fundamental forces, in the *Note 2 to Theorem 8* Kant argues that “only an original attraction in conflict with the original repulsion can make possible a determinate degree of the filling of space” (MAN, AA 04: 518.06-08). As Kant explains in the *General remark*, this possibility depends from the fact that “attraction rests on the

aggregate of matter in a given space, whereas expansive force, by contrast, rests on the degree of filling of this space, which can be very different specifically”, that is, attraction depends on the homogeneous (extensive) quantity of matter, while the same quantity of matter can have a different degrees of repulsive force, thereby filling different volumes of space (MAN, AA 04: 524.02-04; compare AA 04: 533-534). Again, this perspective involves a reform of Newton's foundation of natural philosophy, where density was treated as an elementary property in the definition of the quantity of matter: now the originally different “degree of repulsive force” is the basic quantity, and density arises from its interplay with attraction.³⁹

On the whole the *Dynamics* chapter seems to establish *wholly a priori* the rectification of the Newtonian views of *impenetrability*, *gravity* and *density*, and to derive this threefold criticism from the proofs of the fundamental forces. But if we include in this picture the discussion about dynamical and mechanical methods in natural philosophy in the *Remarks*, with the several passages about the *non-necessity* of absolute impenetrability, we need to slightly modify our conclusion. In fact, when we come to the domain of empirical physics, the confrontation between dynamism and mechanism appears to be not so easily settled without entering into hypothetical arguments.

In the *General Remark* Kant compares the respective advantages of the two methods with regards to the actual construction of specific densities and he argues that “the mathematical-mechanical mode of explanation has an advantage over the metaphysical-dynamical [mode]”, namely that “the possibility of both shapes and the empty interstices can be verified with mathematical evidence” (MAN, AA 04: 525.06-07). In other words, one can construct atoms and void in pure intuition.

By contrast, if the material itself is transformed into fundamental forces (whose laws we cannot determine a priori, and are even less capable of enumerating reliably a manifold of such forces sufficient for explaining the specific variety of matter), we lack all means for *constructing* the concept of matter, and presenting what we thought as possible in intuition (AA 04: 525.07-11).

In other words, we *cannot* construct matter a priori by means of fundamental forces in pure intuition, contrary to what happens with atoms and void, because, as Kant puts it in metaphysical language, we cannot “comprehend their possibility” (AA 04: 524.39); what we can do is to infer the action of fundamental forces, and, given the *possibility* of a different degree of repulsive force, think of possible laws, which only empirical inquiry will be able to establish. As regards the advantages of dynamism, indeed, Kant argues as follows: having been shown that the mechanistic explanation is not necessary, the field of the natural scientist is “indirectly enlarged” (AA 04: 524.21), for he can now conceive of a dynamical explanation of specific densities. Therefore Kant will conclude that dynamical natural philosophy “is much more appropriate and conducive to experimental philosophy, in that it leads us directly to the discovery of matter's inherent forces and their laws, while restricting our freedom to assume empty interstices and fundamental particles of determinate shapes” (AA 04: 533.21-26). On the whole, mechanism appears as an *a priori* method, which postulates atoms and voids in pure imagination, whereas dynamism is open to new experiments and discoveries.

But this perspective of the discovery of new laws is precisely the point where Kant's transition from *metaphysical* dynamics to *physical* dynamism comes to a problematic point. The dynamical natural philosophy of the MAN is much different from its precritical version and it presents new serious problems in its mathematical application – as Kant admits in the *Remarks* to *Theorem 8*, which I will discuss in a moment. But in order to understand this point we have to start considering one more theorem of the *Dynamics* chapter.

Theorem 4 argues that: “Matter is *divisible to infinity*, and, in fact, into parts such that each is matter in turn” (MAN, AA 04: 504.21-22). Remember that in the *Monadologia Physica* Kant similarly defended infinite divisibility of space, taking position with the “mathematicians” against the Wolffians, but he claimed that point-like monads as centres of forces could nonetheless be admitted as undivided and simple. The novelty in Kant's present argument is given by the single word *parts*. In the light of transcendental philosophy we cannot allow of material points – which can be no object of experience – and thus material substance is always associated to a determinate volume (compare KrV A 441/B 469; MAN, AA 04: 508). This is the reason why Kant devotes the *Remark 1* to a critique of the views of the (physical) “monadist”, arguing that the filling of space is dependent on the repulsive action of “every part of space”, since there is no privileged point of repulsion and without resisting action even the smallest parts space would always be penetrated by the expansion of matter (MAN AA 04: 504-505). Indeed Kant now conceives matter as an originally elastic fluid, a “quantum continuum” (MAN, AA 04: 521.30), whose physical subdivision must be explained by means of dynamical processes.

But from this move, which is constrained by transcendental philosophy, results a new problem for Kant's new theory of forces as compared to the precritical one. In this latter theory, as we have seen, the conflict of attractive and repulsive force determined the volume, while the “force of inertia” of a body, “which is called its mass”, determined the mechanical property of resisting and communicating motion (MP, Prop. XI, AA 01: 485.20-21). Here Kant, following Newton's and Keill's observation that a disseminated ether should have a negligible density in order to allow of the free motion of celestial bodies, but (already) rejecting the method of explaining this different density by means of atoms and void, explained the *different density* of materials by means of the originally different *force of inertia* (MP, Prop. XII, AA 01: 485.05-07). Now, in the MAN, Kant abandons the concept of a “vis inertiae”, as contrary to the lifelessness of matter, and tries to derive *different density* from the interplay of attractive and repulsive forces. The repulsive force is now a *superficial* force (MAN, AA 04: 516.09-10) which is propagated by a *volume* of matter, and it makes no sense to talk of *finite* distances between repulsive points. But this also means that Kant now *gives up* the attempt at explaining the determinate volume of matter by means of the law of conflicting forces, which was only possible on the ground of this finite distance – and was, indeed, a typical advantage of any physical monadology.⁴⁰ Now Kant presents again that hypothesis of a law derived from mere geometrical arguments (in *Remark 1* to *Theorem 8*), substituting finite with “infinitely small distances” (AA 04: 520.15), but comments (in *Remark 2*) that this construction now presents a “difficulty” (AA 04: 521.14): indeed, the distances among parts of matter are merely imaginary, since repulsive parts are actually in contact, and they correspond to the distance “into which

the same quantum of moving force would need to have diffused, in order to act immediately on this point at the determinate distance” (AA 04: 522.21-23). Moreover Kant has to admit that his law of repulsion (as proportional to $1/dr^3$) is different from the empirical Mariotte's law for fluids, which he thus tries to consider as related to the action of heat-matter and therefore as less fundamental. Finally, he comments:

I do not want that the present exposition of an original repulsion to be viewed as necessarily belonging to the goals of my metaphysical treatment of matter. Nor do I want this latter (for which it is enough to have presented the filling of space as a dynamical property of matter) to be mixed up with the conflicts and doubts that would afflict the former” (MAN, AA 04: 522.39-523.04).

Now, since Kant openly admits the difficulty, there is no reason to doubt that he must have good reasons to draw this conclusion and to separate the metaphysical proof of fundamental forces from its empirical and mathematical application. But this means that the model of conflicting forces must not end in a blind alley and there must be a different way conducting from metaphysical to empirical dynamics.

Indeed Kant, being aware of this drawback of his new theory, has already introduced this alternative. By introducing the original attraction (in the lines following a passage quoted above), and before presenting his previous geometrical argument about the ratio of forces, he writes (*Note 2 to Theorem 8*):

Since every given matter must fill its space with a determinate degree of repulsive force, in order to constitute a determinate material thing, only an original attraction in conflict with the original repulsion can make possible a determinate degree of the filling of space, and thus matter. Now it may be that the former flows from the individual attraction of the parts of the compressed matter among one another, or from the uniting of this attraction with that of all the matter in the universe [*aller Weltmaterie*] (MAN, AA 04: 518.04-11):

The last sentence introduces a new hypothesis, grounded on the existence of a “World-matter”, which Kant presents again in the *Phenomenology* chapter, when he discusses the concept of empty space, coming back to the open issue of its non necessity (and logical possibility). Here he writes that

[...] even if no merely logical reason for rejecting this kind of empty space were to be found here, there could still be a more general physical reason for expelling it from the doctrine of nature – that of the possibility of the composition of matter in general, if only this were better understood. For if the *attraction* assumed in order to explain the cohesion of matter should only be apparent, not true attraction, and were merely the effect, say, of a *compression* by external matter (the aether) distributed everywhere in the universe, which is itself brought to this pressure only through a universal and original attraction, namely, gravitation (a view that is supported by several reasons), then empty space within matter, although not logically impossible, would still be so dynamically, and thus physically [...] (MAN, AA 04: 563.35-564.07).

The possibility of ether as a matter whose “repulsive force must be thought as incomparably larger in proportion to its inherent attractive force than any other matter known

to us” has been already discussed at the end of the *General Remark to Dynamics*, where Kant presents it as:

the only assumption that we make, simply *because it can be thought*, but only to controvert an hypothesis (of empty spaces), which rests solely on the pretension that such a thing cannot be thought without empty spaces. For, aside from this, no law of either attractive or repulsive forces may be risked on a priori conjectures (AA 04: 534.12-17).

Now, let us try to sketch an overview of this complicated solution to the problem of matter and empty space. According to Kant, the action of repulsive and attractive forces – as *causes* of motion – can be concluded *a priori*. Moreover, the existence of empty space and absolute solid atoms is comparable to an obscure quality. Therefore he admits that some conflict must explain the specific densities. But since the monadological way of deriving a law of forces is no longer possible, he thinks that the hypothesis of ether (which is “supported by several reasons”: e.g. Euler’s wave-theory of light, which Kant endorses) may play a role in this explanation. This additional element in Kant’s transition from pure to empirical dynamism appears as a problem, not only because it is hypothetical. Even with the admission of ether as a hypothetical material we would still be left with a problem: for the “determinate degree” of the filling of space, in the demonstrative part of *Dynamics*, has to be derived from the conflict of *forces*, while now the ratio between mass and volume would depend on the action of a hypothetic material; but the very filling of *this* cosmic material – which Kant considers as a ponderable one, thus as having a determinate mass – would be merely postulated and not derived from a dynamical conflict (though, at least, a physical hypothesis about originally different materials would replace Newton’s metaphysical postulates).⁴¹ Kant’s *Dynamics* of 1786, therefore, appears as a set of demonstrative propositions, which openly challenge some basic postulates admitted by Newton (about solidity, gravity and density), but which lack a clear way of application to empirical physics – and this, I suggest, is a deeper reason of Kant’s insisting on the mere (physical) *possibility* of dynamism as an alternative to mechanism, which starts immediately after the first proposition of the chapter and appears again in the final lines of the *General Remark* and at the end of the *Phenomenology* chapter.

In the light of this long analysis of the *Dynamics* chapter we can finally understand how crucial is the metaphysical background for the conception of Kant’s dynamical theory of matter, as alternative to the Newtonian in its different variants. Indeed, the main philosophical drawback of mechanism (as I have suggested above) is that it introduces an *absolute* property – that is, a non-relational one. But a relational explanation of the filling of space, such as the one grounded on fundamental forces (with the possible supplement of ether), is precisely the representation of the “conflict of realities” which Kant’s metaphysics needs, after its exclusion of monads with their absolute properties. Now Kant, after having eliminated point-like (Wolffian) and non-spatial (Leibnizian) monads, is trying nonetheless to develop a dynamism which could lead to a law of forces. But with this move he can no longer connect his metaphysical principles about “possible constructions” to *any available* theory of mathematical physics. Rather than providing a metaphysical foundation of Newton’s mechanics, then, Kant has come to the point of considering the latter as an insufficient theory *on metaphysical grounds*.

A confirmation of these conclusions comes from the manuscripts of the *Opus postumum*. Here Kant painstakingly reflects on the conflict model, trying to combine forces with ether.⁴² And as he finally tries to demonstrate the existence of ether as a “World matter”, this is no longer the hypothetical material of previous reflections (and of contemporary natural science, with its “several reasons”), but rather an “a priori given” substratum for the representation of possible dynamical interactions and of the physical object in general. The (necessary) conflict of realities, thus, still lacks an exemplary physical instantiation, and Kant merely anticipates a system of *possible* physical properties for empirical inquiry (“a priori thought”, “empirically given”: OP, AA 21: 289-290), including cohesion and solidity. Now this open conclusion of the dynamical theory may appear as a kind of step back to a Cartesian kind of natural philosophy, as it has been claimed about the early *Allgemeine Naturgeschichte*⁴³, or as perfectly integrated in the open status of XVIIIth Century Newtonian theory of matter. The unpublished reflections on contemporary concepts of chemistry, such as heat-matter, support the latter view, being a striking representation of how Kant’s quest for a metaphysical foundation of physics has led, as it were, with Newton beyond Newton, to the philosophical admission of the need for a physical theory which was still not there.⁴⁴

3. GRAVITY AND THE LIMITS OF KNOWLEDGE

Besides his reflection on the properly physical doctrines of Newtonianism Kant also devotes a lifelong meditation on the exemplary meaning of the latter for philosophical knowledge in general, focusing on the Newtonian concept of force and its connection with the intrinsic limitation of possible knowledge. Thus, in the prize-essay of 1764, Kant compares the “true metaphysical method” to Newton’s method in natural science, according to which we explain natural phenomena by deriving them from particular laws, “even though one does not have insight into [*einsieht*] their first principle [*Grund*] in bodies” (UD, AA 02: 286.19-20).⁴⁵ In the *Träume eines Geistersehers*, after having questioned our supposed knowledge of the “spiritual force” and defined metaphysics as a “science of the limits of reason”, Kant first suggests that we may analogically extend Newton’s method to the understanding of the “moral sentiment”, that is the “constraining of our will to harmonize” with the “rule of the general will”, thereby conceiving this sentiment as a “phenomenon of that which takes place within us, without establishing its causes” and thus without feigning an intelligible world (TG, AA 02: 335.12-17).

In such elaborations we find, again, the beginning of a deeply original insight into a widely debated issue in contemporary philosophy, which will find its culmination in critical philosophy. Drawing from Newton’s own statements in the *Principia* and the *Opticks* about the ignorance of the “cause of gravity” and the sufficiency of experimental philosophy⁴⁶, the admission of attractive force on the Continent was accompanied by the argument that we do not know the cause of mechanical impulse at contact either, and therefore we can feel free to accept gravitation as an empirically grounded concept of physics. For example – as we have seen (§1) – Maupertuis made use of precisely this argument for his seminal defence of gravity, which played a major role for the diffusion of Newtonianism in France and Germany.

Furthermore, this idea of a fundamental limitation of our knowledge of physical causes was already a diffused topic in Cartesian natural philosophy, and the same argument could be connected to scepticism as well as to many kinds mechanistic and materialistic hypotheses.⁴⁷

In German philosophy, in particular, the interpretation of “force” (being also a translation of the English word ‘power’) could not avoid a reference to the Leibnizian and Wolffian metaphysics, where the concept of force connected physical and psychological phenomena in a single doctrinal body. Even after the decline of Wolffian orthodoxy this analogy was a matter of discussion among German philosophers: Lambert called the concept a “transcendent” one, “since it represents similar things in the physical and intellectual world”, i.e. “forces of knowledge, forces of desire and moving forces” (according to Lambert all these forces were objects of knowledge, the former two by means of consciousness, the latter by means of the sense of touch).⁴⁸ Eventually the concept of a “force or faculty” was elaborated by Kant in criticism, where it denotes the condition of an empirical synthesis according to a law, whose metaphysical ground remains unknown, and therefore the condition of any philosophical knowledge in general.

The mature development of the doctrine of “fundamental forces” of matter, in the *Metaphysische Anfangsgründe der Naturwissenschaft*, is the opportunity for a new general assessment of this crucial point, which is nicely connected to the discussion in our previous section (§ 2). In the *General Remark to Dynamics* – right after the above quoted passage on the hypothesis of ether as a condition for the rejection of empty space and the conclusion that “no law” of forces can be conjectured a priori – Kant writes:

Rather, everything, even universal attraction as the cause of weight, must be inferred, together with its laws, from data of experience. Still less may such laws be attempted for chemical affinities otherwise than by way of experiments. For it lies altogether beyond the horizon of our reason to have insight into [*einsehen*] original forces a priori with respect to their possibility; all natural philosophy consists, rather, in the reduction of forces and faculties [*Vermögen*] that explain the actions of the former, although this reduction proceeds only up to fundamental forces, beyond which our reason cannot go. And so metaphysical investigation behind that which lies at the basis of the empirical concept of matter is useful only for the purpose of guiding natural philosophy, so far as this is ever possible, to explore dynamical grounds of explanation. For these alone permit the hope of determinate laws, and thus a true rational coherence of explanations (MAN, AA 04: 534.15-30).

The physical assessment of the concept of force can be thus summarized. In order to introduce the concept of force we have first to detect a “real conflict”, and thereby the action of a cause, since physically speaking force is the “cause of a movement” (e.g. MAN AA 04: 497.26-27). A second condition must be the possibility to connect this action to a law. As we have seen, this second step has been excluded by Kant from the domain of metaphysics, though the latter plays a fundamental role for the exclusion of absolute positions and the stimulation of empirical investigations. So the above quoted passage is followed by the general conclusion:

This is now all that metaphysics can ever achieve towards the construction of the concept of matter, and thus to promote the application of mathematics to natural science, with respect to those properties whereby matter fills a space to a determinate measure – namely, to view these properties

as dynamical, and *not as unconditioned original positings, as a merely mathematical treatment might postulate them* (my emphasis) (AA 04: 534.31-36).

Insofar Kant's investigation is an interpretation of Newton's defence of the concept of force, which emends the latter from the disguised metaphysics lying behind its pretended mathematical purity. But there is a third step in the assessment of the concept, which addresses the – typically Leibnizian – idea of investigating the supersensible ground of the force by means of a logical and metaphysical theory of substance. Kant declares that we cannot “have insight into [*einsehen*] the possibility of forces”, thus rejecting this line of inquiry. This rejection is best understood if we highlight Kant's use of his technical language about the different degrees of knowledge, as it is developed in logical lectures. Here Kant, in the section concerning the logical perfection of knowledge, articulates a hierarchy of degrees of knowledge considered according to its object, which in the published *Logik* is as follows (Log, AA 09: 64-65): to represent (Vorstellen = *repraesentare*), to perceive (Wahrnehmen = *percipere*), to be acquainted (Kennen = *noscere*), to cognize (Erkennen = *cognoscere*), to conceive (Verstehen = *intelligere*), to have insight (Einsehen = *perspicere*), to comprehend (Begreifen = *comprehendere*). Here we are interested in the last three degrees of knowledge, which overcome mere cognition by concepts (*Verstehen*) adding further distinction, because these are the degrees which cannot be accessible by knowledge, being the latter grounded on forces and faculties.⁴⁹ To have insight is “to cognize with reason”, and thus by means of inferences, hence knowing something “from universal principles according to its grounds” and thus cognize “not only that it is so [...] but that it must be so” (Logik Dohna, AA 24: 730.35-37). The application of this concept to physical knowledge presents a subtle interpretative issue, since Kant makes examples of knowledge *ex principiis* drawn from chemistry, and generally admits that “with few things do we get this far”, thus admitting that we *can* have insight into something. But with the “possibility” of forces we are concerned not with the inference of *forces from phenomena* (which is perfectly possible), but with the inference of a ground of the forces themselves – and this is what is excluded by Kant. The negative reference is to the (broadly speaking) Leibnizian-Wolffian idea of deriving forces from the concept of substance.

A confirmation of this reading is given by the discussion of comprehending (*Begreifen*), as the a priori cognition through reason. Hereby is meant a deductive inference from grounds to consequences, and thus a perfect rational knowledge, which is never accessible to men. The example discussed in the *Logik Jäsche* – which will be crucial for our discussion in the last paragraph of this paper – is geometrical knowledge. The mathematician can comprehend (relatively) that “all lines in the circle are proportional”, but not (absolutely) “how it happens that such simple figure has these properties”. The reason for this limitation is that we do not know the reasons of the basic properties of space, such as tridimensionality. This suggests that the limitation of dynamical knowledge, which we are trying to explain, depends on the doctrines of the *Transcendental Aesthetic* and its rejection of the metaphysical explanation of space (and time) as phenomena grounded on immaterial substances, and thus of logical and intuitive knowledge.

But there is more to this limitation of comprehension than this geometrical side. Kant argues more generally that we can have a knowledge which is “relative, i.e. sufficient to a certain purpose”, thus also making a reference to issues of moral and religion, were we can follow the guidance of reason, even though we do not properly comprehend its ideas (such as God and freedom).⁵⁰

Both these examples – the geometrical and the moral-religious – introduce to Kant’s extension of the discussion of force beyond the field of natural knowledge, which is expressed in several passages of the critical writings. For example, in his discussion of freedom in the *Kritik der praktischen Vernunft*, Kant writes that “all human insight is at an end as soon as we have arrived at basic powers or basic faculties [*Grundkräften und Grundvermögen*] for there is nothing through which their possibility can be conceived, and yet it may not be invented and assumed at one’s discretion”. Here Kant’s point is that, in moral, “the objectivity of the law cannot be proved by any deduction”, although it is “firmly established of itself” (KpV, AA 05: 46.37-47.20).

In the 1780s Kant will take different opportunities to reassess his philosophical view of the limits of cognition through the concept of fundamental force. E.g., in his essay on the use of teleological principles he would argue that to know something on the basis of forces does not mean to reduce it to a *Grundkraft* and eventually to a substance, from whose concept these forces could be “derived” (*abgeleitet*) (ÜGTP, AA 08: 181.24-39). The reason why our knowledge cannot go beyond the concept of a fundamental force or faculty is that this concept is uniquely defined “through the relation of a cause to an effect”, and it is not possible to “come up with any other appellation for it than the one taken from the effect and expressing only this relationship” (ÜGTP, AA 08: 180.27-30). This situation – which is obviously inspired by Newton’s treatment of gravity⁵¹ – is now presented as a fundamental feature of “true metaphysics”, which “can do nothing else than reduce the fundamental forces [*Grundkräfte*] which experiences teaches it [...] to the smallest possible number, and to look for the pertinent *fundamental force* in the *world*, if it is a matter of physics, or *outside the world*” (ÜGTP, AA 08: 180.18-27).⁵² The latter case has been discussed in the *Transcendental Dialectic*, with negative result, regarding a transcendental ground of the world, and thus represents an insuperable limit of knowledge. Contrary to what happens with the knowledge of body, we cannot apply our concepts of causality to our relation with this merely thought ground.⁵³

That all these apparently dispersed passages are rooted in Kant’s original confrontation with Newton is made explicit in a well known analogy, which Kant puts in the foreground in the *Preface* to the second edition of the *Critique*, precisely in the paragraph where he presents transcendental idealism as an “experiment of pure reason”, and discussed the antinomies and the possibility to fill the empty concept of the unconditioned “through practical data of reason”. In a footnote Kant writes:

In the same way, the central laws of the motion of the heavenly bodies established with certainty what Copernicus assumed at the beginning only as a hypothesis, and at the same time they proved the invisible force (of Newtonian attraction) that binds [*verbindende*] the universe, which would remain forever undiscovered if Copernicus had not ventured, in a manner contradictory to the

senses yet true, to seek for the observed movements not in the objects of the heavens but in the observer (KrV B xxii).

Here the complex analogy drawn by Kant between philosophy and physics comes to a culmination and synthesis. The proof of the force of attraction is compared to the proof of liberty, thus positing a parallelism between the two entirely distinct domains of philosophical legislation, that is physics and moral. This philosophical approach is contrasted to the presumed rational knowledge of the unconditioned, which dominated traditional metaphysics, most recently in its Leibnizian and Wolffian versions. At the same time, by putting this passage in the context of the *Preface*, Kant is highlighting the crucial role of his *Transcendental Aesthetics*, which indeed determines the originality of his “limitation thesis” as compared to the widely diffused analogous theses in contemporary philosophy and science. For it is precisely with his new hypothesis on space and time that Kant, after having long investigated a possible *deductive* explanation of space and time, eventually embarked on the search for a completely new metaphysics.⁵⁴ And here we come back to the example of geometrical knowledge in the discussion of comprehension and the limits of knowledge. It is precisely because we do not (deductively) know the reason of the properties of space and cannot gain any insight about these properties by means of any metaphysical theory – neither by the Leibnizian monadological approach, nor by means of the different kind of metaphysical speculations suggested by Newton's texts, which Kant took seriously in early writings – that we cannot gain insight into the possibility of forces and cannot “risk on a priori conjectures” any law of attractive and repulsive forces. Hence we cannot formulate any hypothesis about the supersensible, and we cannot lament the ignorance of any “mystery” (or missing “inner” property of things). This point is finally made in a footnote to the *Religion*:

The **cause** of the universal gravity of all matter in the world is equally [to the cause of freedom] unknown to us, so much so that we can even see that we shall never have cognition of it, since its very concept presupposes a primitive moving force unconditionally residing in it. Yet gravity is not a mystery; it can be made manifest to everyone, since its law is sufficiently cognized. When **Newton** represents it as if it were the divine presence in appearance (omnipresencia phaenomenon), this is not an attempt to explain it (for the existence of God in space involves a contradiction) but a sublime analogy in which the mere union of corporeal beings into a cosmic whole is being visualized, in that an incorporeal cause is put underneath them – and so too would fare the attempt to have insight into the self-sufficient principle of the union of rational beings in the world into an ethical state, and to explain this union from that principle (RGV, AA 06, 138.25-37).

On the whole Kant developed an original view of Newtonianism, both on the physical and the philosophical level, purging Newton's original thought from dogmatical doctrines (such as the absolute solid bodies and the activity of God in the physical world), and setting his own transcendental theory of space and time as the true condition for the very possibility of formulating hypotheses. In this process the Newtonian theory of gravity had to be defended from the charge of presenting yet another occult quality, and Kant realized this defence in the framework of criticism by means of his new foundation of natural philosophy in the *Metaphysische Anfangsgründe*. Only after having reached this point – and connected the

empirical theory of gravity to the a priori theory of matter – he returned in number of texts to the wider analogy between gravitation and freedom, which would remain a central pillar of his philosophy until his last writings.⁵⁵

ABSTRACT: The article examines different aspects of Kant’s Newtonianism, focusing on Kant’s attempt in the *Metaphysische Anfangsgründe der Naturwissenschaft* to realize a new “pure part” of physics, complementary to Newton’s “mathematical principles”. The first section regards the philosophical objectives of Kant’s engagement with Newtonian physics, highlighting the role of physics for the “exhibition” of metaphysical concepts and criticizing the view that Kant’s intention would have been to provide a “foundation” of Newton’s physics. The second section provides an example of Kant’s original reappraisal of Newton’s physics, focusing on the concepts of material substance and force. The third section shows how Newton’s thesis about the limited (but sufficient) knowledge of gravity represented for Kant the main example of a general limitation of philosophical knowledge.

KEYWORDS: Kant – Newton - Metaphysics of bodily nature – Substance – Force.

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NOTES

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1 See ADICKES' very informative footnotes to voll. XIV and XXI-XXII of the Akademie Ausgabe and Adickes 1924-1925, e.g. I, p. 2ff., 17ff., 49ff.

2 The crucial importance of the physical “exhibition” for the unity of Kant’s system is discussed in a paragraph of the MAN, AA 04: 477.14ff. (whereof the above quotations were extracted) and in a parallel passage of the new *General Note to the Analytic of Principles* (KrV B 288-294). This parallelism is most significant since the new edition of the *Critique* was published one year after the MAN: after successfully finishing this new work, Kant felt the need to highlight its transcendental background in the wider philosophical framework of the *Critique*. On the difference between *Beweisen* and *Darstellen* (or *Demonstrieren*, *ostendere*) compare e.g. KU, AA 05: 343.08-16 For a detailed account of this crucial systematic issue see PECERE (2009), p. 187-202).

3 See below footnotes 28-29 and the paragraphs to which they are appended.

4 Compare Michael Friedman’s comment to these lines: “The aim of the *Metaphysical Foundations*, accordingly, is to apply Kant’s revised version of metaphysics in the Leibnizian tradition – derived from the form and principles of the pure understanding – to explain how it first becomes possible to apply mathematics in the Newtonian style to our actual experience of sensible nature” (FRIEDMAN, 2013, p. 259). This comment underscores the top-down aspect of pure physics, but in the light of the quoted passages from the *Preface*, the reverse bottom-up aspect appears of equal importance both historically and systematically: Kant’s “revised” metaphysics could not be realized without this connection to physics as the exemplary domain of application of categories. This second point is also clearly spelled out by Friedman 2006, p. 322: “the application of categories to objects of experience in general is only possible by means of, and, as it were, *through* their a priori application to pure natural science”. As I will add in the following lines, this application also involves a partial *modification* of Newtonian physics itself in its original formulation.

5 The first term is already used in the sympathetic reading by Fries, which – well aware of the reception of Kant’s dynamism in Schelling’s and Hegel’s *Naturphilosophie* – still recognizes the critical aspect of Kant’s Newtonianism: the MAN are “the complete philosophical foundation [*Begründung*] of Newton’s physics, and the liberation of the latter from the prejudices of atomism”. See FRIES (1837-1840, I, § 150, p. 550). An example of the use of the term “justification” in the misleading context of early XXth century axiomatic “analysis of science” is given by REICHENBACH, when he ascribes to Kant a “philosophical justification [*Rechtfertigung*]” of Galilei’s and Newton’s exact science. REICHENBACH (1920, p. 41). Here Reichenbach was also influenced by the Neokantian reading which I discuss in this paragraph.

6 Kant’s aim in the *Metaphysische Anfangsgründe* would have been to provide a “philosophical foundation [*Begründung*] of the presuppositions of the Newtonian natural science”, the result being actually a “philosophical transcription [*Umschreibung*] of the latter presuppositions” (*Zur Einsteinschen Relativitätstheorie. Erkenntnistheoretische Betrachtungen*, CASSIRER 1998-2009, vol. 10, p. 52). The connection with the *Analogies of experience* is in CASSIRER, *Kants Leben und Lehre*, in _____. (1998-2009, vol. 8, p. 214).

The latter claim is also literally wrong since – as it has been pointed out many times in the literature – the *Mechanics* chapter of the MAN does not provide a corresponding treatment of Newton's three laws, but presents three metaphysical laws, one regarding the conservation of material substance and the others corresponding (though not being identical with) to Newton's laws of inertia and reciprocal action.

7 BUCHDAHL (1986, p. 127-161).

8 Most significantly Friedman, in his most recent book on the *Metaphysische Anfangsgründe*, dispels any ambiguity and refers to Kant's "engagement with the largely Newtonian science of his time" (FRIEDMAN, 2013, p. ix, my emphasis).

9 KUHN (1993, p. 331). Kuhn was presenting a version of the idea originally advanced (and later rejected) by REICHENBACH (1920).

10 KUHN (1962, p. 10).

11 For an overview of the many varieties of "Newtonian" natural philosophy in the XVIIIth century it is still worth reading HEILBRON (1982, chapters 4-6). See footnote n. 17 below for Newtonianism in Germany.

12 'sGRAVESANDE (1720-21); MUSSCHENBROEK (1734). Kant possessed a copy of the latter work in a German translation of the second edition (*Grundlehren der Naturwissenschaft*. Leipzig, 1747). WARDA (1922, p. 35). On the diffusion of this approach in physical textbooks see LIND (1992, p. 158-161).

13 COTES, R., *Editor's Preface* in NEWTON (1726/1999, p. 392).

14 BOSCOVICH (1758/1763, § 2, reconciling Leibniz and Newton, §§ 17-19, action at contact vs law of continuity). On Boscovich's theory and its influence see ULLMAIER (2005).

15 See the brief summary of the exchange between Priestley and Boscovich in SHAFFER (1990, p. 283-284). Priestley's dynamical theory, expounded in the *Disquisitions Relating to Matter and Spirit* (1777), bears striking similarities to Kant's mature theory in the *Dynamics* of 1786. For a first overview see HEIMANN-McGUIRE (1971, p. 270-274).

16 MENDELSSOHN (1759).

17 On the diffusion of Newtonianism in XVIIIth century German philosophy and physics see CASINI (2000, p. 251-282). On Wolff and Euler in particular see CASINI (2014).

18 See Leibniz' first letter in LEIBNIZ (1717/1957, p. 23). On Wolff and materialism see RUMORE (2013, p. 76ff).

19 See WOLFF (1717, p. 975).

20 These philosophers include in particular Knutzen, who according to the first biographers introduced Kant to Newton's physics, and Gottsched, who connected "moving forces" of the monads with the filling of space (exactly the idea developed by Kant in his *Gedanken* and *Monadologia physica*), GOTTSCHED (1755, I. § 400). See WATKINS (1995).

21 *Discours sur les différentes figures des astres où l'on essaye d'expliquer les principaux phénomènes du ciel* (1732; 1742²), in MAUPERTUIS (1768, I, p. 98).

22 *Système de la nature*, in MAUPERTUIS (1768, I, § XIV, p. 147; § XVIII, p. 149); *Lettres*, VIII: "Sur les monades", in Maupertuis 1768, I, p. 264 The German translator of the former work noticed the proximity between Maupertuis and Leibniz in his preface (*Versuch von der Bildung der Körper*. Leipzig 1761, [s.p.], conducted on the first edition titled *Dissertatio inauguralis metaphysica de universali naturae systemate*, Erlangen 1752).

23 See PECERE (2009, p. 82-84, 492); CASINI (2014). Also compare the references to Euler's texts in footnote n. 32 below.

24 FRIEDMAN (2013, p. 130-142).

25 On the latter point see MARINUCCI (2011, p. 49-98). Both D'Alembert and Lagranges mocked the German Academy of Science for the prize competition of 1777 on the "fundamentum virium". See LAGRANGE (1867-1892, vol. XIII, p. 332, 336).

26 Kant's subtle reading of Newton's arguments is most carefully emphasized in FRIEDMAN (1992 and 2013).

27 The action of short-range attractive and repulsive forces is already discussed in the first edition of 1704, with reference to light, but the 1706 edition goes much further, by attributing a role to these kinds of forces for the explanation of the above mentioned phenomena.

28 On the unity of these early works see SCHONFELD (2000).

29 Both the justification of a "complete analysis of the concept of matter" and the definition of motion as a "basic determination" raise some interpretative issues. For a full examination of this methodological background see PECERE (2009, p. 321-343, p. 370-391; for a discussion of the main interpretations, p. 392-446).

30 Synthetic a priori “metaphysical principles” are grounded on the empirical concept of matter, and hence different from transcendental principles. Compare KU, AA 05: 181.

31 The reference is to *Query* 31 in NEWTON (1730/1952, p. 400). Note that Kant made reference to *Query* 31 in a passage of the essay on the *Negative Magnitudes* (quoted above), where he criticized Crusius precisely for ignoring Newton’s fruitful application of negative magnitudes to attractive and repulsive forces (NEWTON, 1730/1952, p. 395). Here Kant argues, for the first time, that impenetrability cannot be derived by analysis, and depends from a “real opposition”. Crusius can be included among “Lambert and others”, since he claimed that “compensation between substances is unthinkable”. (CRUSIUS 1745, § 402).

32 EULER. *Recherches sur l’origine des forces* (1752), §§ 11-21. In : EULER (1911ss., s. II, 5, p. 114). The same argument can be found in the *Lettres a une princesse d’Allemagne* (1768), n. LXXVII. In: EULER (1911 s. III, 11, p. 166-168).

33 LAMBERT (1771, §§ 81, 94). See FRIEDMAN (2013, p. 121-130).

34 MAN, AA 04, 523-525; 533-535. That the “real” in space must not be regarded as everywhere homogeneous was already argued in a parallel passage of the *Critique* (KrV A 173-174/B 215-216).

35 *Danziger Physik*, AA 29: 106.08-09.

36 Leibniz himself had accused Newton of endorsing a “lazy” philosophy; Fifth writing to Clarke, § 24. In: LEIBNIZ (1717/1957, p. 133).

37 Kant is here making reference to Newton’s method for estimating the mass of the planets in Book III, prop. 8 of the *Principia*, which assumes the proportionality between gravitational force to gravitational and inertial mass (See already NTH, AA 01: 244-245). He also quotes Newton’s denial of the essentiality of gravity, in the *Advertisement* to the 1717 edition of the *Opticks*, which in turn contains a reference to *Query* 21, where gravity is explained mechanically by means of the different density of the ether. See NEWTON (1730/1954, p. 350).

38 KrV B xxii. Copernicus’ astronomy had been considered as an example of a hypothesis in logical lectures (see Log, AA 09: 86; Wiener Logik, AA 24: 887-888; Logic Blomberg, AA 24: 221). In this perspective CAPOZZI (2002, p. 680) underlines the absence of Copernicus’ heliocentrism in the discussion of hypotheses of the Logik Dohna Wundlacken (AA 24: 746-747), which regards lectures of the 1790s.

39 Compare NEWTON (1726/1999, p. 493).

40 Think of Boscovich’s attempt at defending the “law of continuity” and explain the boundary of particles on the ground of point-like monads. The possibility of this kind of mathematical construction is now excluded by Kant’s criticism of its metaphysical presupposition.

41 This was already Kant’s strategy in the *Allgemeine Naturgeschichte* (NTH, AA 01, 262-264). According to Kant, that gravity depends on “God’s immediately sustaining it” was the basic tenet of “those who proclaim themselves to be followers of Newton” (e.g. Bentley) (ND, AA 01: 415.14-16).

42 TUSCHLING (1971) has been the first to point out how Kant was looking for a different model of the conflict of forces. For example, TUSCHLING (1971, p. 100) argues that in *Theorem* 1 of the *Dynamics* Kant had postulated a discrete volume, whose explanation depended on the action of the hypothetical ether. Though Tuschling’s analysis is not entirely correct his thesis has stimulated further investigations on the problematic continuity between the *Metaphysische Anfangsgründe* and the *Opus postumum*. Eckart FÖRSTER (2000, p. 48-74), provides an intriguing account of Kant’s research for a new conflict model. I also agree with Förster’s reconstruction that Kant’s understanding of this problem was connected to the problem of the “gap” in the system, which he was intending to fill with the new work. But in my view this would regard not – as Förster argues (p. 70-73) – the already established doctrine of transcendental schematism, but rather the intuitive “exhibition” of general metaphysical concepts – such as “reality” – which had been the systematic objective of the MAN. For my own account see PECERE (2009, p. 667-729). For the gap (*Lücke*) see Kant’s letters to Christian Garve, 21 September 1798 (AA 12: 254) and to Johann Kiesewetter, 19 October 1798 (AA 12: 256).

43 MAMIANI (1991, p. 1-10).

44 Indeed this problem would still be addressed in XXth century physics. “Kant’s problem” of a dynamical explanation of mass in the *Metaphysische Anfangsgründe* was explicitly addressed by Hermann Weyl in his field-theoretical physics: “The theory of the fields has to explain why the field is granular in structure and why these energy-knots preserve themselves permanently from energy and momentum in their passage to and from”. This objective – which Weyl later would abandon because of technical difficulties – is connected in a footnote to Kant’s doctrine that “matter fills space not by its mere existence but in virtue of the repulsive force if all its parts” (WEYL, 1921/1952, p. 202-203). A connection of Kant’s dynamism with successive physical theories had been already argued by Marburg Neokantianism (see PECERE, 2007).

45 One example of this method is precisely the inference from impenetrability to fundamental forces of matter, which is presently conceived by Kant as analytical (AA 02: 287).

46 NEWTON 1726/1999, *Scholium generale*, p. 943 (on the sufficiency of Newton's account of gravity and the rejection of hypotheses); NEWTON 1730/1954, *Query* 31, p. 401 (on gravity being manifest and not occult).

47 For an overview of how the concept of force was connected to the issue of the weakness of reason and the ignorance of causes in Cartesian, Newtonian and Lockean traditions see Tonelli 1966. For the example of Maupertuis see TONELLI (1987, p. 8-16, p. 26-27, p. 30-34, p. 92-104, p. 126-130).

48 LAMBERT (1764, § 48, p. 484-485).

49 For the explanation of Kant's logical concepts see CAPOZZI (2002, p. 536-540).

50 These examples are explicitly made in the Wiener Logik, AA 24, 846.

51 See a passage from the *Religion* which, by introducing a parallel between the belief in miracles and scientific cognition, introduces the example of gravity, distinguishing between bottom-up (*abwärts*) and top-down (*aufwärts*) cognition and arguing for the sufficiency of the former – the “secundum quid” explanation of phenomena – and the impossibility of the latter, which is equivalent to the attempt “to have insight into the causes of the forces acting according to these laws” (RGV, AA 06: 88.18-28). Also see KrV A 649/B 677.

52 In this passage Kant is commenting on still another case, that is the concept of organism and the corresponding “formative drive” (according to the hypothesis by J.F. Blumenbach), which we are allowed provisionally to admit insofar as we proceed in our investigations by means of merely mechanical laws.

53 KU, § 88, AA 05: 483. Compare KrV A 613-614/B 641-642.

54 For my full reconstruction of this transition in the development of Kant's thought see PECERE (2009, p. 34-153). Here I argue that the origin of the transcendental turn lies in Kant's giving up the originally Leibnizian project of a metaphysical explanation of space and time. TONELLI (1963) already argued that Kant's turn in 1769 resulted from the difficulty of describing the field of sensible intuitions by means of genus and species, rather than from the discovery of the Antinomies. In the present context, it is important to observe that Kant's first publication of the theory of space and time as forms of phenomena included a reference to a “law of the human mind” (*animi legem*) (MSI, AA 02: 398.19).

55 Thus in one of the last sheets of the *Opus postumum* (dated about 1800) he writes: “Newtonian attraction through the empty space and the freedom of man are reciprocally analogous concepts, categorical imperatives, *ideas*” (OP, AA 21: 35.04-06).¹

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CIÊNCIA EMPÍRICA, CAUSALIDADE E RAZÃO SUFICIENTE EM KANT

[*EMPIRICAL SCIENCE, CAUSALITY AND SUFFICIENT REASON IN KANT*]

Patrícia KAUARK-LEITE¹

Toda ciência empírica parece não poder prescindir do princípio segundo o qual deve haver uma causa ou razão suficiente para qualquer fato, evento ou acontecimento do mundo ou para qualquer proposição verdadeira sobre fatos contingentes do mundo. Uma teoria científica deve assim fornecer uma explicação suficiente do porquê um evento ocorreu ou do porquê, dadas certas condições, devemos esperar que um evento *E* ocorra. Essa exigência mínima de inteligibilidade dos fatos do mundo parece à primeira vista ser um princípio lógico trivial. No entanto, tal princípio, nomeado por Leibniz de Princípio da Razão Suficiente (PRS), em contraposição ao princípio da não-contradição, é um dos mais controversos na nossa tradição filosófica. Evidentemente, tal princípio não se aplica apenas às explicações científicas, mas a qualquer explicação não-científica, considerada suficiente, para fatos contingentes do mundo. Assim, o fato de haver um rato no meu apartamento pode ser considerado uma explicação suficiente para o sumiço do queijo na minha cozinha durante a noite. Ou ainda deve haver uma razão suficiente, de natureza teleológica ou metafísica, para a emergência da vida humana na Terra. Assim se explicações em contextos não-científicos, sejam elas de caráter metafísico ou ordinário, podem satisfazer o Princípio da Razão Suficiente, temos que lidar com duas questões: 1) o que torna “científica” uma explicação? 2) o que há de comum entre explicações científicas e outras formas de explicação?

Ora, diferentemente de Leibniz, Kant foi um dos primeiros a enfrentar a questão da especificidade da explicação científica em relação a outras formas de explicação. E ao abordar essa complexa questão, Kant parece identificar, pelo menos em sua fase crítica, o princípio da

causalidade com o princípio da razão suficiente. Encontramos na *Crítica da razão pura* a ideia segundo a qual dar as causas é também dar as explicações suficientes da razão pela qual certo evento se produziu. Essas explicações, no entanto, devem se assentar em fundamentos naturais e leis causais. Na “Doutrina transcendental do método”, na seção “Sobre a disciplina da razão com respeito à hipóteses”, Kant afirma a esse propósito: “Para a explicação de fenômenos dados não pode ser aduzida nenhuma outra coisa, nenhum outro fundamento explicativo, senão aqueles que tenham sido postos em conexão com as coisas dadas segundo leis já conhecidas dos fenômenos” (KANT, 2013, p. 565; KrV, A772/B800). Nosso objetivo neste trabalho é duplo: 1) analisar o lugar do PRS no sistema crítico kantiano e 2) avaliar se tal identificação entre PRS e o Princípio da causalidade dentro da perspectiva kantiana é de fato plausível. A primeira seção investiga o princípio da razão suficiente em diferentes textos de Kant. A segunda seção explora a relação entre causalidade e razão suficiente na *Crítica da razão pura*. A terceira seção analisa o critério de suficiência estabelecido por Kant nos *Princípios metafísicos da ciência da natureza* ao procurar expor os argumentos a favor da explicação dinamista da matéria em oposição à teoria mecanicista. Concluímos na última seção que, contrariamente ao que Béatrice Longuenesse (2001) parece defender, o princípio da razão suficiente na filosofia crítica de Kant não é estritamente reduzido ao princípio de determinação de uma ordem temporal objetiva dos objetos da percepção.

1. CONSIDERAÇÕES INICIAIS SOBRE O PRINCÍPIO DE RAZÃO SUFICIENTE NA OBRA DE KANT

Desde a sua fase pré-crítica, Kant exprimia a exigência de uma aliança estreita entre o princípio de razão suficiente e aquele da causalidade como base da explicação científica. Tomando como referência a física newtoniana, o argumento kantiano consistia em dizer que toda explicação científica das causas de um fenômeno deve fazer apelo a regras formuladas matematicamente e aplicadas às condições dadas na percepção. Uma versão desse argumento foi apresentada em 1764, em sua obra *Investigação sobre a evidência dos princípios da teologia natural e da moral*:

Deve-se procurar, assim se diz, por experiências seguras, de preferência com o auxílio da geometria, as regras segundo as quais ocorrem certos fenômenos da natureza. Mesmo que não se veja [*einsieht*] nos corpos o primeiro fundamento dessas regras, é certo, contudo, que eles se comportam segundo tais leis, e os complexos eventos da natureza se definem quando se indica distintamente o modo pelo qual estão submetidos a essas bem-demonstradas regras. (KANT, 2005, p. 119; UD, AA 02: 286).

Kant já enunciava assim no texto de 1764 o princípio de razão suficiente de maneira totalmente distinta daquela de Leibniz. Assim, consideremos, para efeito de comparação, a formulação leibniziana de tal princípio, exposta no parágrafo 32 da *Monadologia*, em contraposição ao princípio da não-contradição:

31. Os nossos raciocínios fundam-se sobre *dois grandes princípios*: o da *contradição*, pelo qual consideramos *falso* o que ele implica, e *verdadeiro* o que é oposto ao falso ou lhe é contraditório.

32. E o da *Razão Suficiente*, pelo qual entendemos não poder algum fato ser tomado como verdadeiro ou existente, nem algum enunciado ser considerado verídico, sem que haja uma razão suficiente para ser assim e não de outro modo, embora frequentemente tais razões não possam ser conhecidas por nós. (LEIBNIZ, 1993, p. 108).

A principal diferença entre a abordagem kantiana e aquela de Leibniz não dizia respeito tanto à definição do princípio, mas aos critérios de suficiência para a explicação de uma afirmação verdadeira.

Na dissertação intitulada ‘Nova explicação dos primeiros princípios do conhecimento metafísico (*Nova dilucidatio*)’ (1755), Kant colocava já em questão os papéis consagrados pelas metafísicas de Leibniz e de seu discípulo Christian Wolff (1679-1754) ao princípio de razão suficiente. A *Nova dilucidatio*, mesmo que ainda não representando um rompimento metodológico em relação ao racionalismo metafísico de Leibniz e Wolff, rompia com ele em vários pontos importantes. Kant começava por rejeitar a suposição de Wolff segundo a qual o princípio de contradição é o princípio simples e suficiente de verdade. Kant, no entanto, considerava que deveria haver princípios primeiros distintos daqueles de contradição e de identidade. Reconhecendo-se seguidor de Christian August Crusius (1715-1775) nesse aspecto, Kant desconfiava dos programas que tentavam reduzir toda a verdade a um único princípio simples. Apesar de reconhecer na primeira *Crítica* o fracasso da sua própria prova do princípio de razão suficiente empreendida na *Nova dilucidatio*, Kant já atacava fortemente todas as provas precedentes de tal princípio, o qual preferia chamar, como propôs Crusius, de razão determinante².

Nesse texto, Kant (PND, AA 01: 391-393) distinguia primeiramente as razões anteriormente determinantes daquelas posteriormente determinantes (proposição IV). As primeiras forneciam as razões de ser ou de vir a ser (*ratio essendi vel fiendi*) e respondiam à questão do “porquê”. As segundas davam as razões de conhecer (*ratio cognoscendi*) e respondiam à questão do “quê”. Kant dava como exemplo o caso da propagação da luz não ser instantânea. Uma razão posteriormente determinante para tal fato poderia ser fornecida fazendo apelo à existência de um atraso nas observações dos eclipses dos satélites de Júpiter. Esse atraso seria uma consequência ou uma razão a conhecer do fato de que a luz se propaga a uma velocidade finita. Poder-se-ia, ademais, e de forma independente, dar uma razão anteriormente determinante para o referido fato da luz possuir uma velocidade finita supondo, por exemplo, que a elasticidade das partículas do éter fosse responsável pelo atraso no movimento da luz. Estaríamos assim diante de dois tipos de razões determinantes para um dado fato: aquela que determinaria a verdade do enunciado factual pela consequência, isto é, pela observação ou experiência que deveria se suceder admitindo que tal enunciado fosse verdadeiro e aquela que explicaria as razões antecedentes para a verdade do enunciado.

A explicação do princípio de razão suficiente na *Nova dilucidatio* é particularmente interessante pois é lá que encontramos a apresentação a mais clara da necessidade de rejeitar a posição de Wolff sobre a redução do princípio de razão suficiente ao princípio da contradição. Para Wolff, toda verdade é no final das contas analítica, na terminologia de Kant, ou verdade da

razão, na terminologia de David Hume. As verdades de fato ou verdades empíricas existiriam na concepção wolffiana apenas em aparência, em virtude dos limites do intelecto humano em seu esforço por alcançar as verdades da razão. Ao rejeitar o projeto wolffiano de reduzir toda afirmação verdadeira ao princípio de contradição, Kant, de certa maneira, rejeita também o ponto de vista leibniziano segundo o qual não existiria nenhuma interação real. Os leibnizianos-wolffianos estariam presos na armadilha de um sistema que lhes permitia apenas analisar as ligações entre os conceitos sem nenhuma relação empírica real. As coisas que existiam verdadeiramente, como as mônadas, não estariam em uma relação real uma com as outras. Em revanche, para Kant, em seu texto pré-crítico, o princípio de razão suficiente não implica a teoria da harmonia pré-estabelecida vislumbrada por Leibniz. A necessidade de uma razão suficiente a toda mudança de substância prova mais a necessidade do que a impossibilidade de interação real entre uma pluralidade de substâncias. Desvestido de seus ornamentos ontológicos, e encerrado em uma armadura epistemológica, esse argumento será central na primeira *Crítica*³.

Na sua fase crítica, Kant acentuará mais a sua oposição a Leibniz e Wolff, evidenciando que a validade material do princípio de razão suficiente, isto é, a validade de um princípio que deve aplicar-se aos fatos contingentes do mundo, não poderia se apoiar em argumentos ontológicos. A única justificação plausível desse princípio deveria ser transcendental, uma vez que é um princípio imposto pela razão aos fenômenos, segundo leis causais. Assim Kant se exprime na seção “Disciplina da razão pura em relação a suas provas” da *Crítica da razão pura*:

todas as investigações voltadas a provar o princípio de razão suficiente se revelaram inúteis, tal como o admitem, em geral, os entendidos; e antes que aparecesse a crítica transcendental preferiu-se, como não se podia abandonar esse princípio, apelar obstinadamente ao saudável entendimento humano (uma saída que sempre prova a situação de desespero da razão) em vez de ensaiar novas provas dogmáticas. (KANT, 2013, p. 572; KrV, A783-784/B811-2)

Em sua resposta a Eberhard, publicada em 1790 sob o título *Da utilidade de uma nova crítica da razão pura*, Kant distingue duas formulações e, portanto, dois sentidos diferentes do princípio da razão suficiente: um lógico (formal) e outro transcendental (material). O primeiro afirma que *toda proposição deve ter uma razão*. Esse é para Kant um “princípio lógico (formal) do conhecimento, que não está ao lado do princípio de contradição, porém subordinado a ele” (KANT, 1975, p. 27; ÜE, AA 08: 193). No entanto, o princípio transcendental ou material da razão suficiente afirma que *toda coisa deve ter sua razão*. Esse é para Kant um princípio “que nenhum homem jamais experimentou e nem experimentará pelo princípio de contradição (nem, em geral, através de um simples conceito, sem relação com a intuição sensível)” (KANT, 1975, p. 28; ÜE, AA 08: 193-194). O erro na argumentação de Wolff e Eberhard seria provocado pela confusão entre essas duas formulações, identificando sub-repticiamente os sentidos lógico e material. Como as categorias, o princípio da razão suficiente tem tanto um significado lógico que é não-esquemático, como também um significado transcendental quando é esquematizado, isto é, quando submetido às condições da intuição sensível. Ou em outras palavras, o PRS tem tanto um significado analítico quanto um significado sintético *a priori*. Como analítico, o PRS é equivalente ao princípio que estabelece a condição lógica suficiente para se fundar um conhecimento. Assim, como é afirmado em seu manual de Lógica, estabelecido por Jäsche,

para que um conhecimento, além de logicamente possível, seja logicamente fundado é preciso que tenha: “(a) razões em que se funde e (b) não tenha consequências falsas” (KANT, 2011, p. 69; Log, AA 09: 51). Entretanto, como princípio sintético *a priori*, o PRS deve ser restrito à experiência possível. Assim, quando o PRS é aplicado sinteticamente ele pertence à lógica transcendental, e não à lógica geral pura.

Nessa próxima seção vamos investigar até que ponto o princípio da razão suficiente, enquanto princípio sintético *a priori* aplicado à intuição sensível, pode ser assimilado ao princípio da causalidade.

2. CAUSALIDADE E RAZÃO SUFICIENTE NA *CRÍTICA DA RAZÃO PURA*

A ligação entre o princípio de causalidade e o princípio de razão suficiente adquire novos contornos na *Crítica da razão pura*. A validade do princípio de razão suficiente deve se restringir aos objetos de nossa experiência perceptiva. Nesse sentido, Kant afirma que “os fenômenos só demandam explicação na medida em que as condições de sua aplicação são dadas na percepção”. (KANT, 2013, p. 402; KrV, A 483/B 511-512).

Na prova da segunda analogia, encontramos a definição do princípio de razão suficiente em relação à sucessão causal: “o princípio de razão suficiente é o fundamento da experiência possível ou, mais especificamente, do conhecimento objetivo dos fenômenos no que diz respeito à relação dos mesmos na série sequencial do tempo” (KANT, 2013, p. 214; KrV, A200-201/B246). A explicação de um fato contingente do mundo empírico se funda, portanto, na conexão desse fato a uma regra de sucessão temporal. Segundo Kant, nós determinamos alguma coisa na medida em que nós a inserimos em uma sucessão no tempo. O princípio da razão suficiente deve assim se basear sobre aquele da causalidade, explicitado pela segunda analogia, pois ele é o princípio pelo qual um acontecimento segue-se de outro no tempo segundo uma regra.

Vinculado às categorias de relação do sistema kantiano, o princípio de razão suficiente supõe que uma relação real entre os diferentes objetos seja pensada. Nossa intuição sensível e nosso entendimento discursivo são compelidos a sintetizar as relações reais em termos de causa e de efeito. No nível abstrato do entendimento puro, onde a categoria de causalidade pode se apresentar não esquematizada, pode-se pensar que uma causa racional real se liga a um efeito real sem especificação da natureza estética da apresentação da causa e do efeito. Mas, uma vez que somos dotados de intuição espaço-temporal, nossa maneira particular de vincular a causa racional ao efeito real se exprime por associação de uma causa temporal a um efeito temporal. A segunda analogia impõe ao acontecimento no tempo uma regra mediante a qual algo (efeito temporal) é necessariamente causado por alguma outra coisa (isto é, por uma espécie de razão temporal). O que é expresso pela segunda analogia não é nada além do que a maneira particular em que seres humanos dotados de intuição espaço-temporal e de entendimento discursivo são compelidos a pensar relações reais.

A segunda analogia fornece assim um princípio segundo o qual os objetos da experiência são determinados em uma relação temporal de sucessão. O “princípio da sucessão no tempo,

segundo a lei da causalidade” afirma que toda mudança no tempo deve se conformar à lei causal. Todos os fenômenos são submetidos às leis segundo as quais a existência suficiente de seu estado presente é uma consequência de certo estado anterior. Kant tenta, portanto, apresentar uma justificação transcendental à aplicação do princípio de razão suficiente aos objetos da experiência, pois para ele nenhum tipo de justificação válida para esse princípio não foi ainda fornecida. Leibniz e seus discípulos fracassaram porque eles consideraram o princípio em sua plena generalidade, aplicando-o às coisas em si. Particularmente, Wolff tentou mostrar que ele deriva do princípio de contradição. No entanto, do fato que esse princípio é sintético e não analítico, a prova de Wolff para Kant não é também válida⁴.

Antes de Kant, David Hume tinha já aceito o caráter não-lógico do princípio relativo aos fatos contingentes do mundo e tinha por outro lado notado que ele não poderia ser justificado *a posteriori*. Hume, no entanto, substituiu o princípio de razão suficiente pelo princípio de causalidade e denunciou notavelmente a ilusão subjacente à ideia de conexão necessária, implícita no conceito de causa ou de fundamento racional. Se, por um lado, o princípio de causalidade não pode ser derivado nem analiticamente do princípio de contradição, nem indutivamente da experiência, e, por outro, ele não pode ser reduzido a uma mera associação subjetiva entre causa e efeito, a justificação encontrada por Kant para o caráter ao mesmo tempo sintético e *a priori* desse princípio deve pressupor uma lógica não analítica, que ele nomeou de transcendental. A rejeição por Kant da prova de Wolff é também uma refutação do ceticismo de Hume em relação ao princípio de causalidade.

Kant, no entanto, considera que a causalidade, enquanto princípio necessário para a unidade da experiência, é uma razão suficiente para a percepção objetiva dos eventos como temporalmente sucessiva. O argumento kantiano para demonstrar a versão causal desse princípio começa pelo conceito de mudança de estado. A determinação de uma mudança no tempo exige que um estado seja pensado como existindo antes da mudança e que outro como existindo depois. Assim, os estados se sucedem segundo uma ordem de tempo definido. Mas a ordem não pode ser percebida, uma vez que o tempo mesmo não pode ser percebido. A única evidência que temos para a ordem da sucessão das aparências (a sucessão objetiva) é aquela de nossas percepções (a sucessão subjetiva). Mais esta pode acontecer em uma ordem diferente daquela. Kant sustenta que a ordem das percepções é um produto da imaginação e que a produção de imagens pode acontecer arbitrariamente.

Kant toma como exemplo de sucessão subjetiva o ato de olhar um objeto estacionário tal como uma casa (KANT, 1997: 260 ; KrV, A190-191/B235-236). As aparências são sucessivas, mas a ordem da sucessão das percepções pode se apresentar de qualquer jeito, de cima para baixo, da esquerda para a direita, etc. Trata-se de uma sucessão completamente arbitrária. Por ser capaz de dizer quando uma sucessão objetiva se produz, devemos apelar a regras segundo as quais a sucessão acontece de certo modo. Assim, para determinar uma sucessão de aparências em relação a um acontecimento, nós exigimos a aplicabilidade do princípio de razão suficiente. Em uma sucessão objetiva, a ordem do múltiplo da intuição sensível deve se conformar a uma regra. O que acontece decorre necessariamente do estado que o precedeu, como no exemplo citado por Kant do barco em movimento. Trata-se nesse caso de um acontecimento que segue

uma ordem necessária das aparências que não pode de modo algum ser mudada. Para um barco que se desloca no sentido da corrente de um rio, nós podemos somente ter as percepções que se seguem uma depois da outra em uma ordem que não pode ser invertida.

A segunda analogia fornece a regra em virtude da qual nós podemos constituir todas as aparências de sucessão no tempo como mudanças. Nós percebemos que as aparências se seguem umas depois das outras e nós as conectamos graças à faculdade sintética da imaginação. A relação objetiva da aparência da sucessão não é determinada pela percepção. Para que essa relação seja determinada, ela deve ser pensada como necessária. A necessidade pode somente vir de um conceito puro do entendimento e, nesse caso específico, daquele de ligação entre causa e efeito. A apreensão do múltiplo da intuição sensível é sempre sucessiva. As aparências, simplesmente por serem representações, não são de forma alguma distintas de sua apreensão. Nós não atribuímos nunca a sucessão ao objeto tomado isoladamente. Quando percebemos algum acontecimento, essa representação contém a consciência que existe alguma coisa que o precedeu. A aparição adquire sua relação de tempo somente em relação ao que a precedeu. Cada ocorrência é condicionada por outra anterior e esta se apresenta como causa daquela que lhe sucedeu. Assim, a sucessão das aparências é condicionada à lei de causalidade (KANT, KrV, A194/B239). Pela ação dessa lei, pode-se sair da subjetividade da apreensão das aparências e chegar à objetividade dos eventos do mundo empírico (o mundo como ele “aparece”).

A abordagem transcendental do princípio de razão suficiente implica antes de tudo situá-lo na temporalidade. A razão no tempo não é outra coisa que a causa antecedente e necessária. Cada acontecimento pressupõe uma razão (fundamento) que é a causa formal da ocorrência que aconteceu. Essa forma que Kant deu ao princípio de razão suficiente é saudada por Schopenhauer na conclusão do seu livro *O mundo como vontade e representação* (capítulo L, vol. II):

a expressão da forma mais universal e geral de nosso intelecto é o princípio do fundamento ou razão (Grund) suficiente, mas esse princípio aplica-se somente ao fenômeno, e não ao ser-em-si das coisas; e apenas sobre ele repousam todo “como” e todo “porquê”. Em consequência da filosofia kantiana, ele não é mais uma *aeterna veritas*, mas apenas a forma, ou seja, a função, de nosso intelecto. (SCHOPENHAUER, 1966, p. 640, tradução nossa)⁵

Assim, tanto para Kant quanto para Schopenhauer, cada acontecimento no mundo fenomênico (para Kant, o mundo dos fenômenos; para Schopenhauer, o mundo como representação) é estritamente determinada, isto é, condicionada pela lei necessária e universal da causalidade. A razão suficiente de um fato é, portanto, dada pela ligação a uma causa antecedente.

Diante da explicação dada por Kant na Analítica transcendental, poderíamos ser levados a supor, entretanto, como bem o fez Béatrice Longuenesse (2001) em seu artigo *Kant's Deconstruction of the Principle of Sufficient Reason*, que a prova de Kant do princípio da razão suficiente coincide exatamente com a sua prova do princípio de causalidade⁶. Assim poderíamos pensar que o princípio de razão suficiente foi reduzido ao princípio da causalidade empírica, expresso na segunda analogia da experiência, e dessa forma o problema da prova e do estatuto epistêmico do princípio de razão suficiente teria se dissolvido.

No entanto, o que pretendemos defender neste trabalho é que o princípio da razão suficiente não se reduz ao princípio da causalidade, pelo menos à causalidade empírica da segunda analogia da experiência. Tomando como referência a interpretação de Gerd Buchdahl (1992) o nosso objetivo é mostrar que a concepção de causalidade, e, portanto, do princípio de razão suficiente deve ser entendida em um contexto mais amplo do sistema crítico. Há pelo menos dois sentidos de causalidade (ver, a esse propósito, Kauark-Leite, 2008). O primeiro é justamente esse que se apresenta como princípio constitutivo da experiência que forma o sistema de princípios da Analítica transcendental e que é propriamente caracterizado com causalidade empírica. No entanto, Buchdahl nos chama atenção para um segundo sentido de causalidade, como princípio regulador, cuja significação é adquirida na Dialética transcendental e que ele prefere nomeá-la de causalidade transcendental.

Essa mesma concepção é também compartilhada por Nicholas Rescher (1983, p. 19) que considera dois tipos diferentes de causalidade: o primeiro tipo, a autêntica causalidade, que é governada pelo princípio “experencialmente” constitutivo da causalidade e o segundo tipo, um fundamento genérico não propriamente causal, meramente inteligível, que é governado pelo princípio regulativo da razão suficiente.

Enquanto ideal regulador, esse princípio nos faz crer que existe um fundamento explicativo a tudo o que acontece, e que, com uma pesquisa aprofundada, podemos sempre, em princípio, encontrar essa explicação. Esse princípio funciona como uma regra da razão que prescreve que deve haver sempre um fundamento suficiente a explicar os acontecimentos que se desenrolam no tempo. Rescher nomeia esse princípio como causalidade noumenal - o que para G. Buchdahl era causalidade transcendental - para distinguí-lo do princípio de causalidade da segunda analogia.

Da atividade reguladora própria dos juízos reflexionantes se origina o conceito de finalidade da natureza (KANT, EEKU, AA 20: 216). Como Buchdahl nos chama atenção, o acento dado à ideia de causalidade apenas no contexto da Analítica do entendimento puro, de acordo com o princípio da segunda analogia da experiência, obscureceu dois aspectos fundamentais da dinâmica cognitiva. Esses dois aspectos são as ideias de finalidade objetiva e de dimensão sistemática, necessárias para constituir o conhecimento da natureza como um sistema orgânico. É a razão, em sua faculdade de desejar, que complementa o processo iniciado pela faculdade do conhecimento do entendimento de tratar as teorias da ciência como um sistema coerente de leis empíricas.

Diferente de Leibniz, portanto, o uso em Kant do princípio de razão suficiente não demonstra a existência de um fundamento noumenal nem estabelece a real existência das coisas em si. Sua função é a de condicionar a nossa mente para o conceito de uma coisa em si como hipótese disponível e aplicável na expansão do conhecimento sempre atrelado à causalidade empírica. Assim, Kant afirma na seção ‘Sobre a disciplina da razão com respeito à hipóteses’ da Doutrina transcendental do método:

uma hipótese transcendental, em que uma mera ideia da razão fosse empregada para explicar as coisas da natureza, não seria explicação alguma, pois não se pode explicar aquilo que não se compreende suficientemente - a partir de princípios empíricos conhecidos - através de algo de que não se sabe

absolutamente nada. Além disso, o princípio de tal hipótese serviria apenas, propriamente falando, para satisfazer a razão, e não para promover o uso do entendimento em relação aos objetos. A ordem e a conformidade a fins que imperam na natureza têm de ser explicadas, por seu turno, a partir de fundamentos naturais e segundo leis naturais; e aqui as mais ousadas hipóteses, sendo apenas físicas, são mais palatáveis que uma hipótese hiperfísica, i. e., o apelo a um criador divino que se pressupõe com vistas a isso.” (KANT, 2013, pp. 565-6; KrV, A772-3/B 800-1).

Assim Kant reserva um espaço privilegiado no seu sistema crítico ao princípio de razão suficiente, não redutível à segunda analogia da experiência. É preciso considerar que a dedução transcendental das categorias e o sistema de princípios do entendimento puro não são suficientes para permitir, para além da constituição das leis empíricas, uma teoria sistemática da natureza, enquanto *corpus* teórico. Para além da espontaneidade do entendimento, é necessário que a razão entre em cena no processo de criação das teorias científicas que partem das leis empiricamente causais produzidas pelo entendimento (ver Kauark-Leite, 2008, pp. 482-483).

Os *Princípios metafísicos da ciência da natureza* de Kant nos oferece um exemplo privilegiado para apreciarmos a validade e aplicabilidade do princípio de razão suficiente no domínio da razão pura em sua função metafísica reguladora. Nessa obra, Kant procura defender a explicação dinamista da matéria em oposição à explicação mecanicista, apelando a uma razão suficiente para sua defesa. Esse será o assunto da nossa próxima seção.

3. DINAMISMO, MECANICISMO E RAZÃO SUFICIENTE

O confronto que Kant estabelece nos *Princípios metafísicos da ciência da natureza*, especificamente no capítulo da ‘Dinâmica’, entre as interpretações mecanicista e dinâmica na tentativa de explicar a constituição da matéria, nos oferece uma rica oportunidade de verificar a efetiva aplicação de critérios científicos desenvolvidos por sua doutrina crítica quando se trata de escolher entre duas teorias científicas concorrentes. Pretendemos com a análise desse estudo de caso mostrar que o princípio da razão suficiente, como muitos defendem, não se reduz ao princípio da causalidade. Não se trata aqui de um confronto entre uma explicação metafísica e outra científica, mas entre duas teorias que se aplicam ao domínio dos fenômenos e que devem explicar características empíricas da matéria como sua densidade, sua coesão e fluidez, sua elasticidade, sua dissolução ou decomposição. Ambas as explicações levam assim em conta as limitações impostas pela estética transcendental e, portanto, pressupõem a intuição espaço-temporal. O texto da ‘Observação geral sobre a dinâmica’ (KANT, MAN, AA 04: 523-535) nos permite, portanto, compreender o argumento kantiano sobre o que conta como uma razão suficiente para a legitimação da escolha de uma dada teoria científica entre duas alternativas concorrentes, uma vez que ambas satisfazem o princípio de causalidade, porém apenas uma oferece uma razão suficiente.

Nesse sentido, a explicação da diferença específica das matérias adquire na filosofia kantiana da natureza, fundamental importância, quando, entre duas possibilidades de explicação, Kant defende a teoria dinâmica, em oposição ao mecanismo, explicação corrente entre os cientistas da época. Segundo as definições dadas por Kant o método mecânico

explica todas as diferenças específicas das matérias “pela combinação do cheio absoluto e do absolutamente vazio”. Por sua vez, o método dinâmico “que se lhe contrapõe, as explica pela simples diferença nas combinações das forças originárias: repulsão e atracção”. (KANT, 1990, p. 82; MAN, AA 04: 532).

A teoria mecanicista supõe, assim, que o universo se reduz a um sistema de volumes geométricos em movimento e que essa ideia aplica-se também à constituição da matéria, composta de volumes minúsculos ou corpúsculos primeiros. Estes são fisicamente considerados como pequenas partes indivisíveis de matéria, os átomos. A ideia de átomo, justaposta àquela do vácuo, são as duas hipóteses do mecanicismo, suficientes para explicar toda a diversidade específica das matérias. Essa explicação é chamada de filosofia mecânica da natureza, porque os átomos são concebidos como máquinas, “simples instrumentos de forças motrizes externas” (KANT, 1990, p. 82; MAN, AA 04: 532). De Demócrito a Descartes, e também junto aos filósofos naturalistas do século XVIII, essa teoria, também chamada de atomismo ou filosofia corpúscular, manteve sua autoridade e influência sobre a ciência da natureza.

Kant considera que essa teoria leva em conta uma física puramente matemática, na qual a geometria se aplica muito bem. No entanto, uma física desse tipo é, para ele, um abuso da imaginação, que toma o lugar do pensamento verdadeiro. Ao demonstrar a possibilidade de espaços vazios, o mecanicismo não deixa de ter a seu favor, de acordo com Kant, a evidência matemática, mas em contrapartida, ele se priva de qualquer base experimental, não privilegiar os dados da sensibilidade. Kant considera, no entanto, que nem os espaços vazios nem os corpúsculos primitivos podem ser descobertos pela percepção. Justamente por renunciar a todas as forças próprias da matéria, a interpretação mecanicista não se baseia na experiência.

Ao propor uma nova teoria para a diferença específica das matérias, Kant pretende adotar uma explicação natural para os fenômenos que, segundo ele, estaria mais de acordo com nossas percepções. A teoria dinâmica da natureza seria, portanto, mais apropriada para a ciência experimental. Ela conduz diretamente à evidência da existência de forças motrizes próprias à matéria e conduz a pesquisa científica a partir dessas forças. Deste modo, considerações com base em hipóteses arbitrárias, tais como a do átomo ou a dos espaços vazios, são evitadas. Para Kant, tomar as forças de atração e repulsão como base da explicação significa levar em conta as condições dadas pela intuição empírica, e não apenas pela intuição pura.

Se, por um lado, a explicação mecanicista permite construir teoricamente a diversidade dos corpos materiais com base em fundamentos matemáticos, a explicação dinâmista, por outro, não pode de maneira alguma demonstrar, através da construção do conceito de matéria, a possibilidade das forças fundamentais. A certeza de tais forças se funda apenas na condição de não se poder reduzi-las a outros princípios primeiros. É por essa razão que Kant considera matemática a explicação mecanicista e metafísica a explicação dinâmica. A primeira leva em consideração apenas a essência dos fenômenos, enquanto a segunda baseia-se não apenas na essência, mas na existência deles. Por essência Kant quer dizer “o primeiro princípio interno de tudo o que pertence à possibilidade de uma coisa” (KANT, 1990, p. 13; MAN, AA 04: 467). Nesse sentido, pode-se atribuir uma essência às figuras geométricas, mas jamais uma existência.

Portanto a teoria dinamista deve propriamente servir à ciência da natureza, por lidar não com a possibilidade, mas com realidade da matéria.

Face à explicação dinamista da diversidade das matérias, a teoria mecanicista torna-se para Kant inútil, não sendo mesmo sequer necessária como hipótese. Ele quer, de qualquer forma, não só evitar a ideia de espaços vazios, mas invalidar todas as considerações baseadas nessa noção. Assim, ele diz:

O vazio absoluto e o absolutamente denso são, na doutrina da natureza, mais ou menos o que o acaso cego e o cego destino constituem na cosmologia metafísica, a saber, uma barreira para a razão dominadora, a fim de que ou a pura invenção ocupe o seu lugar, ou ela se ponha a descansar no travesseiro das qualidades ocultas. (KANT, 1990, p. 82; MAN, AA 04: 532).

Sobre a necessidade de se admitir a existência real de espaços vazios, Kant declara:

nenhuma experiência ou conclusão a partir da mesma, nenhuma hipótese necessária nos autorizam a admitir espaços vazios como *reais*. Com efeito, toda experiência nos dá a conhecer unicamente espaços comparativamente vazios, os quais se podem explicar perfeitamente, seja qual for o grau, pela propriedade que a matéria tem de encher o seu espaço com uma força de expansão sempre maior ou menor até ao infinito, sem precisar de espaços vazios. (KANT, 1990, p. 85; MAN, AA 04: 535).

A teoria dinâmica permite, então, explicar as principais características da matéria sem recorrer a qualquer hipótese mecanicista. Kant pretende assim estabelecer *a priori*, a partir das forças motrizes fundamentais de atração e repulsão, os conceitos que devem justificar qualquer diferença específica entre matérias. A aplicação das categorias gerais do entendimento puro à definição dinâmica da matéria, isto é, à matéria tomada em sua qualidade, permite derivar quatro propriedades materiais fundamentais. A quantidade da qualidade fornece o volume e a densidade, a qualidade da qualidade, a coesão, qualidade através da relação, a elasticidade, e a modalidade da qualidade, a estrutura física e química dos corpos. Jules Vuillemin (1955), em sua análise dos Princípios metafísicos da ciência da natureza, considera essa passagem de fundamental importância. Nessa condição específica da categoria de qualidade de refletir sobre todas as outras, estamos diante da exposição da filosofia kantiana da natureza mais autêntica.

Todas essas características da matéria são, assim, explicadas, pelo grau de preenchimento do espaço, sendo esse grau determinado em função das forças motrizes fundamentais e não em termos de composição de corpúsculos atômicos no vazio. A dinâmica kantiana renuncia a tudo o que poderia dar lugar a uma interpretação descontínua da matéria. Para Vuillemin (1955, p. 192, tradução nossa), “o esforço kantiano vai consistir em harmonizar continuidade e substância; e chegará a um novo conceito de continuidade, aquele das grandezas intensivas, bem como de substância, como um conjunto relativo de matéria sempre divisível ao infinito”.

Esse esforço também tem a intenção de evitar o dualismo pressuposto pela física mecanicista entre a matéria com peso e a matéria sem peso (éter). Kant introduziu o conceito de éter de forma diferente daquele de Newton. Enquanto que para este último o éter é um conceito útil para explicar a gravitação, para Kant, que admite ação à distância, trata-se apenas de um conceito limite, totalmente desnecessário para a teoria da gravitação, uma vez que o

princípio de ação distância não requer um meio no qual a ação das forças possa se propagar. A hipótese do éter decorre diretamente do princípio das forças motrizes como grandezas intensivas. Se as forças têm um certo grau, pode-se admitir um éter, isto é, uma substância material com um peso infinitamente pequeno. Essa suposição não introduz nada de novo na teoria da dinâmica. É uma consequência natural do princípio geral. Essa seria outra vantagem da dinâmica em relação ao mecanicismo: a continuidade entre princípios e hipóteses. A hipótese de um vácuo, ao contrário, é inteiramente extrínseca ao princípio mecanicista, que afirma que as forças dependem apenas das formas (máquinas).

Assim, é no plano da existência e da realidade e não no da essência e da possibilidade que se coloca a supremacia do dinamismo sobre o mecanicismo. Para resolver o conflito que se estabelece entre essas duas teorias, Kant toma como parâmetro o uso empírico do entendimento na investigação da realidade empírica, mais do que a possibilidade da realidade. Se, na *Crítica da razão pura*, o conceito de grandeza intensiva permanece como puramente matemático, é porque não se havia introduzido realmente o conceito de movimento da matéria. A realidade da qual trata a *Crítica*, na seção relativa ao princípio das antecipações da percepção, não é a da força enquanto grandeza física, mas a da possibilidade matemática da força. A introdução da realidade do movimento faz emergir o conflito, ignorado na primeira *Crítica*, entre o dinamismo das forças motrizes fundamentais e teoria mecanicista.

Ao comentar sobre o problema das “grandes teorias físicas”, Vuillemin (1955, p. 172, tradução nossa) argumenta que é “idealismo transcendental em seu conjunto que Kant coloca em questão para refutar o mecanicismo”⁸, tornando inútil a hipótese do vácuo. A hipótese dinâmica de que o real não se apresenta uniformemente de forma homogênea no espaço é baseada na distinção necessária entre grandezas extensivas e intensivas.

A explicação mecanicista, no entanto, não supõe essa diferença. Considerando a homogeneidade e heterogeneidade do preenchimento material do espaço apenas como relativa à agregação das partes da matéria, somente a grandeza extensiva é levada em conta. A hipótese mecanicista, como afirma Vuillemin (1955, p. 172, tradução nossa), “confunde extensão e matéria, grandezas extensivas e intensivas, axiomas e antecipações”⁹. A idealidade transcendental do espaço é a condição para uma possível distinção entre esses dois tipos de grandezas e que ao mesmo tempo permite defender uma explicação mais fenomenalista da constituição da matéria. Se a gênese do contínuo escapa à construção geométrica, isso é revelador para Kant não da fragilidade do dinamismo, mas da limitação da imaginação do realismo geométrico. A explicação dinamista, ao contrário da explicação mecanicista, de natureza essencialmente geométrica, é resultado de uma maior liberdade da razão, em seu uso plenamente legítimo, de pensar a diversidade da matéria de outra maneira.

Um motivo suplementar que faz da teoria dinamista uma fonte explicação mais adequada para Kant é o fato dela contar com ajuda de investigações metafísicas. Essa ajuda permitiu estruturar o conhecimento de acordo com leis determinadas, que procuram reduzir a aparente variedade de forças dadas a um menor número, as forças fundamentais, que explicam o efeito das outras. Embora a razão não possa se elevar para além das forças fundamentais, as investigações de ordem metafísica são úteis para a ciência, principalmente por conduzir o mais longe possível

a busca por razões explicativas dinâmicas sem deixar de levar em conta o conceito empírico de matéria. Para Kant, são essas razões que “permitem esperar leis determinadas, por conseguinte, um verdadeiro encadeamento racional das explicações”. Graças a uma metafísica colocada a serviço da aplicação da matemática à ciência natural que as propriedades da matéria podem ser consideradas “como dinâmicas e não como posições originais e incondicionadas, como decerto as postularia um método puramente matemático” (KANT, 1990, p. 94; MAN, AA 04: 534).

Kant se volta assim contra a tradição mecanicista herdado dos atomistas gregos, que considerava o átomo como o real e realmente existente, como o elemento último indivisível constituinte de toda a matéria. Todas as qualidades sensíveis da matéria deveriam ser explicadas em termos do arranjo geométrico e movimento mecânico desses átomos nos espaços vazios do interior da matéria. Isso resultou em uma imagem da natureza, cuja simplicidade parecia tão clara e convincente aos olhos dos naturalistas dos séculos XVIII e XIX. Tudo no universo se reduzia a pequenas partículas em movimento. Essa era tomada a única e verdadeira realidade existente.

É somente no século XX, com a mecânica quântica, que a ciência consegue se livrar completamente dessa visão simplista e mecanicista do mundo. Porém, já na segunda metade do século XIX, essa imagem mecanicista se torna menos relevante com o advento da teoria eletromagnética, que oferece outra imagem de realidade no lugar do arranjo de partículas no espaço vazio. O campo de forças assume o lugar do mecanicismo surge como a única e verdadeira realidade existente. A natureza como resultante da interação entre campos de força era menos facilmente compreensível do que a ideia mecanicista da realidade, própria do atomismo. Os critérios matemáticos de Descartes de clareza e evidência não se aplicam imediatamente e a imagem do mundo resultava ser menos intuitiva. Quando Kant solitariamente declara no século XVIII que hipótese dinamista de interação entre as forças motrizes fundamentais era uma razão mais suficiente para explicar a diversidade dos corpos, ele está muito mais próximo de uma visão mais contemporânea da ciência empírica do que defendendo uma interpretação equivocada ou errada da realidade física. A substituição da imagem atômica pelo pensamento dinamista confirma uma tendência contemporânea seguida pela física do século posterior ao de Kant.

Assim, não se pode simplesmente dizer que a concepção kantiana da estrutura da matéria não tem nada a ver com o desenvolvimento da atividade científica. Kant, na verdade, introduziu algo de novo quando ele diz que a matéria não preenche um espaço em virtude apenas de sua extensão, como pensavam Lambert e Descartes. Solidez e impenetrabilidade não são propriedades fundamentais que por si só justificariam o preenchimento do espaço pela matéria. Kant afirma derivar essas propriedades a partir de um princípio mais fundamental. Afirmar que um princípio é mais fundamental significa dizer que ele não pode ser derivado a partir de nenhum outro. Não podemos compreender a possibilidade das forças motrizes, precisamente porque elas são fundamentais.

A superioridade do dinamismo sobre o mecanicismo assenta-se na suposição de que a explicação da natureza da matéria se baseia em um princípio e não numa imagem. Esse, em nossa opinião, é o ponto mais importante. A riqueza da metafísica kantiana exatamente

introduzir um debate epistemológico sobre o que conta como uma razão suficiente para a escolha entre teorias científicas, evidenciando o complexo jogo epistêmico entre intuições empíricas, construções matemáticas com base na intuição pura, princípios constitutivos do entendimento, como o princípio da causalidade, e ideias metafísicas da razão, com o seu papel regulador não menos fundamental.

4. CONCLUSÃO

Como o nosso foco de análise foi a pertinência e uso do princípio de razão suficiente no domínio das ciências empíricas, deixamos de lado todas as considerações sobre o seu uso prático e sua relação com a liberdade humana. No domínio do conhecimento da natureza, entretanto, é preciso considerar antes de tudo que o uso legítimo de tal princípio, como de qualquer outro princípio transcendental só se aplica ao domínio dos fenômenos espaço-temporalmente intuídos e jamais às coisas em si mesmas. Porém, a regra causal, estabelecida pelo entendimento, da sucessão objetiva dos acontecimentos no tempo não é suficiente para proporcionar a unidade sistemática requerida pela razão. Com base nos argumentos apresentados por Kant na Dialética transcendental e na análise do conflito apresentado nos *Princípios Metafísicos da Ciência da Natureza* entre as explicações dinamista em mecanicista, concluímos, assim, que o Princípio da razão suficiente, enquanto princípio transcendental em seu uso teórico aplicado ao campo da experiência possível, não pode ser simplesmente assimilado ao princípio da causalidade, tal como estabelecido na segunda analogia da experiência, no quadro da Analítica transcendental.

As ideias da razão, de natureza eminentemente metafísica, apesar de não se aplicarem diretamente e constitutivamente a nenhum objeto da experiência, têm um uso regulativo legítimo absolutamente indispensável ao entendimento. Enquanto o entendimento busca unificar o múltiplo da experiência através de seus conceitos, a razão procura unificar os conceitos do entendimento através de suas ideias, buscando a ampliação máxima possível da própria experiência (KANT, KrV, B 672-3). Como afirma Kant:

[o que a razão] procura produzir é a *sistematicidade* do conhecimento, i.e, a sua concatenação a partir de um princípio. Essa unidade da razão pressupõe sempre uma ideia, qual seja, a da forma de um todo do conhecimento que antecede o conhecimento determinado das partes e contém as condições para determinar a cada parte, *a priori*, o seu lugar e a sua relação com as demais. De acordo com isso, essa ideia postula a unidade completa do conhecimento do entendimento, graças à qual ele deixa de ser um mero agregado contingente e se torna um sistema concatenado segundo leis necessárias (KANT, KrV, B 673).

Assim, a restrição do princípio de razão suficiente ao princípio de determinação de uma ordem temporal objetiva dos objetos da percepção, como estabelecido pela segunda analogia da experiência, é válida no nível do entendimento. No entanto, a razão exige mais. Ela exige que a suficiência da explicação científica deva ser buscada na ideia de unidade completa dos conceitos do entendimento, mesmo que de forma hipotética. Desse modo, a aparente variedade de leis empíricas bem como a aparente variedade de fenômenos e os diversos conhecimentos do entendimento podem ser reduzidos, produzindo uma representação sistemática sob um

princípio mais geral. Como no caso do embate entre as concepções dinamista e mecanicista, o que está em jogo é a defesa de um critério de razão suficiente que possa ser estabelecido com base em um princípio mais geral, construído hipoteticamente, com base no conceito de força fundamental, como forma de unificar a diversidade das aparências.

RESUMO: Na Analítica Transcendental de Kant encontramos a ideia segundo a qual dar as causas é também dar as explicações suficientes da razão pela qual um certo fenômeno se produziu. Este trabalho pretende examinar em detalhe as bases dessa aliança entre o princípio de causalidade e o princípio de razão suficiente, em passagens tanto da *Crítica da razão pura* quanto de outros textos kantianos. Procuraremos especialmente mostrar através da análise do embate entre as teorias dinamista e mecanicista sobre a matéria, apresentado nos *Princípios metafísicos da ciência da natureza*, que o princípio da razão suficiente, no âmbito das ciências empíricas, não pode ser reduzido, tal como defende Longuenesse (2001), ao princípio da ordem temporal objetiva dos objetos da percepção.

PALAVRAS-CHAVE: Kant – causalidade - princípio de razão suficiente - explicação científica – dinamismo – mecanicismo.

ABSTRACT: In Kant's Transcendental Analytic we find the idea that providing a causal explanation for a certain phenomenon is necessarily equivalent with providing a sufficient reason for the occurrence of that phenomenon. In this paper, I examine in detail this fundamental equivalence between the principle of causality and the principle of sufficient reason as it is presented by Kant in the *Critique of pure reason* as well as other Kantian texts. Above all, by analyzing the conflict between the dynamical and mechanical theories of matter in the *Metaphysical foundations of natural science*, I aim to show that the principle of sufficient reason, in the context of empirical sciences, cannot be reduced to the principle of the determination of an objective temporal ordering of the objects of perception, contrary to what is argued by Longuenesse in her 2001 paper.

KEYWORDS: Kant – causality - principle of sufficient reason - scientific explanation – dynamism – mechanism.

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2 Cf. KANT (1983, pp. 43-44, PND, AA 01: 393): “Prefiro igualmente substituir a expressão “razão suficiente” por “razão determinante” e tenho nisso a aprovação do ilustre Crusius, pois a palavra “suficiente” é ambígua, tal como o demonstrou Crusius, pois não vemos imediatamente em que é que ela é suficiente; mas como determinar é colocar uma coisa de tal maneira que o posto seja excluído, esta palavra exprime, sem dúvida, o que basta para que a coisa seja assim concebida e não de outra maneira”.

3 Para uma discussão aprofundada sobre as diferentes versões do princípio de razão suficiente em Kant : cf. B. LONGUENESSE (2001).

4 “o famoso Wolff, ou o perspicaz Baumgarten, que lhe seguiu as pegadas, puderam procurar a prova para o princípio da razão suficiente, manifestamente sintético, no princípio de contradição” (KANT, 1984, p. 17; Prol, AA 04:270).

5 “the expression of the most universal and general form of our intellect is the principle of sufficient ground or reason (Grund), but that, on this very account, this principle finds application only to the phenomenon, not to the being-in-itself of things; but all whence and why rest on this principle alone. In consequence of the Kantian philosophy, it is no longer an aeterna veritas, but merely the form, i.e., the function, of our intellect” (SCHOPENHAUER, 1966, p. 640).

6 “What Kant describes as his “proof of the principle of sufficient reason” is none other than his proof, according to this method, of the causal principle in the Second Analogy of Experience, in the *Critique of Pure Reason* (LONGUENESSE, 2001, p. 67).

7 « l'effort kantien va consister à harmoniser continuité et substance ; il aboutira à un concept nouveau de la continuité, celui des grandeurs intensives, aussi bien que de la substance, celui d'un ensemble relatif de matière toujours divisible à l'infini ». (VUILLEMIN, 1955, p. 192).

8 « [C'est] l'idéalisme transcendantal dans son ensemble que Kant met en question pour réfuter le mécanisme » (VUILLEMIN, 1955, p. 172).

9 « [L'hypothèse mécaniste] confond extension et matière, grandeurs extensives et intensives, axiomes et anticipations » (VUILLEMIN, 1955, p. 172).

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KANTIAN ANTHROPOLOGY: A SCIENCE LIKE NO OTHER

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1. SCIENCE AND NONSCIENCE

Kant's severe strictures in the Preface to the *Metaphysical Foundations of Natural Science* (1786 – hereafter, *MAN*) regarding which disciplines do and do not constitute “proper science (*eigentliche Wissenschaft*)” seem to rule out entirely the prospect of ever classifying his own anthropology as a science. And yet, as we will see later, he himself does repeatedly call his anthropology a *Wissenschaft*. Is he guilty of contradicting himself, or is there a way to resolve this awkward antinomy within Kant's own system? Let's begin by looking at what he means by “proper science.”

First, proper science according to Kant must employ causal laws that are expressible mathematically. Proper science requires a substantial mathematical component – the more mathematics the better, as far as its scientific credentials go. As Kant writes:

I assert . . . that in any special doctrine of nature there can only be as much *proper* science as there is *mathematics* therein. For . . . proper science, and above all proper natural science, requires a pure part [*einen reinen Theil*] lying at the basis of the empirical part, and resting on the *a priori* cognition of natural things (*MAN*, AA 04: 470).

Kantian anthropology would seem to decisively fail this crucial litmus test, for the simple reason that there appears to be no mathematics therein. As Alix Cohen notes, “insofar as human phenomena are not mathematisable, the human sciences are denied the status of ‘science’ in the Kantian sense.”²

Physics is Kant's paradigm of science, indeed, on his view physics is the *only* proper science. Even chemistry, he claims, "can be nothing more than a systematic art or an experimental doctrine [*systematische Kunst oder Experimentallehre*], but never a proper science, because its principles are merely empirical, and allow of no *a priori* presentation in intuition" (MAN, AA 04: 471). Empirical psychology – one of the chief background sources for Kantian anthropology (particularly as developed by Alexander Baumgarten in his *Metaphysics*)³ – fares even worse than chemistry in Kant's eyes: "the empirical doctrine of the soul must remain even further from the rank of a properly so-called natural science than chemistry" (MAN, AA 04: 471). Empirical psychology fails to qualify as proper science for at least two reasons. First, its primary data – human thoughts – have no identifiable spatial location and hence according to Kant cannot be mathematized: "mathematics is not applicable to the phenomena of inner sense and their laws" (MAN, AA 04: 471). But second, the data of empirical psychology are not subject to repeatable experiments, in part because "observation by itself changes and displaces the state of the observed subject" (MAN, AA 04: 471).

The possibility of replicable experiments is thus Kant's second necessary criterion for proper science. The difficulty of performing replicable experiments involving human mental states is described at greater length later in the Preface to *Anthropology from a Pragmatic of View* as one of the "considerable difficulties (*erhebliche Schwierigkeiten*)" inherent in human nature that confront any anthropology that aspires to scientific status. The first of three interrelated observations that Kant makes on this topic, for instance, is the following:

If a human being notices that someone is observing him and trying to study him, he will either appear embarrassed (self-conscious) and *cannot* show himself as he really is; or he dissembles, and does not *want* to be known as he is (Anth, AA 07: 121; cf. V-Anth/Mron, AA 25: 1214, V-Anth/Busolt, AA 25: 1437).⁴

Biology is not even mentioned as a possible candidate for proper science in Kant's *MAN* discussion, presumably because his own teleological commitments in biology prevented him from conceiving that biology could ever be mathematized. The activities of living organisms, Kant asserts later in the third *Critique*, cannot be explained by mechanical principles, and there will never be a Newton of biology:

we can boldly say that it would be absurd for humans even to make such an attempt or to hope that there may yet arise a Newton who could make comprehensible even the generation of a blade of grass according to natural laws that no intention has ordered; rather, we must absolutely deny this insight to human beings (KU, AA 05: 400; cf. NTH, AA 01: 229-30).

Although the dual requirements of mathematization and repeatable experimentation may not exhaust Kant's criteria for proper science,⁵ we can see already that anthropology, particularly *Kantian* anthropology, which is concerned with "what *he* [viz., the human being] as a free-acting being makes of himself, or can and should make of himself" (Anth, AA 7: 119; cf. V-Anth/Pillau, AA 25: 733) faces an extremely high hurdle. If chemistry, psychology, and biology all fail the scientific litmus test, what hope is there for anthropology?

One way out of this apparent impasse is simply to reject the strong criteria for proper science that Kant defends in the Preface to *MAN* and replace them with softer criteria that anthropology might be able to more readily meet. This strategy is pursued at one point by Thomas Sturm in his book, *Kant und die Wissenschaften vom Menschen*. In his discussion of “Kant’s Concept of Science” (Chapter III), Sturm does not refer to Kant’s *MAN* criteria at all. Rather, the emphasis is on “systematicity (*Systematizität*).”⁶ And Kant does state in the *Critique of Pure Reason* that “systematic unity is that which first makes ordinary cognition into science [*Wissenschaft*]; i.e., makes a system out of a mere aggregate of it” (KrV, A 832/B 860). Additionally, Kant clearly does stress systematicity over mere aggregates in several of his anthropology lectures. For instance, at the beginning of *Friedländer* (1775-76), after stating that physical geography and anthropology form the two parts of “knowledge of the world (*Kenntnis der Welt*),” he adds: “In order to have world knowledge, one must study a whole, out of which the parts can subsequently be determined, and this is a system, insofar as multiplicity has arisen out of the idea of the whole” (V-Anth/Fried, AA 25: 470) And in the Prolegomena to *Busolt* (1788-89) he stresses that when observations of human beings are presented “systematically, then they are a science, which one calls ‘anthropology’” (V-Anth/Busolt, AA 25: 1435). Similarly, in the Preface to *Anthropology from a Pragmatic Point of View* (1798), he stresses that a proper anthropology should be “systematically formulated” and “systematically designed” (Anth, AA 07: 119, 121).

But there are at least two problems with this softer strategy for defining science. First, it casts the net much too widely. Many disciplines are systematic without being scientific. For instance, in Kant’s previously-referred to discussion of chemistry in *MAN*, he readily allows that it is a “systematic art (*systematische Kunst*)” and a “systematic art of analysis (*systematische Zergliederungskunst*),” but he still maintains that it can “never (*niemals*)” be a proper science “because its principles are merely empirical, and allow of no *a priori* presentation in intuition” (MAN, AA 04: 471). Many areas of human inquiry can make a legitimate claim to being systematic unities rather than mere aggregates, but relatively few of them can say in addition that they employ universal causal laws of nature that are mathematizable. Second (and this is a point that Sturm himself recognizes, albeit insufficiently),⁷ what exactly Kant means by “systematicity” is too vague and ambiguous to be of much use in distinguishing science from nonscience. For instance, on Kant’s view a discipline has “inner” systematicity when its findings are united by an integrated point of view, and it has “external” systematicity when its boundaries are clear and don’t “run together” with other sciences (ProI, AA 04: 265). But it is quite possible for a discipline to possess one of these two kinds of systematicity without possessing the other. Furthermore, Kant does not specify which type of systematicity is more important, nor does he tell readers when he uses the term “specificity” whether he is referring to both kinds or only one (and if the latter, which one).

A second, more popular response to Kant’s strong criteria of science in *MAN* is not to reject the criteria themselves, but rather Kant’s application of them. Chemistry, on this view, *is* mathematizable, and so is biology.⁸ And this strategy also coincides with the received view at present. Today these disciplines are regarded by nearly everyone as proper sciences, despite ongoing skepticism and debate regarding the status of the social or human sciences.

My own response to Kant's discussion of what constitutes proper science is influenced by my work on his anthropology. At first glance, Kant's anthropology clearly seems to fail his own criteria for science, particularly the two necessary criteria laid out in *MAN*: mathematization and replicable experiments. And yet, as I will show in what follows, he does repeatedly refer to his anthropology as a science, and there is a Kantian way to respond positively to the dual challenges of mathematization and replicable experiments. Should we thus conclude that, initial appearances to the contrary, his anthropology does in fact qualify as a science according to his own demanding criteria? Or is the price to be paid for this strategy too high? Can we, in other words, manage to resolve the paradox only by hiding or ignoring core aspects of his anthropology that simply won't fit into his science box, regardless of how much we or Kant may want them to? These are the questions that I will address in the final section of my paper.

2. ANTHROPOLOGY AS SCIENCE

In nearly all of the opening sections of his numerous lectures on anthropology that are currently available to us, Kant repeatedly describes his own anthropology as a *Wissenschaft*. And even in those few lectures where he does not explicitly describe anthropology as a science, one can readily infer from the context that he regards it as one. It is important – particularly for those who hold that Kantian anthropology is merely descriptive or reflective and cannot be an explanatory science – to take note of this simple linguistic point.⁹

For instance, in the opening sentence of *Collins* (1772-73) Kant states:

The science of the human being [*Die Wissenschaft des Menschen*] (anthropology) has a similarity to the physiology of outer sense, insofar as both the grounds of cognition are drawn from observation and experience. Nothing indeed appears to be more interesting for the human being than this *Wissenschaft*, and yet none is more neglected than precisely this one (V-Anth/Collins, AA 25: 7).

And he goes on to use the term *Wissenschaft* six more times in reference to anthropology in the Prolegomena to *Collins* (V-Anth/Collins, AA 25: 7-9). The above analogy between anthropology and physiology, along with the two disciplines' shared emphasis on observation and experience, provide additional support for the claim that Kant does indeed view anthropology as a science.

In the opening section of *Parow* (1772-73) Kant does not explicitly use the term *Wissenschaft* in describing anthropology. However, in referring to empirical psychology, which in this lecture as well as others (e.g., V-Anth/Mron, AA 25: 1214) is presented as part of the backdrop for his anthropology, he calls the former “a species of natural doctrine [*Naturlehre*],” and then adds that “we can expound this doctrine just as we do physics” (V-Anth/Parow, AA 25: 243). This comparison of empirical psychology (and by extension, anthropology) to physics is another clear sign that Kant does indeed view his anthropology as a science.

In the Preamble to *Friedländer* (1775-76), Kant states: “to observe human beings and their conduct, to bring their phenomena under rules [*unter Regeln*], is the purpose of anthropology”

(V-Anth/Fried, AA 25: 472, cf. V-Anth/Mensch, AA 25: 856). This central concern with rules or laws of human behavior¹⁰ is an important point that we will examine in more detail in the next section. It too signals that Kant does indeed view his anthropology as an explanatory science dealing with causal laws. And at the end of this Preamble, Kant again compares anthropology to physics, arguing now that the former “deserves just such effort” as the latter and that anthropology thus deserves “to be treated as a *Wissenschaft* in academia” and placed not within metaphysics but among the “empirical *Wissenschaften*” (V-Anth/Fried, AA 25: 473).

In the very short Prolegomena to *Pillau* (1777-78), Kant begins by arguing against those who believe that “it would be superfluous [*überflüssig*] to make a *Wissenschaft*” of anthropology on the grounds that it requires “no discipline” and is “easy” (V-Anth/Pillau, AA 25: 733), and he concludes by referring to both physical geography¹¹ and anthropology – the two parts of *Weltkenntniß* (knowledge of the world) – as “these two *Wissenschaften*” (V-Anth/Pillau, AA 25: 733).

In the opening sentence of the *Menschenkunde* transcription (1781-82), first published in 1831, Kant contrasts two different types of study. The first is “the brooding sciences [*grüblerische Wissenschaften*], which are of no utility to the human being.” This type of study – referred to in other anthropology lectures as “scholastic” (e.g., V-Anth/Mron, AA 25: 1209) – is merely “*Wissenschaft* for the school, but one could not obtain any enlightenment for common life from it” (V-Anth/Mensch, AA 25: 853). The second type of study is anthropology, which by contrast extends knowledge “beyond the school” and aims “toward universal utility: this is study for the world” (V-Anth/Mensch, AA 25: 853). Later in this opening section he once again (as we saw earlier in *Friedländer*) stresses that the goal of anthropology is to discover rules or laws of human behavior:

our purpose is merely to draw up rules from the multiplicity that we perceive in human beings, for however incredibly different the human moods appear to be, still there is more regularity here than one would think. We will attempt to bring this play of human actions under rules (V-Anth/Mensch, AA 25: 856).

Here again, in stressing the goal of bringing human actions *unter Regeln*, Kant signals that he views anthropology as an explanatory science concerned with causal laws.

In the opening chapter of *Mrongovius* (1784-85), Kant’s only explicit use of the term ‘*Wissenschaft*’ occurs when he briefly discusses the uses of anthropology with regard “to the *Wissenschaften*” (V-Anth/Mron, AA 25: 1211). But in the course of this discussion he employs yet another analogy that adds further support to the claim that he does view anthropology as a science: “Anthropology stands to morals as spatial geometry stands to geodesy” (V-Anth/Mron, AA 25: 1211). As I noted elsewhere, the transcriber of this lecture “has unfortunately reversed Kant’s intended analogy.”¹² The analogy should read: “Anthropology is to morality as geodesy is to spatial geometry.” ‘Geodesy’ is an obsolete term for land measurement or “that branch of applied mathematics which determines the figures and areas of large portions of the earth’s surface” (*Oxford English Dictionary*). But by means of this (corrected) analogy, Kant indicates that he views anthropology as an applied science. And his explicit comparison of

anthropology to an applied *mathematical* science is also relevant to the mathematization issue discussed earlier.

In the Prolegomena to *Busolt* (1788-89 – note that this set lectures was delivered after the 1786 publication date of *MAN*) we find what is perhaps Kant’s strongest declaration concerning the scientific status of anthropology:

When this observation of human beings (*anthropography*) is brought to a *Wissenschaft*, it is called ‘anthropology’, and one attains to this *Wissenschaft*:

1. through long and manifold experiences and through travels. . . .
2. If one makes attentive observations of oneself and with other human beings. . . . If through experiences without any aim and through observations we get knowledge of human beings for ourselves and present them in a connection, according to a certain method, or in a word, systematically, then they are a *Wissenschaft*, which one calls ‘anthropology’ (V-Anth/Busolt, AA 25: 1435).

Here as elsewhere, the references to experience, observation, and systematicity all serve to accentuate what he believes is the scientific status of the new discipline of anthropology.

Finally, the Preface to *Anthropology from a Pragmatic Point of View* (1798), the last set of lectures Kant gave for his annual course in anthropology. As we saw earlier, in this discussion Kant points out that “all attempts to arrive at such a science [*zu einer solchen Wissenschaft*] with thoroughness encounter considerable difficulties that are inherent in human nature itself” (Anth, AA 07: 120). The word “such (*solch*)” in this passage clearly refers to anthropology, and while Kant goes on to discuss the “considerable difficulties” in some detail, he by no means regards them as insurmountable hurdles to anthropology’s becoming a science. Indeed, in the last sentence of the Preface he refers to “the growth of *Wissenschaft* for the common good” (Anth, AA 07: 122), and here too it is clear that he conceives anthropology as the *Wissenschaft* in question.

Kant’s repeated descriptions of anthropology as a *Wissenschaft* in the opening sections of his Lectures on Anthropology, particularly when read in context along with his recurrent analogies between anthropology and physics, his repeated stress on discovering laws of human behavior, etc., should give pause to recent claims that Kant conceives anthropology “as nonexplanatory,” that is, as one of the human sciences “that should settle for description,”¹³ or that Kantian anthropology is modeled not “on physics” but rather “on the reflective model of biology” and that it does “not aim to achieve knowledge that is true or false.”¹⁴ For as we have seen, Kant himself does not describe his anthropology this way. Granted, we may decide after closer examination that his own descriptions of his anthropology are inaccurate. But we should not reach this conclusion without first considering carefully what he has to say on the matter.

3. ANTHROPOLOGY AND CAUSAL LAWS OF NATURE

We saw earlier that in several texts Kant places the quest for causal laws of human behavior at the center of the new discipline of anthropology. As he states in *Friedländer*: “to observe human beings and their conduct, to bring their phenomena under rules, is the purpose of anthropology” (V-Anth/Fried, AA 25: 472; cf. V-Anth/Mensch, AA 25: 856). Granted,

“the purpose” is an overstatement – Kantian anthropology is an eclectic and multifaceted project that cannot be boiled down to a single aim. And the transcriber’s phrase “to bring their phenomena under rules” may sound a bit odd to the untrained ear. But anyone familiar with the basic claims of the critical philosophy can see that by means of this phrase he is alluding to Kant’s core distinction between phenomena (the way things appear to us) and noumena (the way things are in themselves). Anthropology, as an empirical science, deals with observable aspects of human thought and action, and in its quest to being them under rules it operates on the assumption that these phenomena – like all other phenomena in nature – are determined according to universal causal laws.

Kant’s clearest statement on this matter is perhaps his opening sentence in *Idea for a Universal History with a Cosmopolitan Aim* (1784):

Whatever concept one may form of the *freedom of the will* with a metaphysical aim, its *appearances* [*Erscheinungen*], the human actions, are determined [*bestimmt*] just as much as every other natural occurrence in accordance with universal laws of nature (IaG, AA 08: 17).

According to this view, human actions – like all other natural events – are determined according to universal laws of nature, and hence are subject to the basic laws of physics.

True, Kant is talking about history here rather than anthropology, but elsewhere he describes the two disciplines as being “mutually bound up with each other” (V-Anth/Mron, AA 25: 1212). Building on the work of other German Enlightenment historians such as Johann David Köhler, Thomas Abbt, Johann Christoph Gatterer, and Johann Mattias Schroeckh, Kant repeatedly advocates a distinctively “pragmatic history,” a history that will be more useful than the traditional “scholastic history.”¹⁵ And the usefulness of the former (and uselessness of the latter) stem largely from the fact that pragmatic history is concerned with explanatory causal laws of human action, whereas scholastic history rests content with mere descriptions of events. For instance, in his *Blomberg Logic* lectures, Kant states: “That history which becomes useful through universal rules is called pragmatic. . . . If one learns merely the names of sovereigns and knows their reigns, then this provides little material for the use of reason” (V-Lo/Blomberg, AA 24: 297). In the *Mrongovius* lecture on anthropology he expands on this theme, sharply distinguishing the two histories from one another, and showing why anthropology is necessary for pragmatic history:

History is of two kinds:

1. scholastic, when I know only what occurred; and
2. pragmatic, when I investigate the private aims of human beings and the public aims of the commonwealth.

Pragmatic history really provides a benefit [*einen Nutzen*], for if I know history only scholastically, it serves me just as much as a fairy tale or novel does.

Now anthropology is indispensably necessary [*unumgänglich nöthig*] for pragmatic history. For how can we reason about a history, if we do not know human beings and are not able to explain through their inclinations and passions the causes [*die Ursachen*] of events? (V-Anth/Mron, AA 25: 1212).

Anthropology's job, as Kant sees it, is to find causal connections between human inclinations, passions and thoughts on the one hand and the resulting actions that stem from them on the other, and he clearly views anthropology as an explanatory science here. Without this crucial knowledge of human nature (viz., which inclinations, passions, and/or thoughts cause which actions?) the historian does not know where to direct his or her attention. As Kant notes in the *Menschenkunde* lecture: "another source of anthropology is history, but of course an anthropology must be there beforehand: for if I do not know what I have to give attention to, then through the historical narrative alone I will not know what I should observe" (V-Anth/Mensch, AA 25: 857-58).

Kant's repeated emphasis on anthropology as an attempt to bring human actions under rules is very similar to Hume's earlier description of history in his famous discussion of liberty and necessity in *An Enquiry Concerning Human Understanding* (1748). For here Hume too argues – albeit without using the term 'anthropology' – that the chief benefit of history is its discovery of universal causal laws of human behavior, and that it is in virtue of this benefit that history should form the basis for the new science of man:

Mankind are so much the same, in all times and places, that history informs us of nothing new or strange in this particular. Its chief use is only to discover the constant and universal principles of human nature, by showing men in all varieties and circumstances and situations, and furnishing us with materials from which we may form our observations and become acquainted with the regular springs of human action and behaviour. These records of wars, intrigues, factions, and revolutions, are so many collections of experiments, by which the politician or moral philosopher fixes the principles of his science, in the same manner as the physician or natural philosopher becomes acquainted with the nature of plants, minerals, and other external objects, by the experiments which he forms concerning them.¹⁶

So it is clear both that Kant thinks causal laws play a crucial explanatory role in science, and that anthropology properly concerns itself with such laws. But what about his mathematization requirement? Are anthropology's causal laws mathematizable? Can we, in other words, construct concepts of the objects of anthropological investigation in pure intuition, thereby giving a mathematical account of them (see MAN, AA 04: 470)? Some commentators point to the paucity of Kantian texts on this matter as settling the issue. Sturm, for instance, notes, "Kant never even considers the idea of a 'mathematical construction' of . . . causal principles governing the 'anthropological' features of our lives."¹⁷ However, in the opening paragraph of *Idea for a Universal History* Kant does briefly discuss the use of mathematics in at least some of the anthropological features of our lives. Referring to the annual tables of birth, marriage, and death rates that statisticians in many countries prepare, he notes that these human events "happen just as much in accordance with constant laws of nature, as weather conditions" (IaG, AA 08: 17). So if – as Kant clearly holds – the causal laws that determine human actions are the same causal laws that determine other natural events (i.e., the basic laws of physics), then it would seem that anthropology's causal principles are in principle mathematizable. For he certainly holds that the laws of physics are mathematizable. The fact that he never explicitly raises this issue in his anthropology lectures – lectures which are after all designed "to be read by everyone, even by women at the dressing-table" (V-Anth/Mensch, AA 25: 857) – doesn't

show that it can't be done. The popular readership goal of these lectures suggests rather that he thinks they are not the proper place for such a discussion – to examine the mathematization issue in them would scare off potential readers. As he remarks in *Mrongovius*:

a solid knowledge of the human being interests everyone and provides material for conversation, even for a woman. . . . [A]ll that is abstract, namely, what one must for the most part examine [only] with great effort, thus does not belong here (V-Anth/Mron, AA 25: 1213).

4. ANTHROPOLOGY AS AN EXPERIMENTAL SCIENCE

As we saw earlier, Kant's second necessary criterion for proper science concerns experiments that can be replicated by other investigators. In order for a discipline to qualify as a proper science, it must be possible to perform repeatable experiments on the data that are the subject matter of the candidate discipline. For instance, in the Preface to *MAN*, Kant claims that one reason why empirical psychology is not a proper science is that it is impossible to perform repeatable experiments on human mental states, in part because "observation by itself already changes and displaces the state of the observed object" (*MAN*, AA 04: 471). In other words, someone who knows that they are being looked at will often act differently than they would if they weren't being looked at. And because Kantian anthropology shares empirical psychology's concern with human mental states, it would seem that it too will fail to be a proper science. For anthropology also seems to fail the necessary criterion of repeatable experimentation. As Kant remarks in the *Busolt* transcription, humans cannot be observed "through experiments [*durch Experimenten*]" because as soon as the subject notices that he is being observed, "he will do precisely the opposite of what one wants him to do" (V-Anth/Busolt, AA 25: 1437).

But my aim in the present section is to show that Kant does not quite accept the strong conclusion that anthropology cannot be an experimental science. "Not quite accept" because while he does acknowledge that the facts of human self-consciousness and our propensity to dissemble makes reliable experimentation with this particular subject extremely difficult ["one can indeed make experiments with animals and things, but not with human beings" (V-Anth/Busolt, AA 25: 1437)], he thinks he has found a way around the problem. In the opening sections of his Lectures on Anthropology (and these sections are generally his best discussions regarding methodological issues in anthropology), Kant repeatedly acknowledges the "considerable difficulties" (Anth, AA 07: 121; cf. V-Anth/Mensch, AA 25: 857, V-Anth/Mron, AA 25: 1214, V-Anth/Busolt, AA 25: 1437) confronting attempts to perform replicable experiments on human subjects, but he thinks he has found a satisfactory solution to these difficulties.

Here as elsewhere, Kant owes a considerable debt to Hume. For as we saw earlier (n.3), Hume too acknowledges that one central difficulty in developing a science of human nature is the problem of replicable experiments. In the Introduction to the *Treatise* he admits that the science of human nature

has, indeed, this peculiar disadvantage, which is not found in natural [science], that in collecting experiments, it cannot make them purposely, with premeditation, and after such a manner as to satisfy itself concerning every particular difficulty which may arise.

Humans do not live in controlled laboratory conditions, and if a researcher tries to place them in such settings, his subjects' self-consciousness and tendency to dissemble will often distort any observation-based conclusions drawn from this uncomfortable scenario. However, Hume's way out, as we also saw earlier (n. 14), involves an appeal to history:

These records of wars, intrigues, factions, and revolutions are so many collections of experiments, by which the politician or moral philosopher fixes the principles of his science, in the same manner as the physician or natural philosopher becomes acquainted with the nature of plants, minerals, and other external objects, by the experiments which he forms concerning them.

By observing human behavior in different time periods, researchers can construct a much larger database (or "collections of experiments"), one which will enable them to more accurately determine the causes of human behavior. New hypotheses can be tested against the existing database, and conclusions based on atypical observations of behavior that fall too far outside the empirical norm will be rejected.

Kant borrows and endorses Hume's history strategy in several of his anthropology lectures. For instance, in the early *Collins* lecture, he announces that he plans "to indicate the different ages [*Älter*]" of the human being. "From this will follow what is natural to the human being and what is artificial or habitual about him" (V-Anth/Collins, AA 25: 8). Similarly, in *Pillau*, *Menschenkunde*, and *Mrongrovius* history is explicitly mentioned as an important source of and aid to anthropology (V-Anth/Pillau, AA 25: 734, V-Anth/Mensch, AA 25: 857, V-Anth/Mron, AA 25: 1212-13). And in *Friedländer* he again explicitly mentions history (as well as Hume's monumental *History of England*), but now argues that the history strategy needs to be extended still further into a "world history (*Welthistorie*)" – one that will give us a true "history of humanity" and also further help researchers in bringing the phenomena of human behavior "under rules" (V-Anth/Fried, AA 25: 472). The appeal to "world history (*Weltgeschichte*)" also appears later in *Anthropology from a Pragmatic Point of View* (Anth, AA 07: 121). In emphasizing the importance of world history for acquiring knowledge of human nature, Kant adds a crucial spatial and cross-cultural perspective to Hume's temporal perspective. By comparing different human cultures to one another we can extend our database still further, thus adding to the collections of experiments and offering researchers more insurance against local deviations from empirical norms of human behavior.

But in these later versions of the anthropology lectures, two additional interrelated strategies for dealing with the "no-repeatable-experiments objection" also surface. First, Kant also urges that several additional sources for and aids to acquiring knowledge of human nature be added to the mix, including *plays* – particularly Shakespeare's¹⁸ (V-Anth/Fried, AA 25: 472, V-Anth/Pillau, AA 25: 734, V-Anth/Mensch, AA 25: 858, V-Anth/Mron, AA 25: 1213, Anth, AA 07: 121); *essays* – particularly Montaigne's,¹⁹ Addison's,²⁰ and Steele's (V-Anth/Fried, AA 25: 472; cf. V-Anth/Collins, AA 25: 8, 193); *biographies* (V-Anth/Pillau, AA 25: 734, Anth, AA 07: 121); and *novels* (V-Anth/Pillau, AA 25: 734, V-Anth/Mensch, AA 25: 858, V-Anth/Mron, AA 25: 1213, Anth, AA 07: 121; cf. V-Anth/Collins, AA 25: 8).²¹ By means of these additional

sources for and aids to anthropology, the database of knowledge concerning the causes of human behavior can be extended still further. Furthermore, he now argues that the arts and humanities can also make their own important contributions to the new human sciences. Granted, Kant frequently issues warnings concerning fiction writers' imaginative flights of fancy (V-Anth/Mensch, AA 25: 858, V-Anth/Mron, AA 25: 1213, Anth, AA 07: 121), but even here – perhaps in an appreciative nod toward one of Descartes' conclusions regarding his famous “dream hypothesis”²² – he concludes that even though the characters and situations they describe often contain exaggerations (“as if in a dream”), “the *main features* must have been taken from the observation of the real actions of human beings: for while they are exaggerated in degree, they must nevertheless correspond to human nature in kind” (Anth, AA 07: 121).

Kant's second strategy for dealing with the no-repeatable-experiments objection is to point out that certain individuals are simply more insightful observers of human behavior than others, and that those of us in the latter group should listen to them. Anthropology arises, he notes in *Friedländer*, “through the collection of many observations about human beings by those authors who had acute knowledge of human beings” (V-Anth/Fried, AA 25: 472), and many of us clearly lack such knowledge. Indeed, “only a person who already has some knowledge of the human being can use” history, novels, plays and biographies in order to acquire anthropological knowledge, “and only such a person can produce” (V-Anth/Mron, AA 25: 1213) such aids to anthropology in the first place. What does the insightful observer of human nature have that the rest of us lack? “Strong reflection” and “an attentive eye” are of course both required (V-Anth/Pillau, AA 25: 734), but in the end it seems to be a special gift that is bestowed only on a lucky few. Particularly in the case of a genius such as Shakespeare (see n. 17), we are talking not about a skill “which can be learned in accordance with some rule,” but rather about a talent “for which no determinate rule can be given” (KU, AA 05: 307).

In the end, Kant does acknowledge that the “considerable difficulties” which stand in the way of performing replicable experiments on human beings are themselves ineliminable. But he also argues that resourceful investigators of human nature can find a satisfactory way around these difficulties. For researchers can test their hypotheses about the causes of human action against the panoramic and multi-disciplinary data collectively forged by historians, playwrights, biographers, essayists, and novelists, and – above all – by those fortunate authors who possess “a deep understanding of the human being.” And other researchers can also replicate the earlier experiments by testing the same hypotheses against the same growing collection of experiments. Finally, new experiments can also be conducted, experiments which will serve either to contribute fresh insights to our knowledge of ourselves or to further strengthen the earlier analyses of our predecessors.

5. A SCIENCE LIKE NO OTHER?

I have argued that the two necessary criteria for proper science defended by Kant in the Preface to *MAN* – viz., causal laws that can be expressed mathematically and replicable experiments – are both in principle realizable in anthropology. So where does this leave us? Is Kantian anthropology in fact a proper science? Or are we able to assert this only if we hide those less tidy aspects of his anthropology project that won't fit onto the Procrustean bed of science?

In earlier writings I have argued that Kantian anthropology is “not at all a Weberian value-free social science whose ends are either indigenous to theory or entirely arbitrary,” but rather something which from the start is “a deeply value-embedded and morally guided enterprise.”²³ But is not science too a value-embedded and morally guided enterprise? From Plato through Habermas, philosophers have repeatedly argued that values and norms come before facts and make facts possible, and that all forms of rational communication and argumentation necessarily presuppose adherence to basic moral norms such as honesty, freedom of inquiry, equal rights to participate, and noncoercion.²⁴ And if it is indeed true that the idea of the good is “the cause of knowledge and truth,”²⁵ then we can’t claim that Kantian anthropology is not a science simply because it is a value-embedded and morally guided enterprise. For this is also true of physics, Kant’s paradigm of science.

But while moral norms and values may well be indigenous to the practice of science itself, there remains an additional aspect of Kantian anthropology which still makes it difficult to square with science. And this is its unabashedly plural and eclectic nature – “one revealing various origins, competing concerns and aims, and multiple possibilities of application.”²⁶ Part of Kantian anthropology’s origin and aim is indeed scientific – and, or so I have argued, it exhibits this concern and aim in a stronger sense than many commentators have realized. But other parts of Kantian anthropology are pragmatic and moral – ‘moral’ not just in the fundamental sense that anthropology, like all science, “is far from standing on its own,” and “requires in every respect first a value-ideal”²⁷ – but in the more specific and problematic sense that it is ultimately placed in the service of the overarching moral goal of showing human beings what they need to do in order to reach their collective destiny. And this particular dimension of Kantian anthropology does have a deeper connection to moral value than physics does – indeed, in Kant’s hands it becomes a type of empirical practical philosophy, “*philosophia moralis applicata*, moral anthropology, to which the empirical principles belong” (V-Mo/Mron II, AA 29: 599). At the same time, not every student of human nature will choose to employ Kantian anthropology in this boldly normative manner, a fact of which Kant himself was well aware. And so in the end, we are left with a discipline that can be kept within the bounds of science by those determined to do so, but one which can also easily break free of these bonds. But this too seems entirely appropriate for lectures that are designed “to be read by everyone” (V-Anth/Mensch, AA 25: 857).²⁸

ABSTRACT: In this essay I begin by examining Kant’s criteria for “proper science” as presented in the Preface to his *Metaphysical Foundations of Science*, and then ask whether Kantian anthropology can possibly qualify as a proper science according to these demanding criteria. I defend a qualified ‘yes’ answer to this question, while also drawing attention to several less tidy aspects of his anthropology project that are difficult to fit onto the Procrustean bed of science.

KEYWORDS: Kant – anthropology – science - causal laws - replicable experiments.

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NOTES

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2 COHEN (2009, p. xii).

3 Courtney D. Fugate and John Hymers have recently prepared an English translation of the fourth edition (1757) Baumgarten's *Metaphysica* (which includes his discussion of both empirical and rational psychology). See BAUMGARTEN (2013, esp. p. 198-279). Baumgarten refers explicitly albeit briefly to anthropology in §747 of this text when he states: "philosophical and mathematical knowledge of the human being is possible . . . , i.e. philosophical ANTHROPOLOGY and mathematical anthropology." For discussion of Baumgarten's empirical psychology and its influence on Kant's anthropology, see STURM (2009, p. 60-65). Earlier discussions include HINSKE (1966, p. 413); and ERDMANN (1882, p. 3).

4 Here as elsewhere, Kant owes a debt to Hume. In his *Treatise of Human Nature*, Hume notes that the science of human nature "has this peculiar disadvantage, which is not found in the natural, that in collecting its experiments, it cannot make them purposively, with premeditation, and after such a manner as to satisfy itself concerning every particular difficulty which may arise" (HUME, 1978, p. xviii-xix). However, as I will show later, both Hume and Kant think that they have found a way around this "no replicable experiments" objection to anthropology's being a science.

5 RAUSCHER (forthcoming) as well as in his earlier paper (2009, p. 141-67) argues that what is to count as a proper law of nature (and hence also a science) for Kant must adhere to seven different constraints. However, his analysis is not confined to Kant's discussion of proper science in *MAN*. I am indebted to several points in Rauscher's analysis in this first section of my essay.

6 STURM (2009, p. 127-182). See also my review of Sturm's book in *Notre Dame Philosophical Reviews*, June 13, 2012. STURM does briefly refer to Kant's *MAN* criterion of mathematizability later in Chapter IV (2009, p. 192-94). The position he defends in this chapter – viz., that appearances to the contrary Kant does not regard "an empirical science of human thoughts, feelings, or desires as impossible" (50) is closer to the position I shall defend later. See also STURM's earlier essay (2001, p. 163-84).

7 STURM (2009, p. 175).

8 See, e.g., FRIEDMAN (2006, p. 328). See also FRIEDMAN's more recent work (2013, esp. 240-58, 590-94). Rauscher also adopts this strategy in (RAUSCHER, forthcoming).

9 Granted, German authors, particularly in the past, have often employed the term '*Wissenschaft*' in a wider sense than the English 'science'. But while I agree that the question of the scientific status of anthropology cannot be definitely resolved simply by means of the linguistic strategy of seeing whether anthropology is described as a *Wissenschaft*, I do think that the passages cited below constitute strong evidence that Kant himself believes that his anthropology is a proper science. Whether he is correct in this belief is of course a separate matter.

10 Granted, KANT also discusses noncausal laws of human behavior – viz., *moral* laws – in other works. For instance, in the Preface to the *Groundwork* he states: “Everyone must admit that a law [*ein Gesetz*], if it is to hold morally, that is, as a ground of obligation, must carry with it absolute necessity [*absolute Nothwendigkeit*]” (*GMS* 4: 389). But Kantian moral laws are a priori – they “must not be sought in the nature of the human being or in the circumstances of the world in which he is placed” (*GMS* 4: 389). The causal rules for human behavior discussed in the anthropology lectures, by contrast, are based on observations of human behavior.

11 As one might suspect, there has also been an ongoing debate over the scientific status of Kant’s physical geography. For discussion and references, see LOUDEN (2014, especially the section entitled “Geography as an Essentially Contested Concept”, p. 5-9).

12 LOUDEN (2000, p. 202 n.32).

13 MAKKREEL (2001, p. 199).

14 COHEN (2009, p. xii).

15 For discussion and references, see LOUDEN (in press).

16 HUME (1975, p. 83-84).

17 STURM (2001, p. 180). See also NAYAK/SOTNAK (1995, p. 133-51).

18 “The plays of Shakespeare are masterpieces because he had a deep understanding [*eine tiefe Erkenntniß*] of the human being” (*V-Anth/Mron* 25: 1213).

19 However, Montaigne is much more sympathetic to cultural relativism than either Hume or Kant. For instance, he begins “Of the Inconsistency of Our Actions” by observing: “Those who make a practice of comparing human actions are never so perplexed as when they try to see them as a whole and in the same light; for they commonly contradict each other so strangely that it seems impossible that they have come from the same shop” (MONTAIGNE, 1976, p. 239). Because Kant seeks knowledge of “the nature of humanity” in his anthropology, a knowledge that is not “bound to time and place” and that “must suit all kinds of human beings” (*V-Anth/Fried* 25: 471), it is very difficult to imagine him agreeing with Montaigne on this key issue.

20 In his Introduction to *The Spectator*, Addison writes: “I live in the World, rather as a Spectator of Mankind, than as one of the Species; by which means I have made my self a Speculative Statesman, Soldier, Merchant and Artizan, without ever meddling with any Practical Part in Life. . . In short, I have acted in all the Parts of my Life as a Looker-On, which is the Characteristic I intend to preserve in this Paper” (ADDISON, 1964, p. 59). This “Spectator of Mankind” perspective is precisely what Kant feels is needed in order to acquire knowledge of the nature of humanity.

21 For related discussion concerning Kant’s views about novels, see LOUDEN, “‘Firm as a Rock in Her Own Principles’ (But Not Necessarily a Kantian),” in _____. (2011, p. 38-45).

22 “It must surely be admitted that the visions which come in sleep are like paintings, which must have been fashioned in the likeness of things that are real, and hence that at least these general kinds of things – eyes, head, hands and the body as a whole – are things which are not imaginary but are real and exist” (DESCARTES, 1984, II, p. 13).

23 LOUDEN, Introduction. In: KANT (2007, p. 2). See also LOUDEN (2011, p. 64, 77).

24 For related discussion and a more detailed defense of this claim, see LOUDEN (2012, p. 117-37; 2013, p. 23-43; and forthcoming).

25 PLATO, *Republic* 508e.

26 LOUDEN (2011, p. 69).

27 NIETZSCHE, *On the Genealogy of Morality*, III: 25.

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**'DAS HIPPOCRATISCHE GESCHÄFT'.
SIGNIFICADO, SENTIDO Y UBICACIÓN ESTRUCTURAL
DE LA MEDICINA EN LA FILOSOFÍA KANTIANA**
*['DAS HIPPOCRATISCHE GESCHÄFT'.
MEANING, SENSE AND STRUCTURAL STATUS OF
MEDICINE IN KANTIAN PHILOSOPHY]*

Pedro Jesús TERUEL¹

Sabemos hasta qué punto la pregunta sobre el ser humano se halla anclada en los intereses más hondos a los que busca responder la obra de Immanuel Kant.² El programa kantiano relativo al conocimiento del hombre queda expresado, de forma sintética, en un pasaje de su *Antropología en sentido pragmático*: «Una doctrina sobre el conocimiento del hombre, concebida sistemáticamente (Antropología),» señala ahí, «puede ser o bien en sentido *fisiológico* o bien en sentido *pragmático*. El conocimiento fisiológico del ser humano trata de la indagación sobre aquello que la *Naturaleza* hace del hombre; el pragmático, de la indagación sobre lo que él, en cuanto agente libre, hace de sí mismo, o puede y debería hacer».³ En sus apuntes de las lecciones impartidas por Kant en el semestre de invierno de 1784-1785, Christoph Coelestin Mrongovius recoge una analogía sin desperdicio: la antropología sería a la moral lo que la geodesia a la geometría.⁴

Las tres preguntas en las que se puede resumir el interés práctico de la razón (¿Qué puedo saber?, ¿Qué debo hacer?, ¿Qué me está permitido esperar?) pueden ser reconducidas a una cuarta: ¿Qué es el ser humano?⁵ Podríamos plantearnos, de entrada, si la medicina poseerá alguna relevancia a la luz de los interrogantes últimos del pensamiento crítico. Quizá no sea un interlocutor adecuado para avanzar por ese camino; quizá conduzca hacia un conocimiento erudito pero no conectado con el interés último de la razón y se trate, por tanto, de una empresa útil pero no enraizada en el *humus* de las inquietudes kantianas.

En las páginas que siguen, mi objetivo consistirá en mostrar que existe un enlace estructural entre la medicina –en la modulación específica que revelará el término– y las inquietudes fundacionales del idealismo trascendental. Para ello, y tras un proemio de índole historiográfica, comenzaremos por indagar en el significado del concepto a la luz de la noción tardía de ‘Hippocratisches Geschäft’. En particular, nos interesará poner de manifiesto la postura del Kant maduro en torno a la delimitación de las disciplinas médicas. A la luz de la dualidad básica entre saberes terapéuticos e higiénicos dilucidaremos los sentidos básicos que subyacen a la aproximación médica al ser humano. Todo ello nos permitirá delimitar la ubicación estructural de las disciplinas médicas en el contexto del conocimiento humano y valorar su relevancia en el marco del sistema crítico.⁶

PROEMIO. HISTORIA RECEPTIONIS

La aproximación de Kant a la medicina fue objeto de una primera recepción, a caballo entre la década de los noventa y el primer tercio del siglo XIX, entre autores cercanos a la praxis. De ellos, el más destacado fue Johann Benjamin Erhard, que mantuvo contacto epistolar con Kant. En un artículo publicado anónimo en 1795, Erhard criticó severamente lo que él consideraba un andar a tientas en la praxis médica.⁷ Lo explicó acudiendo a la estructura silogística: faltando la proposición mayor del silogismo (en este caso, una adecuada comprensión de los fundamentos orgánicos de la enfermedad), difícilmente se podría llegar a conclusión alguna sobre el origen de los síntomas. Dicho al modo de la teoría judicativa kantiana: sin una correcta identificación del concepto general bajo el cual subsumir lo particular, la medicina se disuelve en una casuística de escasa científicidad. Tres años después, la estima kantiana por la medicina inspiró a Johann Karl Osterhausen un peculiar imperativo, inspirado en el lema del *Preisschrift* de 1784: es preciso que el hombre tenga el coraje de salir de su autoimpuesta minoría de edad en las cuestiones relativas a la propia salud.⁸

Hay que notar que la exaltación decimonónica de la medicina, auspiciada por Erhard sobre base kantiana, llegó a su culmen en Schelling. El filósofo fue coeditor de los *Anuarios sobre la medicina como ciencia (Jahrbüchern der Medizin als Wissenschaft)*; en el prólogo, fechado en Würzburg un año después del fallecimiento de Kant, afirma Schelling que «la medicina es la corona y flor de todas las ciencias naturales, tal y como el organismo en general y el organismo humano en particular lo son del mundo. De aquí resulta claro que, en este ámbito de la ciencia, lograr lo perfecto no es exigua empresa y que requiere múltiples fuerzas convergentes y armónicamente activas».⁹ Sin embargo, el planteamiento schellingiano de los estudios médicos en la Universidad difería, como el de Fichte, del punto de vista kantiano en su relación con la praxis; para Kant, el contacto con la variedad casuística de la experiencia formaba parte esencial de la enseñanza en la Facultad de medicina. A pesar de la influencia institucional de Fichte y Schelling, fue la visión kantiana la que prevaleció en la reforma universitaria que tuvo lugar en Alemania en torno a la Humboldt-Universität.¹⁰

Las décadas posteriores privilegiaron la acogida de los aspectos metafísicos y epistemológicos del idealismo trascendental. Habrá que esperar a 1872 para encontrar una

nueva posta en la historia de la recepción del pensamiento kantiano en torno a la medicina: una conferencia, de notable valor historiográfico, que Heinrich Bohn pronunció en Königsberg en el marco de la Kant-Gesellschaft y que fue publicada en el *Altpreußische Monatsschrift*.¹¹ La mitad del escrito se halla dedicada a la consideración biográfica del historial clínico del filósofo y a su posible influencia en su cercanía a la praxis médica; la segunda, a su relación personal con médicos-filósofos. Las cuatro últimas páginas versan sobre episodios prácticos de la conexión entre Kant y la medicina; particular atención se dedica a la postura del filósofo frente a las vacunas.

Durante la mayor parte del siglo XX, la aproximación kantiana a la medicina fue objeto de escasos abordajes temáticos; una obra tan significativa como el *Kant-Lexikon* de Rudolf Eisler (1930) se inscribe en esa tendencia. Se trata de una pauta interrumpida sólo por los párrafos que Karl Vorländer dedica al asunto en su biografía de Kant,¹² por el artículo de A. Witzel sobre la respiración habitual por la nariz como práctica saludable¹³ o por la contribución de Gerhard Funke.¹⁴ En los *Kant-Studien*, cuya primera entrega apareció en 1897, habrá que esperar más de un siglo para que aparezca una investigación relacionada con la medicina; se tratará entonces de la traducción de la *Rektoratsrede* realizada y prologada por Reinhard Brandt: "Über die Heilung des Körpers, sowie sie Sache des Philosophen ist".¹⁵ Esa dilación resulta particularmente llamativa si tenemos en cuenta que la Teología y el Derecho –que, junto con la Medicina, integran la tríada de Facultades mayores tal y como queda expuesta en *El conflicto de las Facultades*– constituyen el objeto de decenas de contribuciones que se sucedieron a lo largo de todo el siglo en la revista fundada por Hans Vaihinger.

Sólo a partir de los años noventa del siglo XX, y coincidiendo con el auge académico de las disciplinas englobadas en las ciencias de la salud, se asiste a un renovado interés por la aproximación kantiana a la medicina: podríamos situar aquí la segunda fase de su recepción, particularmente viva en ámbito anglosajón y germánico. En ella destaca, por su detallado acercamiento a la acogida de la filosofía kantiana entre los pensadores de la generación de Erhard y Osterhausen, la contribución publicada por Urban Wiesing en 2008.¹⁶ Los estudios de Model y Schröpfer han afrontado, respectivamente, la conexión entre el de Königsberg y la comprensión ilustrada de la medicina¹⁷ o su influencia sobre facultativos coetáneos.¹⁸ Varios aspectos sectoriales han llamado la atención contemporánea: así, la postura de Kant frente a la vacunación, en la contribución de Kordelas y Grond-Ginsbach,¹⁹ o la cirugía cosmética, en la aportación de Carey.²⁰ Particular atención ha merecido la vertiente institucional y pública del aprecio kantiano por la medicina; no resulta casual el hecho de que la mayor parte de las contribuciones publicadas en este sentido –como en los casos de Kaldis, Heubel y Loewy– hayan sido redactadas en lengua inglesa.²¹ Desde el punto de vista de la bioética son numerosos los escritos inspirados por, a favor de y contra Kant; dado que esta perspectiva excede el marco hermenéutico de la presente contribución, nos limitaremos a remitir a la extensa bibliografía que el artículo de Wiesing precedentemente citado proporciona al respecto.²²

Mención aparte merece la edición italiana, llevada a cabo por Vincenzo Bochicchio, della *Rektoratsrede* y otros textos kantianos que lindan con la medicina. Con prólogo de Reinhard

Brandt, minucioso aparato crítico y extenso epílogo, ofrece un meritorio ejemplo de interés contemporáneo por el asunto que nos ocupa.²³

1. SIGNIFICADO

1.1. Tanto el término alemán *Medizin* como el castellano ‘medicina’ provienen del latín *medicina -ae*, relacionado a su vez con el verbo deponente *medeor*, ‘cuidar, poner remedio, aliviar, curar’. Se trata, por lo tanto, de un vocablo con amplias ramificaciones semánticas: puede abarcar tanto la atención directa a quien sufre un daño –sea éste permanente o coyuntural, patológico o accidental– como su tratamiento por medio de sustancias (naturales o artificiales) o incluso la intervención a través de instrumental en los órganos afectados; también se puede pensar en un modo de abordaje previo que consistiría en la prevención del daño.

Consideraciones de similar índole parecen haber guiado a Kant a la hora de forjar su categorización terminológica. De hecho, distintos textos tardíos reflejan una distinción tripartita entre medicina, cirugía y dietética;²⁴ a ellas se añade, en alguna ocasión, la gimnástica.²⁵ Lo puramente médico concierne a la dimensión química de la cura: diseño y preparación de las sustancias que actuarán a modo de fármacos; Kant emplea aquí el término latino *medicina*, sus versiones germanizadas *Medicin* o *Medizin* y los alemanes *Heilkunde* o *Arzneikunde*, así como los vocablos derivados, compuestos o relacionados con ellos (como los apelativos profesionales *medicus* o *Arzt*). En lo quirúrgico consiste la faceta más mecánica de la intervención con vistas a la cura; se habla aquí de *Chirurgie* o *Chirurg*. Lo dietético representa el momento preventivo-negativo de la enfermedad, con vistas a mantener el equilibrio del organismo a partir de la contención y la abstinencia; se trata de la *Diaethetic* o *Diätetik* y del *Diaeteticus* o *Diätetiker*. Finalmente, la gimnástica (*Gymnastic* o *Gymnastik*) representa su momento preventivo-positivo, basado en la ejercitación activa del cuerpo. Por otro lado, se dan en los textos kantianos expresiones formalmente cercanas al campo semántico de la cura pero que, en realidad, no se hallan vinculadas a ella; es el caso de la *gerichtliche Arzneikunde* (medicina forense).²⁶

Las dimensiones mentadas constituyen, en la concepción de Kant, respectivas partes de una unidad semántica que remite a la figura fundacional de la medicina occidental: se trata del “asunto” o “cuestión hipocrática” (*das Hippocratische Geschäft*).²⁷ En la figura de Hipócrates de Cos (470-370 ca.) parece haber hallado el paraguas conceptual preciso para vincular esos tres conceptos. Vale la pena que nos planteemos aquí dos interrogantes: en primer lugar, qué luz puede arrojar la figura de Hipócrates sobre la comprensión kantiana de la medicina; en segundo, a qué necesidad puede responder su empleo.

1.2. Gracias al *Corpus hippocraticum* sabemos que el tipo de cura cultivado por Hipócrates y su escuela hacía hincapié en el carácter empírico de la investigación médica e individual del tratamiento. Las características que promovieron históricamente su efectividad serían, pues, las mismas que alejarían la medicina de la aprioricidad y universal necesidad exigidas para su inclusión entre las ciencias; se trataría, pues, de un saber útil e incluso indispensable, pero

por sus métodos particular y contingente. Y es que hablar de principios médicos universales y abstraídos de la experiencia “es contradecirse”;²⁸ en cambio, para el médico será de vital importancia atender al caso concreto y sopesar juicios provisionales.²⁹

Conviene evitar extremar la relevancia hermenéutica de este indicio. En realidad, Kant está aplicando aquí una etiqueta corriente, históricamente consolidada. El siglo XVII había sido escenario de un renovado auge de la medicina, que la puso en el umbral de su desarrollo moderno; en dicho auge, la colección de las obras de Hipócrates y su escuela jugó un papel relevante. Tanto la formación latina de Kant en el Collegium Friedericianum como su conocimiento de la medicina coetánea hubieron de persuadirle de la centralidad del médico de Cos en el desarrollo histórico de la disciplina. La alusión kantiana a Hipócrates ha de ser leída, pues, a la luz de esa herencia recibida; no reflejan una adhesión premeditada a una determinada escuela médica (más allá de lo que ésta representa en la configuración de la disciplina en Occidente).

1.3. Mayor interés reviste el segundo interrogante, a saber: a qué se debe la necesidad de agrupar bajo un paraguas conceptual –el “asunto hipocrático”– tres nociones conceptualizadas, pues, como diferentes entre sí: lo médico, lo quirúrgico, lo dietético. En este aspecto, como en otros relevantes relacionados con la filosofía kantiana, la creciente especialización que caracteriza la ciencia dieciochesca juega un papel crucial. El último tercio del siglo XVIII ha sido testigo de fabulosos avances en la comprensión química de lo orgánico y fisiológica de lo anatómico. Kant conoce ambos de primera mano. En 1787 se publicó en París el texto fundacional de la revolución química, *Méthode de nomenclature chimique*, obra conjunta de un grupo de autores liderados por Antoine de Lavoisier, traducida al alemán por Karl von Meidinger y publicada cinco años después en Viena; Kant conoció su contenido y se sirvió de él en su propia obra, tal y como he mostrado en otro lugar.³⁰ Borowski testimonia cómo Kant siguió con “calurosa adhesión” (*warme Theilnahme*) los progresos realizados por la farmacología gracias a los avances químicos.³¹ Por otro lado, su interés por la fisiología humana –objeto de cruciales investigaciones coetáneas en ámbito germánico– se refleja en varios pasajes de su producción. De entre ellos, y dado su interés filosófico e historiográfico, subrayaría el escrito en torno a las enfermedades de la cabeza y el epílogo a la obra de Thomas Sömmerring *Sobre el órgano del alma*, a los que he dedicado sendas contribuciones.³²

A la luz de estos desarrollos se entiende que Kant tenga plena conciencia de la diversificación metodológica de las investigaciones que conducen a la farmacopea y a la cirugía. La necesidad de unificarlas bajo un paraguas conceptual provendría de esa disgregación, propia de la creciente especialización científica. No habiéndose apropiado del término ‘farmacología’ como signifiante usual (aparece sólo en tres ocasiones en toda la obra kantiana, y siempre a finales de los noventa)³³, lo sustituye por *Medizin*; que ambos vocablos aluden a la misma noción lo demuestra el cotejo de dos de las tres ocasiones en las que aparece *Pharmaceutic* o uno de sus derivados.

Viéndose, pues, en la necesidad de encontrar una etiqueta lingüística que abarcara la tarea del *Medicus / Pharmaceuticus*, del *Chirurgus* y del *Diaeteticus*, Kant recurre a Hipócrates como santo y seña de la empresa histórica de cuya diversificación brotan las tres disciplinas respectivas. Aquí reside la razón de ser de la expresión *Hippocratisches Geschäft*.

1.4. El objetivo de la empresa hipocrática consiste en restablecer o mantener la salud. El modo de hacerlo cae íntegramente en la configuración empírica del organismo: «Cada ser humano tiene su modo particular de estar sano», es el lema, de ecos fridericianos, que Kant hace suyo en carta a Mendelssohn.³⁴ Desde el punto de vista de la percepción del sujeto, la salud equivale a una sensación meramente negativa (ausencia de dolor o desazón), que en sí misma no posee cualidades susceptibles de ser apreciadas.³⁵ Veamos ahora en qué consistiría la salud desde el punto de vista de su estructura objetiva.

En las reflexiones tardías, Kant concibe el estar sano como un equilibrio entre fuerzas vitales, de las que destaca la excitabilidad (*Erregbarkeit, incitabilitas*) y la irritabilidad (*Reizbarkeit, irritabilitas*).³⁶ En el mismo pliego se halla una definición en términos sensiblemente diferentes: la salud sería “la regularidad (*Gesetzmäßigkeit*) de un ser orgánico, por la cual se mantiene en la misma forma a través de la continua pérdida y sustitución de sus partes”.³⁷ Se podría aventurar que la primera caracterización se desarrolla en un cauce fisiológico-dinámico, mientras que la segunda lo hace en uno fisiológico-estructural.

Se trata, en efecto, de una dualidad propia de los estados biopsíquicos que incide, a su vez, en el modo en el que pueden ser abordados: directamente, por medio de operaciones del psiquismo, o indirectamente, a través de mediaciones físicoquímicas externas. Esta dualidad determina la configuración de las disciplinas hipocráticas, tal y como veremos a renglón seguido.

2. SENTIDO

2.1. La relación de Kant con la medicina se puede rastrear ya –aun cuando sea de mera forma externa– en su primera obra, los *Pensamientos sobre la verdadera estimación de las fuerzas vivas* (1747); en efecto, el libro se halla dedicado a un médico y profesor en la Universidad de Königsberg, Johann Christoph Bohlius. Varios autores con los que entró en contacto personal, discípulos y amigos formaron parte de los numerosos pensadores que durante el siglo XVIII compaginaban sus indagaciones filosóficas con un profundo conocimiento médico o que arribaron a la filosofía desde la Facultad de Medicina: entre ellos se encuentran Johann Gottlieb Trummer, Albrecht von Haller, Marcus Herz, Johann August Unzer, Ernst Platner, Johann Benjamin Erhard, Samuel Thomas Sömmerring, Christoph Wilhelm Hufeland y William Motherby (que dedicó a Kant su disertación *De epilepsia*, defendida en 1798 en Edimburgo).³⁸

Particular fascinación sintió por la tesis de Brown sobre la etiología de las enfermedades, a la que alude en varios lugares de sus obras, anotaciones y cartas.³⁹ El médico escocés John Brown (1735-1788) había llegado a ser conocido en toda Europa gracias al sistema nosológico presentado en sus *Elementa medicinae*, obra publicada en Edimburgo en 1780 e inspirada,

entre otras fuentes, por los descubrimientos de Haller en torno a la irritabilidad de los tejidos orgánicos. El brownianismo interpretaba todas las enfermedades en clave de exceso o defecto de excitación o fuerza (sjéno7), es decir, de estenia o astenia, y concebía la salud como un equilibrio o moderación mutua. No es de extrañar que Kant hallase paralelismos con la consideración estoica del dominio de las pasiones y con su propia idea, que desarrollaremos más adelante, del nexo entre dietética y moral.

Del interés personal de Kant por los progresos médicos –a menudo, ligados a la vivencia de sus propios achaques intestinales o de su tendencia hipocondríaca– da buena prueba su epistolario.⁴⁰ Mención aparte merecen las anotaciones y consultas que dedicó al origen de algunas epidemias (de catarro, gripe y viruela; sobre esta última volveré más adelante) y que dieron pie a una breve incursión en el ámbito de la divulgación médica,⁴¹ así como la especulación sobre el nexo entre ciertos fenómenos fisiológicos y la electricidad del aire (*Luftelectricität*).⁴² Incluso entrado ya el nuevo siglo siguió interesándose sobre los progresos médicos; llegó a tomar apuntes para uso personal de la teoría del doctor Reich sobre la fiebre que leyó en el número 222 de la *Erlanger Literaturzeitung*.⁴³

Durante el período en que redacta la práctica totalidad de las reflexiones sobre “el asunto hipocrático”, Kant distingue entre *res naturales* y *res non naturales*.⁴⁴ Las primeras serían aquellas dinámicas fisiológicas sobre las que la voluntad no posee influjo alguno; así sucede, de forma evidente, con la circulación de la sangre o el crecimiento. En cambio, *res non naturales* serían aquellas cosas que caen bajo el alcance de la libertad. Podemos enlazar esta distinción con la diversa índole de las disciplinas hipocráticas: la medicina (farmacología) y la cirugía conciernen a lo que de mecánico hay en las dinámicas relacionadas con la enfermedad y la salud; en cambio, la dietética está conectada con el ejercicio libre de la voluntad con arreglo a máximas de conducta. De hecho, Kant incluye las dos primeras dentro del concepto de terapia (*Therapeutik*), mientras que la dietética y la gimnasia integran la higiene (*Hygyeine* o *Hygiene*); esta clasificación se halla también en las reflexiones tardías y resulta, en cierto modo, paralela a la primera y coincidente con ella.⁴⁵

A mi modo de ver, la clave de la distinción entre *Therapeutik* e *Hygiene* se encuentra precisamente en aquel binomio: la primera se desenvuelve en el ámbito de las *res naturales*; la segunda, en el de las *res non naturales*. A partir de los primeros años sesenta, Kant se interesa muy de cerca por la evolución de las disciplinas que fundamentan la terapia – en particular, por el desarrollo de la química y la fisiología. Sin embargo, la orientación eleuteriológica de su pensamiento hace que las disciplinas relacionadas con la *Hygiene* y, en particular, la dietética ocupen un lugar cada vez más significativo. Así se colige de varios escritos fechados a finales de la década de los noventa. Por su enlace con la temática que nos ocupa y por su extensión me parece aquí central la tercera parte de *El conflicto de las facultades*, dedicada a la relación entre filosofía y medicina y articulada en torno al lema “Sobre el poder del ánimo para enseñorearse de sus sentimientos morbosos por medio del simple propósito”.⁴⁶

La lectura de la obra de Hufeland *Sobre el arte de prolongar la vida humana* (*Von der Kunst das menschliche Leben zu verlängern*), que recibió del propio autor el 12 de diciembre de 1796, interesó a Kant por sus conexiones con el influjo que la vida reflexiva puede tener sobre

la salud. Ya en carta a Hufeland menta la idea de desarrollar una dietética que promueva el “poder del ánimo” (*Macht des Gemüths*), idea que se halla en la antesala del escrito publicado en 1798 y recogido como tercera sección del *El conflicto de las Facultades*.⁴⁷ La filosofía moral proporcionaría una “medicina universal” que concierne a la dietética y que procede “sólo negativamente, como arte de mantener alejadas las enfermedades”.⁴⁸ Esta observación concuerda con lo que en anotaciones privadas dejará escrito calificando la dietética como una doctrina negativa centrada en la contención y la abstinencia (*sustine et abstine*).⁴⁹ Ahora bien, “un tal arte presupone una capacidad que sólo puede dar la filosofía o el espíritu que de hecho hay que presuponerle a ésta”.⁵⁰

Se trata de la reflexividad, orientada a fines práctico-morales, que convierte la dietética en herramienta con vistas al mantenimiento de la salud. Este asunto implica una cuestión no mentada de forma explícita pero de hecho actuante, a saber: en la medida en que el mantenimiento (por vía preventiva) de la salud acaece a raíz del sometimiento de las dinámicas fisiológicas “no naturales” a máximas racionalmente configuradas y como consecuencia directa de ellas (no farmacológica o quirúrgicamente mediada, sino por imposición de un propósito), la dietética sirve también para modelar el propio carácter: es cura de la mente. Así pues, no es de extrañar que la obra de Hufeland resulte de interés para Kant y que el regiomontano ponga especialmente de relieve los aspectos relacionados con la dietética. En sus propias palabras,

El estoicismo como principio de la dietética (*sustine et abstine*) no pertenece, pues, sólo a la *filosofía práctica* en cuanto *doctrina de la virtud*, sino también en cuanto *medicina*.— Ésta es por lo tanto *filosófica* cuando el solo poder de la razón en el ser humano, consistente en enseñorearse de los sentimientos sensibles por medio de un principio dado a sí mismo, determina el modo de vida. En cambio, cuando para excitar o contrarrestar estas sensaciones busca la ayuda *fuera de sí* en medios corporales (de la farmacia o la cirugía) es meramente empírica y mecánica.⁵¹

La referencia al estoicismo resulta aquí significativa. En efecto, el arte de ejercer el dominio sobre sí mismo revela una cercanía entre aquél y la tarea dietética, expresión de máximas morales, que no podía pasar desapercibida a Kant. En otro lugar ejemplifica en el estoico Posidonio y su admirable contención durante un violento ataque de gota “la fuerza de la filosofía como remedio médico”.⁵²

2.2. Hay que notar que el concepto de *Diätetik* que aquí aparece se halla notablemente ampliado respecto de la comprensión convencional. ‘Dietéticas’ serán todas aquellas medidas que tengan que ver con el ejercicio de la voluntad respecto de la contención y la abstinencia de recursos relacionados no sólo con el alimento, sino también con el descanso o el placer en general —y, por lo tanto, con las disposiciones animales (*Anlagen zur Tierheit*) a las que Kant hace referencia en otros lugares⁵³— e, incluso, con las representaciones morbosas. En este punto no sigue tanto la etimología latina (*diaeta -ae*, ‘régimen alimenticio’) sino la griega. En efecto, δίαίτα —ης implica, antes que una mera prescripción alimentaria, un ‘modo de vivir’, un ‘género o método de vida’.

Las sugerencias dietéticas relacionadas con las disposiciones animales ocupan gran parte de los comentarios de Kant en la tercera parte de *El conflicto de las Facultades*, a menudo en conexión con sus propias experiencias (que, puesto que no se trata de una ciencia universalmente necesaria, aquí pueden valer como orientación). Un lugar destacado ocupan las disquisiciones relativas al equilibrio en la sensación térmica, las horas de descanso y la alimentación, contrarrestadas por una saludable huida de la comodidad representada por la exposición moderada al frío, al madrugar o a la abstinencia.

Mención aparte merece la dietética de las representaciones. Dejar éstas a su propio albur puede ser causa patológica de la hipocondría u ocasional del insomnio. Una adecuada higiene de los pensamientos ejerce, pues, de puente hacia la salud mental y el reposo; la prudencia en el esfuerzo intelectual conduce a una "dietética del pensar" (*Diaetetic des Denkens*).⁵⁴ Kant retoma aquí, en parte, el hilo conductor tendido en su escrito de 1764 sobre las enfermedades de la cabeza. En este contexto, hay modos del pensar que traen consigo incalculables beneficios: se trata de la adquisición de nuevos conocimientos, la reflexión, la ejercitación moral y, en particular, la filosofía.

Dicho sea de paso: el *filosofar*, aun sin ser por ello filósofo, es también un medio para contrarrestar algunos sentimientos desagradables y a la vez una *agitación* del ánimo; en su ocupación trae consigo un interés que es independiente de contingencias externas y que por eso mismo, aunque sea sólo como juego, es no obstante vigoroso e interno y no deja paralizarse la fuerza vital. En cambio la *filosofía*, que pone su interés en el todo del objetivo final de la razón (la unidad absoluta), trae consigo un sentimiento de fuerza que en cierta medida bien puede compensar, por medio de una estimación racional del valor de la vida, las debilidades físicas de la edad.⁵⁵

La filosofía constituye, pues, una forma de vida saludable: es cura del cuerpo. Se trata del *Leitmotiv* del discurso que Kant había pronunciado con motivo de su elección como rector de la Universidad de Königsberg (el 1 de octubre de 1786) o de su reelección (el 4 de octubre de 1788).⁵⁶ En él se establece una analogía entre los efectos del filosofar para el cuerpo y los de la medicina para el alma ("De medicina corporis quae philosophorum est" / "Regimen mentis quod Medicorum est"). Con mucha probabilidad halló inspiración en un escrito de Ehrenfried Walther von Tschirnhaus titulado *Medicina mentis et corporis* y publicado en dos volúmenes, con fecha de 1687, en Ámsterdam;⁵⁷ ambos libros formaban parte de la biblioteca privada de Kant y fueron leídos y comentados con hasta cincuenta anotaciones en los márgenes de sus páginas.⁵⁸ También se puede rastrear la influencia de la obra de Hyeronimus David Gaubius *De regimine mentis, quod medicorum est*, a la que el regiomontano alude en una nota de los años setenta;⁵⁹ diversas anotaciones de datación imprecisa pero en todo caso anterior a los años noventa apuntan en la misma dirección.⁶⁰ Las consideraciones expuestas en *El conflicto de las Facultades* enlazan, pues, a través de la *Rektoratsrede* con reflexiones planteadas al menos veinte años antes.

El género de vida propugnado aquí va más allá de la moderación alimentaria o cronobiológica: abraza una serie de consejos encaminados a modelar un tenor de vida apto para vigorizar el cuerpo también a través del esparcimiento, la conversación o la carcajada. El contrapunto peyorativo lo constituiría el menoscabo autoinfligido por Moses Mendelssohn

bajo barniz de régimen virtuoso, al que Kant achaca el temprano fallecimiento de su amigo. Y es que, tal y como afirmará en la *Metafísica de las costumbres*,

Hacerse bien a sí mismo, en la medida en que sea necesario para gozar de la vida (cuidarse del cuerpo, pero no hasta ablandarlo) pertenece a los deberes hacia sí mismo. Su opuesto consiste en privarse, por *avaricia* (de modo esclavo), de lo necesario para el jubiloso disfrute de la vida o bien en negar a las inclinaciones naturales, por extremada *disciplina* (fanáticamente), el gozo de las alegrías de la existencia. Ambas cosas contradicen el deber del ser humano hacia sí mismo.⁶¹

En este marco, la *Rektoratsrede* busca la equidistancia:

Cuidar el cuerpo no es –como se suele decir– mimarse la piel (secundar siempre el propio talante, evitar trabajos y molestias, cosa propia de los hombres delicados y dados a la molición), sino preservar protegida e incólume la prenda que nos ha sido entregada por la naturaleza, de manera que resulte apta para su fin propio, es decir, para todas las empresas de la vida, tanto para soportar las molestias como para afrontar los trabajos.⁶²

La autoindulgencia propiciada por un tenor de vida artificioso y la rudeza autoinfligida por la negación de los bienes necesarios –ambas enflaquecedoras del propio cuerpo– constituyen las Escila y Caribdis de la dietética, tal y como Kant la entiende. Se puede rastrear aquí un modo de pensar que se despliega desde la época precrítica⁶³ hasta sus últimos escritos.⁶⁴

2.3. El interés filosófico del regiomontano por la gimnástica fue, a juzgar por la extensión de los pasajes que le dedica, menor. Como en el caso de la dietética, se trata de textos redactados fundamentalmente en los años noventa. Tal y como apuntamos previamente, la gimnástica forma parte de los saberes higiénicos; en ellos, la promoción de la salud se lleva a cabo por vía preventiva. La distingue de la dietética su parcial índole positiva: la gimnasia consiste en el cultivo de las fuerzas del cuerpo adecuado a los fines de éste⁶⁵ y no ya en una mera contención, abstinencia o medida.⁶⁶ El término aparece de igual modo en clave metafórica, tendiendo una analogía implícita entre el cultivo de la mente y del cuerpo: así, alude a una ‘gimnasia ética’ (*ethische Gymnastik*).⁶⁷

Que Kant haya privilegiado en sus disquisiciones a la dietética sobre la gimnástica parece fundado en los temas de fondo de su planteamiento. La razón de ello reside, a mi modo de ver, en los cauces por los que una y otra disciplina se vehiculan.

La gimnástica comparte con los saberes terapéuticos un rasgo de doble mediación en la forja del carácter: su formalidad específica de actuación (el ejercicio físico) requiere un instrumento de la voluntad (el cuerpo) que viene disciplinado *en su exterioridad misma*. En cambio, la dietética no requiere de otra cosa que del ejercicio de la voluntad, sin necesidad del rodeo de una ejercitación externa a ella; dicho ejercicio no posee un correlato positivo, puesto que consiste en las meras contención, abstinencia y medida. En la dietética se revela, pues, de modo inmediato el poder configurador de la libertad sobre la naturaleza; se podría decir que es su ejercitación inmediata en acto. De esta forma, la *Diätetik* viene a ocupar un lugar crucial en

el mapa antropológico kantiano: representa un paso privilegiado de la consideración fisiológica del ser humano a su consideración pragmática.

2.4. En las distintas medidas dietéticas propugnadas, la atención (*Aufmerksamkeit*) juega un papel crucial. Se trata de la inmediata operación del ánimo (*unmittelbare Gemüthsoperation*) que, en conexión con las máximas adoptadas por la razón práctica, permite detectar los excesos y contrarrestarlos por medio de hábitos mentales que, a su vez, revierten en dinámicas fisiológicas reguladas. Particularmente evidente resulta su papel en el caso de la detección y erradicación de la hipocondría, del insomnio e incluso de reacciones fisiológicas como la tos nerviosa.⁶⁸

Se trata de una observación que emparenta a Kant con las tendencias coetáneas de la psicología empírica. Éstas hallan su referencia en Johann Georg Sulzer y su influjo, a través de Jakob Friedrich Abel o August Friedrich Bök, en la Karlsschule fundada en 1770 en Stuttgart. Dada la influencia de éstos sobre Schiller, Hölderlin, Hegel o Schelling, no resulta aventurado señalar aquí un punto de inflexión que apunta hacia la *Spätaufklärung*. Así, para Schiller en su *Filosofía de la fisiología* “toda la moralidad del ser humano tiene su fundamento en la atención”.⁶⁹

El interés dispensado por Kant a la *Aufmerksamkeit* en sus reflexiones de finales de los años noventa muestra aquí un elemento de sintonía con tendencias —en otros sentidos profundamente divergentes— que en ese momento se desarrollan en Tubinga de la mano de Abel. La atención se erige en quicio del dominio de sí y pieza clave en la forja del carácter, de crucial importancia en el proyecto antropológico kantiano.

3. UBICACIÓN ESTRUCTURAL

3.1. Las disciplinas que configuran el saber hipocrático abarcan las vertientes externa e interna de la experiencia. Así, en cuanto dependiente de la física y la química, la terapia (farmacología y cirugía) se ocupa del fenómeno del cuerpo y, por tanto, del ser humano en cuanto objeto del sentido externo; en este sentido, las consideraciones kantianas lindan con la física y la química, por un lado, y con la anatomía, la fisiología general y la neurofisiología, por otro. De ahí que en época tardía Kant afirme que “la medicina de los cuerpos orgánicos pertenece también a la física”.⁷⁰

Hay que notar que, desde esta perspectiva, el de Königsberg defendió una idea holista de las relaciones mutuas entre órganos. El organismo es un sistema que ha de ser considerado como unidad de finalidad y sentido; de ahí que sus elementos se hallen emparentados por relaciones funcionales que van más allá de lo evidente. Sin duda, esta tesis de fondo había de recibir una profunda confirmación interna gracias a la teoría kantiana de la facultad de juzgar expuesta en 1790; resulta aquí de particular interés la consideración teleológica que brota de la *Crítica del juicio* al modo de un “como si” (*als ob*) que guía la investigación de la naturaleza orgánica. Con todo, esa lectura holista había sido precedida, desde el punto de vista de la filosofía de la fisiología, en el ensayo de 1764 sobre las enfermedades de la cabeza.⁷¹

En dicho escrito se presta especial atención a aquellas perturbaciones que pueden ser objeto de intervención y se presenta como plausible la idea –fundamentada sobre estudios antiguos y modernos– de que dichos desajustes no se deban a daños cerebrales sino a problemas relacionados con el aparato digestivo. Se trata de una tesis que Kant recoge de los números 150, 151 y 152 de la revista, editada en Halle por Johann August Unzer, *El médico. Semanario de medicina*, publicados en 1761. El filósofo seguía sus entregas con gran interés, muy probablemente gracias a la suscripción de la Universidad. La modulación holística que aquí aparece, en el marco de un contexto ya deudor del empirismo inglés, convierte el texto en una declaración funcionalista *avant la lettre*. En otro lugar he reconstruido la relación entre Kant, Unzer y la *Medicinische Wochenschrift*.⁷²

3.2. En cuanto dependiente del influjo directo de la determinación de la voluntad, configurada con arreglo a máximas ajustadas a principios morales, los saberes hipocráticos se hallan vinculados por medio del sentido interno a la vivencia del sujeto y a la receptividad hacia el respeto por la ley moral. La autodeterminación moral se vehicula aquí por medio de lo que Kant denomina ‘higiene’, que en la dietética posee un carácter predominantemente negativo (en cuanto prevención basada en la contención, la abstinencia y la medida) y en la gimnástica presenta un carácter parcialmente positivo (en cuanto relacionada con los rendimientos anatómico-fisiológicos producidos por el ejercicio físico).

Ya hemos visto cómo la noción de *Diätetik* sobrepasa los límites del concepto convencional para abarcar el tenor de vida. El filósofo va más allá del régimen alimenticio para centrarse en una ‘dietética del ánimo’ (*Diätetik des Gemüths*)⁷³ arraigada en una existencia autoconsciente y moral: «Mantenerse moralmente sano es una especie de *dietética* para el hombre».⁷⁴ En este sentido, la dietética conecta con el más genuino interés antropológico de Kant: la forja del carácter. «La cimentación de un carácter es la absoluta unidad del principio interno del modo de vida (*Lebenswandel*)»;⁷⁵ gracias a ella, el sujeto no posee precio sino valor.⁷⁶

Desde este punto de vista, la cuestión hipocrática enlaza con el distintivo máspreciado y la tarea más alta de la existencia humana, a saber: el reconocimiento consciente de la ley moral y la configuración de las propias máximas a la luz de principios éticos. La dietética del ánimo se constituye, pues, como herramienta al servicio del programa kantiano de edificación del sujeto de la racionalidad práctica en el mundo de la experiencia.

3.3. El saber hipocrático se convierte, de este modo, en el campo de juego de una analogía bidireccional entre la salud del cuerpo y la de la mente, por un lado, y la dietética y la filosofía, por otro. Tal y como hemos señalado en (2.3), la dietética es a la salud corporal lo que la filosofía a la mental; pero también rige que la filosofía es a la salud corporal lo que la dietética a la mental. La clave de la analogicidad reside en la aceptación de un concepto lato de *Diätetik* asimilado a la forma de vida (*Lebenswandel*), ajustada a máximas configuradas según principios morales y, por lo tanto, vehículo de la forja del carácter.

Las disciplinas hipocráticas se hallan en un territorio que linda, por un lado, con la consideración del ser humano desde el punto de vista externo y, por otro, con su vivencia de sí desde el punto de vista interno; enlazan, pues, tanto con la corporalidad como ámbito de explicación física y química (saberes terapéuticos: medicina / farmacología, cirugía) como con la subjetividad como escenario del respeto hacia la ley moral y del reconocimiento del imperativo ético que se traduce en máximas de vida (saberes higiénicos: dietética, gimnástica).

No es de extrañar, pues, que Kant se distanciara explícitamente del enfoque mecanicista propio de ciertas corrientes médicas, que en la *Rektoratsrede* ejemplifica en Friedrich Hoffmann.⁷⁷ Aunque la parcial efectividad del iatromecanicismo no haya de ser excluida, éste arranca de una comprensión inexacta del hombre –asimilado a la máquina– y de su experiencia del cuerpo: es el estatuto de lo específicamente humano el que está en juego a la hora de concebir qué aproximación médica se le adecua. La estructura espiritual de lo subjetivo y la reflexión filosófica sobre el hombre desempeñan aquí un papel crucial; la prescripción kantiana se aleja así del diseño hipocrático de la dietética, más instrumental y fisiologista. Al mismo tiempo, su faceta pragmática, que descende al precepto alimentario o cronobiológico, la aparta –a pesar de la filiación subrayada por el propio Kant– de su equivalente estoico, más centrado en lograr el señorío de la voluntad que en sus mediaciones psicosomáticas.⁷⁸

3.4. En la medida en que un Estado se halla legitimado para influir sobre el pueblo, y en que dicha influencia puede y debe ajustarse a principios morales, la medicina se erige en objeto de promoción estatal. Kant expone su planteamiento al respecto en la introducción a *El conflicto de las Facultades*,⁷⁹ texto precedido por reflexiones preparatorias en distintos escritos publicados y anotaciones personales.⁸⁰

Siguiendo la distinción tripartita entre los bienes promovibles (eterno, civil y corporal), recoge la correspondiente jerarquía relativa a las Facultades superiores (Teología, Jurisprudencia y Medicina) para señalar las respectivas obligaciones del Estado. En el caso de la Facultad médica, se espera de él una labor social de supervisión (a través del correspondiente Consejo) y la organización de infraestructuras y empleo que garanticen una suficiente disponibilidad de médicos y la erradicación del curanderismo.

En su desenvolvimiento interno, las Facultades médicas habrán de ser máximamente libres, puesto que su disciplina atañe a la naturaleza de las cosas y por ello no puede ser legislada mediante decreto. Dicha vinculación a la Naturaleza tiende un enlace con la filosofía que la emparenta estrechamente con la medicina; a la vez, el carácter empírico, contingente y particular del conocimiento médico lo aleja tanto de la teología y el derecho como de la Facultad inferior y libérrima.

La familiaridad entre filosofía y medicina se revela en una nueva versión de la analogía entre una y otra, que pivota en torno a la ambivalencia del concepto de salud: del mismo modo que el gobierno ha de supervisar la salud pública con vistas al bienestar general, se ha de ocupar también del buen ejercicio de la filosofía con vistas a ese mismo objetivo. En efecto, la salud de la razón es un efecto de la filosofía; para promoverla no basta con las medidas preventivas

ligadas a la dieta y la gimnasia de la razón práctica, sino que es preciso fomentarla también desde el enfoque terapéutico. Ello requiere que se mantengan dispensarios –en este caso, de remedios salutariferos para la razón práctica– en los que despachan facultativos dotados de legitimidad para ejercer su oficio y no simples aficionados; los poderes públicos habrán de velar por ello. Se trata de una nueva vuelta de tuerca a la analogía entre la filosofía y los saberes hipocráticos, que aparece en el *Anuncio de la próxima conclusión de un tratado para la paz perpetua en la filosofía*.⁸¹

UN CASO DE INTERSECCIÓN DE PLANOS: LA LUCHA CONTRA LA VIRUELA

Uno de los planos en los que medicina, jurisprudencia y filosofía se intersecan es el de la reflexión ética sobre las condiciones de la cura. En este sentido, un avance médico que suscitó profundos interrogantes a Kant fue la vacunación. Nos detendremos en este asunto como última parada de nuestro trayecto.

En Europa, la inoculación fue introducida durante la primera mitad del siglo XVIII, suscitando la admiración de pensadores influyentes como Voltaire. La población de Königsberg se familiarizó con ella probablemente durante las últimas décadas de la centuria (de hecho, según el testimonio de Wasianski la propia madre de Kant aún habría fallecido de viruela); en la extensión de la vacuna a todas las clases sociales hubo de jugar un papel decisivo la implicación normativa del Estado.

No sólo el fundamento biológico de las vacunas, sino también su cuna geográfica interesó al filósofo. En las lecciones de geografía alude a su procedencia asiática; sitúa su descubrimiento en el Astracán tártaro, donde se habría comenzado a aplicar la cura contra la viruela por sus efectos estéticos (dado que evita la huella de la enfermedad en la epidermis facial).⁸² Ahora bien: el principio de la vacunación –inocular en el organismo gérmenes debilitados de la propia enfermedad– parecería ser un modo de exponerse al peligro; contrasta, pues, con la primera obligación moral del ser humano hacia sí mismo en cuanto animal: favorecer la conservación de su vida. Así lo expone Kant, en forma de pregunta casuística, en la sección de la *Metafísica de las costumbres* dedicada a los deberes del hombre hacia sí mismo: «¿Es lícita la inoculación de la viruela?».⁸³ La lectura de esas disquisiciones incitó a un lector de noble cuna, Fabian Emil conde de Dohna, a escribir a Kant desde Mallnitz (actual Małomice, Polonia) para consultar su opinión sobre la licitud ética de la vacunación en el caso de su propia esposa, que a causa de un precedente cercano (el fallecimiento de una pariente, a causa de la viruela, a los 19 años) había tomado la determinación de hacerse tratar; la respuesta no se ha conservado.⁸⁴ Un año después, un médico de Halle escribió a Kant transmitiéndole la inquietud de un notable miembro de su comunidad al respecto.⁸⁵

Que su opinión era contraria lo deja entrever, de entrada, una reflexión anotada durante los meses que circundaron al planteamiento del asunto. Aludiendo al papel que la guerra y la viruela desempeñan en el control natural de la población, señala ahí que la primera de ellas jamás podría ser usada lícitamente en ese sentido por hombre alguno; «en cambio, el segundo medio –a saber, el de la viruela infantil– es permitido por otros hombres: ya que, en efecto, el gobierno ordena la vacunación antivariólica *general* (puesto que ineludible para cada individuo); por

consiguiente, está permitido». ⁸⁶ En una anotación al margen de su último manuscrito extrema la dureza en el juicio. Comienza por señalar que hallarse en peligro de muerte es una gran desgracia (*Übel*); quien habiendo podido evitarlo cae en él, peca de ligereza; quien se expone a cometer un acto reprobado, delinque; quien pone a los demás en peligro de una u otra cosa, actúa con malicia (*Bosheit*). A continuación, y antes de presentar el asunto de la vacuna como caso ejemplar, se pregunta: «¿Es lícito poner a otro (con o sin su consentimiento) en uno u otro de estos peligros, a fin de que de ello provenga para el hombre algo bueno –un beneficio físico o moral– que sin ese riesgo (*periclitatio moralis*) no habría podido ser alcanzado?» Y a renglón seguido escribe: «El apóstol dice: “que aquéllos que así piensan merecen la condenación”». ⁸⁷ En términos casi literales se expresa en otras anotaciones, cercanas en el tiempo; en ellas llega a referirse a la práctica de la vacunación como una “temeridad” (*Waghälsigkeit*), para preguntarse si «no sea completamente ilícita desde el punto de vista moral, de manera que no hubiera de implicarse sólo el médico sino también el perito moral de Derecho». ⁸⁸

En el escrito biográfico redactado por Wasianski *Immanuel Kant en sus últimos años de vida* se recoge la idea de que el filósofo rechazó la vacuna porque implicaba la inoculación de sustancias animales que podrían acercar al ser humano al estado propio de la bestia. ⁸⁹ Hay que recordar que la primera página de la historia de las vacunas se escribió gracias a la observación, llevada a cabo por el médico inglés Edward Jenner en 1796, de que la incidencia de la viruela era menor entre las recolectoras de leche de vaca; el primer y exitoso experimento consistió precisamente en inyectar viruela vacuna –variante de sintomatología leve de la viruela humana– en el niño James Phipps, para comprobar después su inmunización. Cuando Kant alude a la (a su juicio temeraria) inoculación de sustancias animales en humanos está recogiendo el estado contemporáneo del asunto –interpretado, eso sí, en un registro especulativo de lejanas resonancias materialistas.

A mi modo de ver, este rechazo a la vacuna se halla enraizado en motivos de índole meramente coyuntural, que pivotan en torno a la percepción de la temeridad pretendidamente implícita en ella. Dicha percepción brota de la incertidumbre aún asociada a un procedimiento de implantación reciente. Pensemos, además, que la práctica a la que Kant se refería en la *Metafísica de las costumbres* muy probablemente no era aún la vacunación propiamente dicha –inoculación de la viruela vacuna, en este caso– en la estela de la obra de Jenner, ⁹⁰ cuya primera traducción al alemán, a cargo de G. F. Ballhom, se publicó un año después. ⁹¹ Más bien había de tener en mente la arriesgada práctica de la inoculación de viruela humana, que se venía difundiendo desde mediados de siglo y llevaba aparejada una elevada tasa de mortandad. Que en sus conversaciones especulara después sobre la posible tendencia a la “bestialidad” inoculada con ella, como recoge Wasianski, atestigua que en sus últimos años de vida sí habría llegado a conocer la vacuna jenneriana.

En la medida en que el margen de riesgo se redujese, el juicio moral hubiera debido invertirse. Recordemos que, en buena letra kantiana, el deber básico del ser humano hacia sí mismo en cuanto animal es favorecer la conservación de la vida. Una vez minimizado e incluso eliminado el riesgo asociado a la vacuna, la máxima conforme al principio moral no sólo la permite sino que la exige.

Más allá del juicio, históricamente condicionado, en torno a la licitud ética de la vacuna, el caso de la lucha contra la viruela constituye un magnífico ejemplo de intersección entre medicina, filosofía y jurisprudencia. No es de extrañar que Kant –ya anciano y vivamente interesado por esa encrucijada– le dedicase prolijas reflexiones, anotadas al margen de su escrito postrero, en un crepuscular intento de arrojar luz sobre una problemática ligada a la salud de sus contemporáneos.

4. OBSERVACIONES CONCLUSIVAS. UN TERRITORIO DE TRANSICIÓN

El análisis de las fuentes y de su trasfondo etimológico nos ha permitido acceder al significado de los que con Kant hemos denominado ‘saberes hipocráticos’. Que el filósofo emplee la expresión ‘Hippocratisches Geschäft’ como paraguas conceptual responde a razones relativas a la historia de la ciencia, que hemos dilucidado y que ocupan un lugar relevante en la evolución intelectual del autor. La distinción entre *Medizin*, *Chirurgie*, *Diätetik* y *Gymnasiastic* apunta en dos direcciones –terapéutica e higiénica– que, a su vez, lindan con sendos territorios de frontera: con la física y la química, por un lado; con la antropología en sentido pragmático y la ética, por otro. En este primer aspecto de nuestra indagación han resultado de crucial importancia las anotaciones kantianas de mediados y finales de los años noventa.

El sentido de la empresa hipocrática atañe al restablecimiento o mantenimiento de la salud, y esto a través de dos vías: las que conciernen a elementos orgánicos que no pueden ser modificados sino a través de mediaciones externas (*res naturales*) y las que afectan a aspectos de la vida que son susceptibles de intervención directa de la voluntad (*res non naturales*). De aquí brota la diferencia entre disciplinas terapéuticas (farmacología y cirugía) e higiénicas (dietética y gimnástica). Todas ellas comienzan a ocupar un espacio sustantivo en la producción kantiana desde mediados de los años sesenta. Sin embargo, la dietética recibe un tratamiento especial, que se evidencia a partir de los años ochenta; el sentido del término excede su acepción convencional para convertirse –siguiendo la estela de su etimología griega– en sinónimo de forma o estilo de vida. En este punto resultan relevantes tanto el *Ensayo sobre las enfermedades de la cabeza* y el discurso rectoral como la *Crítica del juicio*, la recensión al escrito de Hufeland *Sobre el arte de prolongar la vida humana*, la obra *El conflicto de las Facultades*, el epílogo al escrito de Sömmerring y la *Antropología en sentido pragmático*.

Las indagaciones anteriores nos han llevado a ubicar los saberes hipocráticos en una región de frontera. Ese territorio linda, por un lado, con la consideración fisiológica del ser humano, objeto de constante atención filosófica de Kant desde el escrito sobre las enfermedades de la cabeza (1764) hasta el epílogo a la obra de Sömmerring sobre la sede cerebral del alma (1796); limita, por otro, con la consideración pragmática del ser humano, centrada en torno a la forja del carácter por medio del establecimiento de máximas orientadas por principios morales. Reside aquí la clave de la analogía, explotada por Kant en diversos textos, entre la cura de la mente y el cuerpo y el papel respectivo de la medicina y la filosofía. Ambas disciplinas quedan emparentadas en la organización académica que el autor propone como deseable con vistas a la supervisión del Estado en orden al bien común.

La dietética, tal y como queda concebida en este marco fronterizo, constituye una pieza clave que permite la transición de la antropología en sentido fisiológico a la antropología en sentido pragmático. Se echa de ver, pues, cómo los saberes hipocráticos delimitan una región de alto valor en el programa filosófico kantiano. Si la antropología es a la moral lo que la geodesia a la geometría, la forma de vida en que la dietética consiste equivale al trabajo agrícola: en ella y en éste se trata, a fin de cuentas, de ese fructífero empeño que los clásicos denominaron cultura.

RESUMEN: El objetivo del presente *paper* consiste en mostrar el enlace estructural entre la medicina y las inquietudes práctico-morales de la obra kantiana, con hincapié en el período crítico tardío. Se comienza por dilucidar el significado de la expresión 'cuestión hipocrática' y distinguir las disciplinas que la integran. Seguidamente se presenta las vías a través de las cuales se pretende restablecer o mantener la salud, lo cual conduce a dos variantes de agencia que lindan con sendas y heterogéneas facetas de lo humano. Se delinea así la ubicación de la medicina en el conjunto de saberes sobre el hombre, entre los que revela ocupar un lugar crucial de transición.

PALABRAS CLAVE: Medicina – dietética - forma de vida – carácter - antropología pragmática.

ABSTRACT: The present *paper* aims to show the structural link between Medicine and the moral-practical concerns of Kantian work, laying emphasis on the late critical period. It begins by clarifying the meaning of the expression 'hippocratical question' and distinguishing the disciplines that are part of it. Following this, the procedures through which Medicine strives to restore or to maintain health are presented; they lead to two agency models that link with two heterogeneous facets of the human being. The so delineated place of Medicine within the entirety of knowledge about man is revealed to occupy a crucial place of transition.

KEYWORDS: Medicine – Dietetics - Way of Life – Character - Pragmatic Anthropology.

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NOTAS

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2 El presente artículo se integra en el marco de un proyecto en torno al alcance y límites de la visión naturalista en el pensamiento kantiano. Sus antecedentes próximos se hallan en la monografía de TERUEL, P.J. (2008a), así como en las siguientes publicaciones: TERUEL, P.J. (2013a, p. 23-43); TERUEL, P.J. (2013b, p. 507-518); TERUEL, P. J. (ed.) (2011, p. 245-302); TERUEL, P.J. (2010a, p. 215-241); TERUEL, P.J. (2010b, p. 27-52); TERUEL, P. J. (2008b) p. 59-76).

3 Anth, AA 07: 119. Sobre los modos de citación, ver la nota nº 7.

4 La lección está fechada el 1 de agosto de 1785. Cfr. AA 25: 1211.

5 Cfr. *Kritik der reinen Vernunft* (1787²), 833; *Log*, AA 09: 25; carta a Carl Friedrich Staudlin del 4 de mayo de 1793, Br AA 11: 429.

6 Me referiré a las obras de Kant según la edición canónica *Gesammelte Schriften*, Königliche Preußische Akademie der Wissenschaften / Georg Reimer / Walter de Gruyter / Vereinigung Wissenschaftlicher Verleger / Akademie der Wissenschaften zu Göttingen / Akademie der Wissenschaften der DDR, Berlín / Leipzig, 1907- (a partir de aquí, AA), con indicación de volumen y número de página. Para los títulos, y a partir de su segunda aparición, emplearé las abreviaturas establecidas por la *Kant-Forschungsstelle* de la Universidad Johannes Gutenberg de Maguncia. En el caso de las reflexiones, indicaré el número y la datación tal y como fueron establecidos por Erich Adickes para la edición del legado póstumo y referiré volumen y página de la edición de la Academia en que se hallan publicadas; si la anotación se encuentra entre las páginas de una determinada obra, lo señalaré seguidamente. Excepto en el caso de que se indique lo contrario, las traducciones son mías.

- 7 ERHARD, J. B. (1795).
- 8 Cfr. OSTERHAUSEN, J. K. (1798, pp. 8-9).
- 9 SCHELLING, F. W. J. (1856-61, p. 131) ; SCHELLING, F. W. J. (1958ss², p. 65).
- 10 Cfr. GREGORY, F. (1989, p. 17-35).
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- 22 Cfr. WIESING, U (2008, p. 231-236).
- 23 BOCHICCHIO, V. (ed.) (2007).
- 24 Cfr. reflexión nº 1541, fase w⁵ (1799-1800), AA 15: 966, tercera de las páginas sueltas encontradas en la p. 20 del ejemplar personal de la obra de Meier *Auszug aus der Vernunftlehre*, que Kant empleaba para sus lecciones de lógica; R 1544, fase w⁵ (1799-1800), AA 15: 966, junto a la p. 38 del *Auszug* de Meier; R 1545, fase w⁵ (1799-1800), AA 15: 967, junto a la p. 10 del *Auszug* de Meier.
- 25 Cfr. R 1540, w⁵ (1799), AA 15: 965, página suelta encontrada en el ejemplar personal del *Auszug* de Meier.
- 26 Cfr. Anth, AA 07: 214.
- 27 “Das (Hippocratiche) Geschäfte ist 1. für den medicus chemisch, 2. für den Chirurgus mechanisch, 3. für den Diätetiker [dyn] dynamisch., R 1541, cfr. *supra*.
- 28 “Aus der Erfahrung abstrahirte allgemeine Grundsätze (der Heilkunde) ist ein Widerspruch mit sich selbst., *Opus postumum*, décimo convoluto (agosto 1799-diciembre 1800), AA 22: 411.
- 29 Cfr. R 535, fase w² (1792-94), AA 15: 233.
- 30 Cfr. TERUEL, P. J. (2008a, p. 224ss).
- 31 GROSS, F. (ed.) (1912, p. 113).
- 32 Cfr. TERUEL, P.J. (2008b: 59-76); (2013a, p. 23-43).
- 33 Cfr. *Der Streit der Fakultäten* (=ST) (1798), AA 06: 111; R 1540, v. *supra*; R 1547, fase w⁵ (a partir de finales de 1800), AA 15: 970.
- 34 “*Ein jeder Mensch hat seine besondere Art gesund zu seyn*., carta a Moses Mendelssohn del 16 de agosto de 1783, AA 10: 344.
- 35 Cfr. *Die Metaphysik der Sitten* (=MS) (1798), AA 06:485.
- 36 “*Gesundheit* ist das Gleichgewicht im Antagonism der Lebenskraft thierischer Körper. *Erregbarkeit* (*incitabilitas*) im Nervensystem und *Reizbarkeit* (*irritabilitas*) im Muscularsystem sind die bewegende Kräfte, die zum Leben gehören., R 1539, fase w⁵ (1798-1804), AA 15: 963. Se trata de anotaciones que se encuentran catalogadas como hojas sueltas en el convoluto K 2 de la Real Biblioteca Universitaria de Königsberg; la cita se encuentra en la primera de ellas.
- 37 “Die Gesetzmäßigkeit eines organischen Wesens, sich [durch] bey der Continuirlichen Wegschaffung seiner Theile und Ergänzung in derselben Form zu erhalten, ist die Gesundheit., Id., segunda hoja, AA 15: 964.
- 38 Así lo refiere Kant en carta J. B. Erhard del 20 de diciembre de 1799, cfr. Br AA 12: 296.

39 Cfr. MS, prólogo, AA 06: 207; Anth, AA 07: 255; carta a J. B. Erhard del 20 de diciembre de 1799, AA 12: 296; R 1539, op. cit., AA 15: 963, 964; R 1544, op. cit., AA 15: 967; R 1548, fase w⁵ (1798-1804), AA 15: 970; OP, quinto convoluto (julio 1797-mayo 1799), AA 22: 612; octavo convoluto (octubre-diciembre 1798), AA 22: 176; décimo convoluto (agosto 1799-diciembre 1800), AA 22: 300; decimoprimer convoluto (abril 1800), AA 22: 469; primer convoluto (diciembre 1800-febrero 1803), AA 21: 71.

40 Cfr., por ejemplo, la carta remitida a Marcus Herz el 20 de agosto de 1777, AA 10: 211. Sobre las tendencias hipocondríacas de Kant, véase KUEHN, M. (2001, capítulo 4).

41 Se trata de un escrito, dirigido en 1782 a la comunidad médica, en el que exponía su postura sobre el origen y modo de transmisión de la epidemia de gripe que se desató a principios de la década de los ochenta en la Europa continental; le adjuntó la traducción alemana –facilitada por un amigo– de un artículo sobre la oleada anterior de la epidemia, publicado por el doctor John Fothergill en 1776 en el *Gentelman's [sic] Magazine* de Londres. Bajo el título "Nachricht an Ärzte", la breve comunicación kantiana y el artículo adjunto se hallan recogidos entre las páginas 6 y 8 del volumen octavo de la Akademie-Ausgabe.

42 Cfr. carta a Johann Daniel Metzger del 31 de diciembre de 1782, AA 10: 304ss.; carta a Ludwig Ernst Borowski redactada entre el 6 y el 22 de marzo de 1790, AA 11: 141ss.; Refl 1558 y 1559, fase w⁵ (1798-1804), AA 15: 978-979.

43 Cfr. R 1546, datada por Adickes como más pronto a finales de 1800, AA 15: 967-968.

44 Cfr. R 1527, w²⁻⁴ (1792-1797), AA 15: 954-955.

45 Cfr. R 1540, v. *supra*; reflexión n° 1539, v. *supra*; OP, décimo convoluto (agosto 1799-diciembre 1800), AA 22: 375.

46 SF, AA 07: 97-114.

47 Cfr. carta de Kant a Christoph Wilhelm Hufeland fechada el 19 de abril de 1797, AA 12: 157ss.

48 "... So daß moralisch-praktische Philosophie zugleich eine Universalmedizin abgiebt, die zwar nicht Allen für Alles hilft, aber doch in keinem Recepte mangeln kann. Dieses Universalmittel betrifft aber nur die Diätetik, d.i. es wirkt nur negativ, als Kunst, Krankheiten abzuhalten,., SF, AA 07: 98.

49 R 1540, v. *supra*.

50 "Dergleichen Kunst aber setzt ein Vermögen voraus, das nur Philosophie, oder der Geist derselben, den man schlechthin voraussetzen muß, geben kann,., SF, AA 07: 98.

51 "Der Stoicism als Princip der Diätetik (*sustine et abstine*) gehört also nicht bloß zur *praktischen Philosophie* als *Tugendlehre*, sondern auch zu ihr als *Heilkunde*.— Diese ist alsdann *philosophisch*, wenn bloß die Macht der Vernunft im Menschen, über seine sinnliche Gefühle durch einen sich selbst gegebenen Grundsatz Meister zu sein, die Lebensweise bestimmt. Dagegen, wenn sie diese Empfindungen zu erregen oder abzuwehren die Hilfe *außer sich* in körperlichen Mitteln (der Apotheke, oder der Chirurgie) sucht, sie bloß empirisch und mechanisch ist,., Id., AA 07: 100-101.

52 "Beispiel von der Kraft der Philosophie als Arzneimittel". Cfr. *Verkündigung des nahes Abschlusses eines Tractats zum ewigen Frieden in der Philosophie* (=VNAEF) (1796), AA 08: 414-415.

53 Cfr. en particular *Die Religion innerhalb der Grenzen der bloßen Vernunft* (=RGV) (1794), sección "Von der ursprünglichen Anlage zum Guten in der menschlichen Natur", AA 06: 26.

54 R 1105, fase q² (1783-84), AA 15: 491.

55 "Übrigens ist das *Philosophiren*, ohne darum eben Philosoph zu sein, auch ein Mittel der Abwehrgung mancher unangenehmer Gefühle und doch zugleich *Agitation* des Gemüths, welches in seine Beschäftigung ein Interesse bringt, das von äußern Zufälligkeiten unabhängig und eben darum, obgleich nur als Spiel, dennoch kräftig und inniglich ist und die Lebenskraft nicht stocken läßt. Dagegen *Philosophie*, die ihr Interesse am Ganzen des Endzwecks der Vernunft (der eine absolute Einheit ist) hat, ein Gefühl der Kraft bei sich führt, welches die körperliche Schwächen des Alters in gewissem Maße durch vernünftige Schätzung des Werths des Lebens wohl vergüten kann,., SF, AA 07: 102.

56 Sobre la datación del texto, v. REICKE, J (1881, p. 293-309). Dado que Mendelssohn falleció el 4 de enero de 1786, y teniendo en cuenta su protagonismo en la *Rektorsrede*, me inclino por la datación más temprana.

57 TSCHIRNHAUS, E. W. VON (1687 y 1686).

58 Cfr. WARDA, A. (1922, p. 30).

59 Cfr. R 1491, segunda página, fase s (1775-77) o bien y (1776-78), AA 15: 748.

60 Cfr. R 1573, fase g (1760-64)? h (1764-68)? k (1769)? r (1773-75)?, AA 16: 12; R 1629, fase q (1780-89), anotación al margen de su ejemplar personal de la *Metaphysica* de Baumgarten, AA 16: 50.

61 “Sich selber güthlich thun, so weit als nöthig ist, um nur am Leben ein Vergnügen zu finden, (seinen Leib, doch nicht bis zur Weichlichkeit zu pflegen) gehört zu den Pflichten gegen sich selbst; – deren Gegentheil ist: sich aus *Geiz* (sklavisch) des zum frohen Genuß des Lebens Nothwendigen oder aus übertriebener *Disciplin* seiner natürlichen Neigungen (schwärmerisch) sich des Genusses der Lebensfreuden zu berauben, welches beides der Pflicht des Menschen gegen sich selbst widerstreitet.” MS, AA 06: 452.

62 “Corpus curare non est cuticulam, qvov dicunt, curare [aut omnes], (genio suo semper indulgere), labores et molestias arcere, qvov est hominis mollis et delicatuli, sed [quasi] illud ceu demandatum nobis a natura pignus sartum et incolume finiqve suo [aptum], h.e. omnibus vitae negotiis [par], tam ferendis molestiis quam exantlandis laboribus, haud impar servare.” *Rektoratsrede: De Medicina Corporis, quae Philosophorum est*, AA 15: 947-948.

63 Cfr. por ejemplo VKK, AA 02: 269.

64 Véanse, en particular, las reflexiones citadas en este artículo.

65 Cfr. MS, AA 06: 445; *Pädagogik* (=Päd) (1803), AA 09: 469.

66 Así pues, el vínculo textual entre la gimnástica y los principios negativos “*sustine et abstine*”, que aparece en una reflexión tardía, ha de ser considerado un *lapsus*. Cfr. OP, segundo pliego de anotaciones al décimo convoluto, fase w⁵ (1798-1804), AA 15: 974.

67 MS, AA 06: 485.

68 Cfr. SF, AA 07: 111.

69 SCHILLER, F. (1943, vol. XX, p. 26). Sobre la gestación del paradigma psicológico-empírico en Stuttgart y Tubinga y su relación dialéctica con la filosofía crítica véase la obra de MACOR, L.A. (2011).

70 “Also ist die Heilkunde organischer Körper auch zur Physik gehörend..”, Complementos al OP, AA 23: 485.

71 Se trata de *Versuch über die Krankheiten des Kopfes*, reproducido los días 13 y 27 de febrero de 1764 en la publicación periódica *Königsbergische Gelehrte und Politische Zeitungen*.

72 Cfr. TERUEL, P. J. (2013a, en particular p. 29-34).

73 Anth, AA 07: 207.

74 „Es ist eine Art von *Diätetik* für den Menschen, sich moralisch gesund zu erhalten..”, MS, AA 06:485.

75 “... Die Gründung eines Charakters aber ist absolute Einheit des innern Principis des Lebenswandels überhaupt..”, Anth, AA 07: 295.

76 Id., AA 07: 292.

77 Cfr. *Rektoratsrede*, p. 2, AA 15: 943-944.

78 Con acribia lo ha apreciado Bochicchio en sobresalientes páginas de su epílogo a *Immanuel Kant. De medicina corporis*, op. cit., p. 89-97.

79 Cfr. en particular AA 07: 26-27.

80 Así, por ejemplo, en las notas escritas al margen de la *Rektoratsrede*, cfr. AA 15: 953.

81 Cfr. VNAEF, AA 08: 414.

82 Cfr. *Physische Geographie* (=PG) (1802), AA 09: 403.

83 “Ist also die Pockeninoculation erlaubt?” MS, AA 06: 424.

84 Cfr. carta de Fabian Emil conde de Dohna remitida a Kant el 28 de agosto de 1799, AA 12: 283-284.

85 Cfr. carta de Johann Christian Wilhelm Juncker remitida a Kant el 27 de junio de 1800, AA 12: 314.

86 “... So ist doch das zweyte Mittel, nämlich das der Kinderpocken, durch andere Menschen erlaubt: daß nämlich die Regierung die Pockeninoculirung *durchgängig* anbefehle, da sie dann für jeden Einzelnen unvermeidlich: mithin erlaubt ist..”, R 1551, fase w⁴⁻⁵ (1796-1804), AA 15: 972.

87 “Ist es erlaubt, einen Anderen in die eine oder die andere dieser Gefahren, mit oder ohne seine Einwilligung, zu bringen, damit etwas Gutes – ein physisches oder moralisches Heil für Menschen herauskomme, das ohne diese Gefährlichkeit (periclitatio moralis) nicht bewirkt werden dürfte? der Apostel sagt: “daß deren, die so denken, Verdammnis ganz recht sey”..”, OP, anotación al margen del décimo convoluto (agosto 1799-diciembre 1800), segundo pliego, primera hoja, AA 22: 296.

88 "... Nicht gänzlich moralisch unzulässig sey hierüber also nicht blos der Arzt sondern der moralische Rechtslehrer in Anspruch genommen werden müsse." OP, anotación al margen del décimo convoluto (agosto 1799-diciembre 1800), tercer pliego, primera hoja, AA 22: 302.

89 *Immanuel Kant in seinen letzten Lebensjahren*, editado por F. Groß (1912) junto con los escritos biográficos de Borowski y Jachmann. Se da la circunstancia de que Ehregott Andreas Christoph Wasianski, que estudió Teología en la Albertina, mantuvo a lo largo de su vida un profundo interés por las ciencias naturales y, en particular, por la medicina.

90 JENNER, E. (1798).

91 BALLHOM, G.F. *Untersuchungen über die Ursachen und Wirkungen der Kuhpocken, einer Krankheit, die man in einigen westlichen Provinzen Englands vorzüglich in Gloucestershire bemerkt hat*, Hannover, 1799.

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KANT AND THE PROBLEM OF FORM: THEORIES OF ANIMAL GENERATION, THEORIES OF MIND

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Kant has long been revered as an uncompromising moralist and a committed transcendental idealist, but in the past two decades he has been introduced to a new generation of students as an anthropologist, as a physical geographer, and even as a theorist of race. This change has much to do with the recent addition of Kant's lectures on Physical Geography and Anthropology to the edited collections of Kant's works. These textual additions to Kant's corpus and, in their wake, the re-characterization of Kant as something of an eighteenth-century naturalist, have raised all manner of questions for scholars seeking to connect the careful edifice that is the critical system with the wide-ranging discussions now known to have been taking place across the rest of Kant's work. Paul Menzer raised this question already in 1911 in *Kants Lehre von der Entwicklung in Natur und Geschichte*, answering then (and in essential anticipation of the view held by the majority of subsequent Kant scholars) that it was necessary to view Kant's forays into natural history as a set of discussions requiring sharp delineation from his epistemology and ethics, for these were discussions running on "parallel tracks," as he would put it, and their impact on the critical system, if any, was merely metaphorical.²

The first inroads against this policy would be made by researchers investigating the centrality of natural historical considerations in Kant's early social and political essays, essays such as *Idea for a Universal History of Mankind* (1784) wherein Kant's prominent application of teleology to history signaled the continued adoption of a methodological device first used by him in his account *Of the Different Races of Human Beings* in 1775. Similar connections were made between Kant's support for Basedow's attempts to reform educational practices in the mid

1770s and the increasing attention paid by Kant to *Bildung*, in all its various instantiations, as he sought throughout the 1780s and '90s to sort out just what was meant when referring to the formation of character and indeed to the vocation of humankind as a whole.³ As an increasingly comprehensive view of Kant's position came to show, his well-regarded works on ethics and governance simply could not be meaningfully separated from his views on education and history. But these latter views had in turn come out of works in the 1770s, works that had been saturated by natural historical terms: were these now to be also taken into consideration when approaching Kant's position on moral and political life? For many researchers today, the answer is an unqualified yes.⁴

In this essay I proceed in very much the same vein so far as I will be here investigating the connection between Kant's theory of cognition and his interest in debates regarding biological generation and development that were taking place at the time. During the eighteenth century investigations into embryogenesis too fell under the broad umbrella of natural history. Indeed the wide array of topics under consideration by naturalists was part of the great attraction held by the field, as Thomas Ramsay observed in 1772: "Natural history is, at present, the favourite science over all Europe, and the progress which has been made in it will distinguish and characterize the eighteenth century in the annals of literature."⁵

1. FROM TAXONOMY TO NATURAL HISTORY

Natural history's rise in popularity had gone hand in hand with the field's own development during the eighteenth century. In 1735 Linnaeus' taxonomical handbook, the *Systema naturae*, became a near-overnight success, providing the tools of the systematist to learned and layman alike. As one biographer put it, his great reputation rested "in the democratizing accessibility of his achievement. For the value of Linnaeus's classifications lay in their humdrum, everyday usefulness ... In his guides and handbooks, and in the structure of his systems as such, Linnaeus lowered the educational and financial entrance fee to the study of nature."⁶ Linnaeus was able to combine this accessibility, moreover, with a system claiming sensitivity to the critiques that had been launched by Locke and Ray regarding the arbitrariness of classification schemes altogether.⁷ As a follower of Cesalpino (and thereby Aristotle) Linnaeus both believed in the existence of a natural system and recognized the near impossibility of its discovery.⁸ He thus recognized that his system was artificial, and that by focusing on the "fructification organs" of plants and animals that it was bound to produce cases with counter-intuitive results.⁹ But it was a success nonetheless: its nomenclature met the needs of systematists and it provided naturalists everywhere with a coherent program for investigation. As one contemporary summarized it, with these "tables we can refer any fish, plant, or mineral, to its genus, and, subsequently, to its species, though none of us had seen it before. I think these tables so eminently useful, that everybody ought to have them hanging in his study, like maps."¹⁰

The ready acceptance of Linnaean taxonomy would change by mid-century. Hans Sloane in England, Michel Adanson in France, and Albrecht von Haller in Germany each

contributed important criticisms regarding the weakness of any system which relied on only a handful of characteristics in the determination of species. Linnaeus' most trenchant critic, on this point, was Buffon. Beginning in 1749, Georges Leclerc, Comte du Buffon published the first three of what would eventually become some thirty-six volumes dedicated to a freshly conceived history of nature.¹¹ And Buffon opened the first volume of his *Natural History* with a direct attack on Linnaeus. "Who does not see," Buffon demanded, "that whatever proceeds in such a manner cannot be considered a science? It is at the very most only a convention, an arbitrary language, a means of mutual understanding. But no real cognizance of things can result from it."¹² Critical of the "bizarre assemblages" in Linnaeus's taxonomy—"the elm and the carrot, the rose and the strawberry, the oak and the bloodwort"—Buffon suggested that the success of such "ridiculousness" could only be due to the fact that it was "presented with a certain appearance of mysterious order and wrapped up in Greek and botanical erudition."¹³ Indeed Linnaeus's failure went beyond his attention to an arbitrarily chosen set of organs, as Buffon saw it, for Linnaeus had more importantly failed to grasp the essence of natural unity, an interconnected web whose nuances would present an infinity of "intermediate species and mixed objects" to confound the systematist.¹⁴ In place of this Buffon offered instead 'a natural history of all things general and particular,' a history whose new method—Buffon's synthesis of empirical observation, rational reflection, and probability theory—would provide "the complete description and the exact history of each particular thing," including "not only the history of the individual, but that of the entire species."¹⁵ Buffon's attack on Linnaeus, combined with the attention he paid throughout the *Natural History* to questions of origin, generation, and genealogy, thus offered Buffon's readers not only a lesson regarding the limitations of classification, but his ambition to turn natural history into a genuinely explanatory science nonetheless.

2. THEORIES OF ANIMAL GENERATION

Buffon's investigations throughout the *Natural History* encompassed everything from cosmology to physiology, and it was wide-ranging discussions like these which soon came to define the field. While volume one of the *Natural History* was concerned with the birth of the cosmos, Buffon turned in volume two to the question of organic generation. Indeed it was critical that this part of the theory be introduced early insofar as it set the stage for Buffon's later approach to the processes of variation and heredity which occurred during the fashioning of the fetus. Buffon knew that degrees of variation were normal within a stable species line—indeed this was the primary fact upon which all breeders operated—but he was interested instead in the more radical transformations that could take place in a species line as a result of its degeneration.¹⁶ For Buffon, a line would degenerate once environmental conditions had been changed enough to effect the reproductive processes. The key to understanding this lay in Buffon's notion of "organic molecules." These living nutrients came from the soil and operated throughout the food chain so far as they were taken up by plants and, through these, by animals as well.¹⁷ While climate and habits were capable of effecting the external features of a species (colour, fur), only the organic molecules had the power to effect the embryogenetic production

of a seed or animal to the extent that a heritable change to the line itself could occur. So long as members of a given species remained close to their point of origin, Buffon argued, the line would stay true. Degeneration thus occurred primarily as a result of migration since this meant entirely new environmental factors including, most importantly, food.

To make sense of Buffon's account of reproduction we need to remember that in this time period the greatest stumbling block facing any theory of generation concerned the problem of form. Traditional accounts had relied on Aristotle's notion of an entelechy as the source of both direction and force when it came to understanding the production of organisms. But by the middle of the 17th century this view of nature was out of favour, and mechanism was in its ascendancy, so the Modern period saw great confusion in the life sciences as theorists struggled to make sense of reproduction on the basis of mechanical principles alone.¹⁸ It was in light of these difficulties that "preexistence" theories of generation began to gain traction. Although there were a number of versions of the theory, the main point in each concerned the manner in which the problem of form was solved. In the earliest of these, God was said to have made each organic individual at the time of creation. The location of these submicroscopic individuals varied—the Ovisists located the future generations in the female, the Animalculists or Spermists in the testes of the male members of a species, the Panspermist Claude Perrault took them to be in the soil—but in each account the critical fact was that all individuals had been entirely preformed and were only waiting until that predetermined point at which they could begin to expand.¹⁹ An expansion that all theorists agreed could be certainly explained by way of mechanics.

Having laid out his own theory of generation in the opening chapters of volume two, Buffon dedicated roughly the next one hundred pages of the volume to a systematic review and critique of the main theories, starting with an analysis of Plato's *Timaeus*, moving to Aristotle and Aquapadente, and including a detailed comparison of the Ovisists, Harvey and De Graaf, and the microscopists Malpighi, Valisnieri, and Leeuwenhoek, before finally referring his readers to Maupertuis' *Venus Physique* (1745), which "treatise," Buffon explained, "although very short, has more philosophical ideas than there are in many folio volumes on generation."²⁰ Buffon appreciated that Maupertuis had similarly rejected preexistence theories—in both their Ovist and Spermist variations—and he followed him in taking patterns of inheritance to be signs of clear evidence in support of a joint parental contribution in the production of offspring, evidence, in other words, that should doom preexistence theory as it then stood. That said, Buffon disagreed with Maupertuis' specific solution to the problem of form.

Like Buffon, Maupertuis insisted that some sort of material blending occurred in the formation of a fetus, indeed this was key for explaining joint inheritance. And also like Buffon, Maupertuis understood this blending in Newtonian terms of an attraction and repulsion that was essentially mechanical in its operations. He departed from Buffon, however, when it came to accounting for the problem of form, since for this Maupertuis relied upon particles endowed with memory, particles endowed, in other words, with the means for remembering and thereby knowing where the various parts of the fetus needed to be. Arguing that the forces of physics and chemistry could never produce a living organism, Maupertuis described organic

forces as ones following different laws altogether. “We must have recourse to some principle of intelligence,” Maupertuis explained, “to something similar to what we call desire, aversion, and memory.”²¹ While the organic forces of desire and aversion still functioned similarly to the chemical affinities responsible for the attractive and repulsive forces at work in the formation of the Tree of Diana, for example, an organic force of memory was meant by Maupertuis to solve the problem of form, since it explained a particle’s awareness of its previous location in the parent’s body.²² These forces were originally given to matter by God, after which, as Maupertuis described it, they functioned mechanically in their operations as properties of matter itself. As a result, Maupertuis’ so-called “intelligent” particles were thus far more like simple replicating machines than anything else, leading “monstrous births,” for example, to be henceforth explained as cases of poor memory on the part of the organized particles.

Buffon’s own solution to the problem of form relied on organic structures that he likened to internal molds and which were responsible for the proper organization of the organic particles present in any fully developed system. Ingested as food, the organic particles were constantly diffused throughout the body, allowing for its nutrition and growth. At puberty, however, with the body fully grown, the excessive particles returned to the sexual organs bearing impressions of the body’s internal “mold,” an artifice produced for the “first individual of each species” by God but thereafter mechanically replicated by the actions of the molecules and a penetrating force.²³ “What can be the active power which causes this organic matter to penetrate and incorporate itself with this internal mould?”²⁴ For Buffon it was the penetrating force, a notion not only modeled on Newtonian forces but one that in its explanatory role paralleled the job assigned by Newton to gravity. As Buffon explained the working of this force,

In the same mode as gravity penetrates all parts of matter, so the power which impels or attracts the organic particles of food, penetrates into the internal parts of organized bodies, and as those bodies have a certain form, which we call the internal mould, the organic particles, impelled by the action of the penetrating force, cannot enter therein but in a certain order relative to this form, which consequently it cannot change, but only augment its dimensions, and thus produce the growth of organized bodies; and if in the organized body, expanded by these means, there are some particles whose external and internal forms are like that of the whole body, from those reproduction will proceed.²⁵

Here it is important to remember Buffon’s eschewal of anything resembling what he took to be the occult properties associated with a *metaphysical* approach to organic life. “Living animated nature,” Buffon warned, “instead of composing a metaphysical degree of beings, is a physical property, common to all matter.”²⁶ The mechanics of reproduction were therefore modeled as much on nonorganic “growth” as anything else. Arguing that an individual is “a compound of an infinity of resembling figures and similar parts . . . which can expand in the same mode according to circumstances, and form new bodies, composed like those from when they proceed,” Buffon took the case of crystal growth to be paradigmatic for understanding organic processes across the spectrum. Thus although Buffon’s theory of generation is sometimes referred to as one of mechanical epigenesis, there was in fact nothing like William Harvey’s account of a gradual formation of increasingly heterogeneous parts from out of an original homogeneous mass in Buffon’s formulation. On the contrary, the organic molecules waiting in the sexual “reservoirs”

of the parents were already molded in response to their original location, and putting together the embryo was thus like putting together a puzzle, since each “piece” was complete and only waiting its proper placement. It is in this sense that Buffon’s position is best said to be *preformationist* so far as the parts of the embryo were in fact preformed by the parents.²⁷

Now I have said that the immediate task facing generation theorists during these years was to provide a principle of order or some other kind of explanation of the means by which organization occurred within the complex system of the embryo. For Maupertuis and Buffon as much as for all the opposing preexistence theorists, the problem of form required recourse to supernatural agency. Maupertuis thought that the particles had been initially endowed with intelligence by God and Buffon took the internal moulds to have originally be made by God at the creation. But even with crutches like these, the problem of form remained unresolved so far as critics were concerned. Having a mould was one thing, they argued, explaining the precise manner by which the particles were organized by a penetrating force in concert with this mould was something else altogether. And no critic was more vociferous when it came to this point than the Swiss physiologist, Albrecht von Haller.

The German translation of Buffon’s *Natural History* was undertaken by Abraham Kästner between 1750 and 1774, but it was indelibly linked to von Haller, who had prepared two Prefaces of his own for the German edition.²⁸ These were highly critical of Buffon’s theory of organic generation, and Buffon’s failure, as Haller saw it, to account for a principle guaranteeing organization. Thus, after rehearsing Buffon’s discussion of internal molds and the penetrating force, Haller complained that these could not provide a reasonable source of organization given the complexity of the body. As he put it, “Mr. Buffon needs a force which has foresight, which can make a choice, which has a goal, which, against all the laws of blind combination, always and unfailingly brings about the same end.”²⁹ “In brief,” Haller concluded, “what is the cause which arranges the human body in such a way that an eye is never attached to the knee, an ear is never connected to the hand, a toe never wanders to the neck, or a finger is never placed on the extremity of the foot”?³⁰

It was on the basis of precisely such difficulties that Kant took the prospects for any genuine advance in the life sciences to be gloomy. Physics was easily reducible to a set of mechanical causes, but Kant utterly rejected the possibility that organic processes could be explained by means of the same set of attractive and repulsive forces at work in celestial mechanics. Thus when contrasting discussions of celestial origin with the case presented by organic life in 1755, Kant explained that in cosmology all of the questions regarding the coincidence or eccentricity of orbital paths could “be reduced to the simplest mechanical causes. But can we claim such advantages,” he asked, “about the most insignificant plant or insect?”

Are we in a position to say: *Give me matter and I will show you how a caterpillar can be created*: Do we not get stuck at the first step due to ignorance about the true inner nature of the object and the complexity of the diversity contained in it? It should therefore not be thought strange if I dare to say that we will understand the formation of all the heavenly bodies, the cause of their motion, in short, the origin of the whole present constitution of the universe sooner than the creation of a single plant or caterpillar becomes clearly and completely known on mechanical grounds (NTH, AA 01: 230).

Celestial mechanics, with all their mathematical complexity, were nonetheless a perfectly knowable basis for understanding cosmological construction. Organic construction, by contrast, could not be grasped through mechanical laws. And the problem of generation, therefore, was simply closed off from examination so far as Kant was concerned.

While Kant would not change his mind essentially on this point, he was still interested enough in the problem of organic generation to have kept abreast of these debates during the 1760s. Remarking that “it would be absurd to regard the initial generation of a plant or an animal as a mechanical effect incidentally arising from the universal laws of nature,” Kant took time in a 1763 piece to consider in turn the top two competing theories of generation. The first was preexistence theory, according to which each individual being was formed at the time of creation. Such a view, as Kant understood it, demanded that “each individual member of the plant and animal kingdoms is directly formed by God, and thus of supernatural origin, with only the reproduction (*Fortpflanzung*), that is, only the transition from time to time to the unfolding (*Auswicklung*) [of individuals] being entrusted to a natural law” (BDG, AA 02: 114).³¹ The second theory Kant considered appealed to God’s original agency when producing species lines—a type of generic preformation guaranteeing the reproduction of kinds—but argued for the subsequent generation of individuals according to natural means.³² Is it possible, Kant asked when introducing this option, that “some individual members of the plant and animal kingdoms, whose origin is indeed directly divine, nonetheless possess the capacity, which we cannot understand, to actually generate (*erzeugen*) their own kind in accordance with a regular law of nature, and not merely to unfold (*auszuwickeln*) them?” (BDG, AA 02: 114). In this account, form was again supernaturally conceived, but while this generically maintained the stability of the species lines, the subsequent work of generating individuals actively belonged to nature.

Kant went on to rehearse positions that would seem to be examples of this, all the while critical of the specific attempts made in each case to provide a *mechanical* description of the natural means by which individuals would be subsequently generated.³³

It is utterly unintelligible to us that a tree should be able, in virtue of an internal mechanical constitution, to form and process its sap in such a way that there should arise in the bud or the seed something containing a tree like itself in miniature, or something from which such a tree could develop. The internal forms proposed by *Buffon*, and the elements of organic matter which, in the opinion of *Maupertuis*, join together as their memories dictate and in accordance with the laws of desire and aversion, are either as incomprehensible as the thing itself, or they are entirely arbitrary inventions (BDG, AA 02:115).

But while Kant rejected such accounts as “utterly unintelligible” and “entirely arbitrary inventions,” he was equally resistant to the first hypothesis and its recourse to a supernatural origin for every individual member of a species. On this theory human investigation was completely foreclosed, though it could be, as Kant remarked, “supposed that the natural philosophers have been left with something when they are permitted to toy with the problem of the manner of gradual reproduction (*Fortpflanzung*)” (BDG, AA 02:115). Here Kant might

have named Bonnet as a natural philosopher promoting a revised, even “updated” preexistence theory, so far as Bonnet argued that instead of complete individuals only the rudimentary parts or, for Bonnet, the imprint for the species, were contained in the “germs” of an organism. Such revision did not, however, escape the tincture of the supernatural according to Kant, “for whether the supernatural generation occurs at the moment of creation, or whether it takes place gradually, at different times, the degree of the supernatural is no greater in the second case than it is in the first” (BDG, AA 02: 115). Returning to the supposedly “natural order” offered by Buffon and others, what they had was “not a rule of the fruitfulness of nature, but a futile method of evading the issue” (BDG, AA 02: 115).

What Kant wanted was something different, a means of avoiding a supernatural solution even if all of the mechanical accounts of individual generation had so far failed. Indeed, as Kant wryly observed, an adequate mechanical explanation of fermenting yeast had yet to be found, but that had hardly led people to suggest supernatural grounds for its existence; the case of plants and animals should be no different. Unless one was willing to rely on God’s constant creation, Kant concluded, “there must be granted to the initial divine organization of plants and animals a capacity, not merely to develop (*Auswicklung*) their kind thereafter in accordance with a natural law, but truly to generate (*erzeugen*) their kind” (BDG, AA 02: 115). This position followed the others in appealing to divine artifice in the initial creation of forms, but unlike Maupertuis or Buffon, Kant wanted to emphasize the need to conceive of an individual’s subsequent capacity for self-organization: for *erzeugen* as opposed to mere *auswickeln*.³⁴ The position that would later be cautiously endorsed by Kant in 1790—a position explicitly identified by him in the *Critique of Judgement* as one in line with Blumenbach’s *Bildungstrieb*—proposed just such a non-mechanical generation of individuals. In this instance generation took place according to an internalized plan for their species as a whole, a plan that was therefore only “generic” for the species line but which nonetheless afforded to nature the power of all subsequent generation of individuals; it was on this basis that Kant was thus able to identify “generic preformation” with epigenesis (KU, AA 05: 424).³⁵

In Kant’s consideration of Maupertuis and Buffon in the 1763 piece he did not use the term epigenesis. In 1769, however, Kant introduced an explicit discussion of biological epigenesis into his course on metaphysics. Kant always used A. G. Baumgarten’s *Metaphysica* as the basis for this course, and the topics concerning the soul ranged from discussions of human understanding to mind-body interaction and the afterlife.³⁶ In a section devoted to the origin of the soul, Baumgarten had rehearsed the reigning theories of organic generation: preexistence, spontaneous generation—Baumgarten’s example here was infusoria—creation *ex nihilo*, and finally, “concreationism,” according to which the soul was produced through some sort of transfer accomplished by the parents, a position derived from Aristotle’s treatment of the matter. When preparing his own notes for this section, Kant wrote out the questions that would be addressed in his lecture: Was the soul a pure spirit before birth? Had it lived on the earth before? Did it live in two worlds—the pneumatic and the mechanical—at once? The questions were accompanied by a quick list of the various theories of generation, with Kant noting that the central division was between supernatural approaches to the question of origin and a naturalistic account, an account Kant described as an “*epigenesis psychologica*” (HN,

AA 17: 416). The majority of Kant's commentary, however, was devoted to the comparative advantages of the preexistence theory of generation, in either its spermist or ovist variation, over the system proposed by epigenesis insofar as this system was here conceived of as one in line with both Maupertuis' and Buffon's emphasis on the embryo as something under the influence of joint inheritance. As Kant sketched it, in contrast to the preexistence theory, the naturalistic system of epigenesis assumed material contributions from each of the parents, and this, Kant observed, required that prospective couples consider each other with greater care when planning to marry and reproduce.³⁷

In later years, Kant would use this section of Baumgarten's text to discuss the properties of the soul and would invariably dismiss the possibility of its epigenesis.³⁸ In 1769, however, Kant's commentary focused on the physical aspect of generation, identifying epigenesis with a theory of blending that was in line with what he knew of Maupertuis's and Buffon's use of heredity as a basis for their arguments against preexistence theory. The next time Kant came to add notes to this section in 1772, epigenesis was again considered in terms of its biological claims, with Kant now explicitly linking the theory to the desired account of species generation he had first sketched in 1763. In his words,

The question is whether nature is formed organically (epigenesis), or only mechanically and chemically. It seems that nature does have spirit, given that in the generation of each individual there is a unity and connection of parts. And is there not also such a spirit, an animating essence, in animals and plants. In this vein one would have to assume an animating Spirit, operating within an original chaos, in order to explain differences between animals which can now only reproduce themselves (HN, AA 17: 591).

This two-step model is the same as that proposed in Kant's 1763 piece, so far as an initially divine organization—out of an “original chaos”—is then followed by the organic capacity for reproduction within the divinely delineated species lines. What these two sets of comments demonstrate for us however, (comments dated by Erich Adickes as having been written in 1769 and 1772, respectively), is that during a period of crucial formation with respect to the development of Kant's system of transcendental idealism, Kant was actively aware of the epigenesis alternative to preexistence theories of generation.

3. THEORIES OF MIND

Now before going any further, I want to first just briefly rehearse three interrelated characterizations of epigenesis that are especially important for understanding the use Kant would make of the theory for his own purposes. The *first* characterization comes from a seventeenth century English physician who I have already mentioned in passing. William Harvey was interested in distinguishing the radical transformations taking place during ‘metamorphosis’ from the more gradual series of transformations that occurred during ‘epigenesis’. In the latter case, Harvey tracked the manner by which a chick embryo developed, describing the process as the embryo's transition from an initially homogeneous state to one that was increasingly heterogeneous with respect to its parts. The *second*, though related,

characterization of epigenesis concentrated on the capacity of organic structures to be self-organizing during their development, growth, and repair. Although this capacity was oftentimes linked to theories of spontaneous generation and vitalism, there was in fact no consensus position regarding the nature of either the origin or the self-organisation of organisms. In the early decades of the eighteenth century the vitalist Peter Stahl, for example, attributed formation to an anima but distinguished his mechanistic conception from Leibniz's entelechy. In the 1760s, Casper Wolff understood epigenetic growth in terms of an organism's transition from liquid secretions to solidified parts, a vegetative process that was driven in some manner by a life force or *vis essentialis*. And by the 1780s, as we have just seen, epigenesis had come to be identified with Blumenbach's *Bildungstrieb*. It was this characterization of epigenesis that appeared in the *Critique of Judgement*, and it understood epigenesis as a theory regarding the generic preformation of form or species types in nature.

These separate though related characterizations of epigenesis were applied differently by Kant depending upon whether he was thinking about cognition or biological organisms. For the most part, commentators have begun with Kant's statements regarding generic preformation in the *Critique of Judgement* and have sought to read Kant's theory of cognition and the epigenesis of reason through them.³⁹ But while Kant's comments in 1790 demonstrate an underlying continuity in his thoughts regarding biological organisms since the 1760s, they do not in fact add anything to our understanding of what he meant by the epigenesis of reason. To really understand the distinctive role played by epigenesis for Kant's theory of cognition, therefore, we need to detach "generic preformation" from the other two characterizations of epigenesis that were in play for Kant.

In order to discover the internal grounds for this detachment we need to consider the specific epistemic context within which Kant's work on cognition began: his overriding desire to reorient, and thereby protect, metaphysics from the Humean challenge. By 1765, Kant understood that any significant rehabilitation and defense of metaphysics would require its complete reformulation. Though initially conceived in terms of overcoming the problem of 'subreptive axioms,' Kant soon realized that the real task was instead to provide an account of cognition that could avoid scepticism without recourse to innatism. This is the epistemic context within which Kant began to formalise his theoretical programme in the 1760s, and it was against the backdrop provided by his first real attempt at such a theory, his *Inaugural Dissertation* of 1770, that Kant became ready to identify his own position with epigenesis as a position against the preformation system he took to be endorsed by Leibniz.⁴⁰ Thus it was at precisely this point that epigenesis provided 'a theory by which to work' for Kant. This was not epigenesis as generic preformation; *that* theory relied on supernatural forms to keep the species lines intact and was thus akin, for Kant, to both the 'mysticism' of Plato and the 'preformationism' of Leibniz. In 1770, Kant wasn't entirely sure what to use as a replacement with respect to accounting for the problem of form, but he was sure about one thing: innatism had to be rejected as much as did his previous reliance on the model of cognition that had been provided by Locke (e.g., HN, AA 17: 352). In their stead, Kant proposed the original generation of intellectual concepts, referring to them in the *Inaugural Dissertation* as produced by an "original acquisition" by attention to the workings of the mind (MSI, AA 02: 395).

Earlier I described Kant's first use of epigenesis when discussing Baumgarten, but more significant for our purposes now is the set of notes Kant composed shortly after finishing his *Dissertation*. For in these notes, Kant explicitly connected theories of generation to systems of reason and to claims regarding the origin of ideas in particular. Distinguishing empiricists from rationalists, Kant identified his own position with the most radical possibility of all. As he sketched it, "Crusius explains the real principle of reason on the basis of the *systemate praeformationis* (from subjective *principiis*); Locke on the basis of *influx physico* like *Aristotele*; Plato and Malebranche, from *intuit intellectuali*; we, on the basis of *epigenesis* from the use of the natural laws of reason" (HN, AA 17: 492). It was epigenesis, therefore, that Kant identified with the theory of "original acquisition" for explaining the generation of sensitive and intellectual concepts from the mind's own laws in the *Dissertation*. While it cannot be said for certain that Kant took epigenesis as his model when first drawing up his account of the origin of knowledge in 1770—though the evidence from 1769 certainly suggests this—it is certain that in the months following the *Dissertation's* completion the connection had been made. The primary textual resources for proving this stem primarily from the 1770s—the so-called 'silent decade'—and they are gathered from Kant's letters, his lectures, his notes, and the marginal notations he made alongside the textbooks he used for his classes (e.g., HN, AA 17: 492, cf. HN, AA 17: 554, 18: 8, 18: 12, 18: 273–75). Many scholars have relied on these materials for making sense of Kant's theoretical programme during the silent decade. Rereading this material with an eye to Kant's frequent appeal to biological vocabulary when describing cognition, is what finally reveals the importance of epigenesis for the developing system.

4. THE EPIGENESIS OF REASON

Let us pause now and consider the status of the biological model for Kant. There have been a number of writers over the years to worry about what this particular model might have meant given that Kant urged epistemic caution regarding the various speculative hypotheses coming out of the life sciences at that time. The immediate problem is to ask then how it is that Kant—who was ready to dismiss the claims being made by generation theorists in the 1760s as not only uncertain, but unlikely—could nonetheless have been ready to repeatedly identify his own developing theory of cognition with epigenesis during the 1770s? It is certainly not the case that Kant took himself to be investigating an empirical claim about our physical brains (hence Kant's well-known dismissal of the nativism to be found in Tetens' psychological account, e.g., HN, AA 18: 23). So what was Kant up to when he identified his own position as epigenetic?

Here it is critically important to remember the epistemic context within which Kant's investigation was operating, and the significance, therefore, of the fact that he typically juxtaposed his own epigenetic theory with the 'preformation' system proposed by Leibniz and Crusius, on the one hand, and the 'physical influx' position advanced by sensationalists like Locke, on the other. For once we remember that this is indeed the context within which epigenesis became an interesting third option between innatism and empiricism for Kant, we can begin to make sense of what Kant meant by the "epigenesis of Reason" (KrV, B167).

Kant left the 1760s determined to reorient metaphysics by way of attention to a new theory of mind. Central to this was Kant's sense that scepticism could only be avoided so long as the theories under attack by Hume—those held by the innatists and the empiricists in their various stripes—were also avoided. This story regarding Kant's intellectual development—Kant's negotiation between rationalism and empiricism—is of course standard fare in any undergraduate course on the history of Modern philosophy, and it is so because in outline, at least, it fits: it makes sense of Kant's work in the 1760s and 70s to formulate an epistemological programme, and it makes both the goals and the achievement of transcendental idealism all the more clear. Reading Kant's notes during the 1770s, it thus makes sense to see that even despite the seeming intrusion of biological vocabulary amidst the worries over logical subordination or the tasks allocated to the various faculties, Kant is consistent whenever it comes to the cast of characters he is up against: Plato, Leibniz, and sometimes Malebranche, grouped together by Kant as mystics, preformationists, supporters of involution, and believers in intellectual intuition; Aristotle, Locke, and Crusius on the other side, supporting 'physical influx' or *generatio aequivoca*; and Kant's own position in the middle, as an epigenesist. The 'real principle of reason', as Kant put it during this period, rests "on the basis of epigenesis from the use of the natural laws of reason" (HN, AA 17: 492).

In the *Dissertation*, Kant relied on the mental laws for logical subordination as the basis for this generative work, while also leaving the origin of these laws unspecified. In the *Critique of Pure Reason*, Kant relied on these laws again, with the Metaphysical Deduction serving as the updated version of the older account's description of the 'real use' or means by which concepts could be generated. In the first *Critique* Kant explained therefore that the logical table of judgement served as the metaphysical 'clue' for understanding the origin of the intellectual concepts because the latter were in fact those same judgements, only applied now to sensible intuitions. Having already announced the isomorphic connection between the forms of judgement and the categories of experience, by 1781 Kant was also ready to be specific regarding the question of origin here as well. Like all the heterogeneous faculties which together made-up the so-called "transcendental apparatus," logic too had its origin in Reason. Experience relied on the concepts and thereby the table of judgments to provide that constancy of form required for coherency in the field of appearances, but the constancy of the form-giving concepts themselves was itself dependent upon Reason. Kant was clear when it came to the hierarchy of the faculties. He was clear that the understanding, for all its spectacular success when it comes to the construction of a coherent field of appearances, was nonetheless dependent upon Reason. To be specific, that the understanding was 'dependent' upon Reason in two significant ways: as is well known, Reason provided the principles which can alone unify and guide empirical investigations, but Reason was also taken by Kant to encompass the understanding and to thus serve as its seat.⁴¹ Indeed, Kant's account of transcendental affinity was the key to understanding the precise manner by which an epigenetic Reason was ultimately necessary for the success of the Transcendental Deduction.⁴² And as for Reason? Reason, as Kant identified it in both the Transcendental Deduction (KrV, B167) and the Architectonic (KrV, A765/B793), was itself epigenetic or 'self-born.'

This might sound radical, but before we get distracted by that, let's focus on the main point. Kant had a specific epistemic goal, the avoidance of scepticism and the achievement, thereby, of some kind of experiential certainty in the physical (if not the biological) sciences. Transcendental idealism, with empirical realism as its special yield, accomplished precisely that. But it did so on the basis of a story that was being told about the formative control enjoyed by the mind in the case of experience. The transcendental conditions for the possibility of experience relied on the central faculties—reason, understanding, judgement—and their accomplishment of particular tasks. Now Kantians, on the whole, are not prepared to entertain questions regarding the ontological status of these mental faculties. Most will, moreover, emphatically reject a nativist reading of the faculties, even if they feel less confident in rejecting a supernatural origin altogether, given the kinds of passing remarks one finds in the *Religion*. The safest interpretive route, most feel therefore, is to just stick with Kant's agnosticism on the point. In my own view, it is important to identify Kant here as a metaphysician in order to explicitly distance him from the consequences of identifying him as a nativist. And it is in light of this that we must understand the epigenesis of reason to be *metaphysically real* in order to make it clear that Kant was not providing a biological account of the brain. But there is more to this assessment than a simple contrast. Kant takes the mind to be whole. As in Harvey's model, however, this original unity becomes increasingly heterogeneous, as logically distinct faculties emerge or become realized in the face of the various cognitive tasks required of it. As for Reason itself, the word Kant uses for describing it is in a class of its own within his works: spontaneity. There is neither textual conflict nor indeed controversy regarding spontaneity as a basic definition of Reason, for Kant was clear in the *Critique of Practical Reason* regarding the ontological identity between reason in either its theoretical or practical guise,⁴³ and if, by the end of the *Critique of Judgement*, he seemed to have relegated speculative reason to a lesser position in comparison to the free causality of practical reason, it was only because moral teleology had by then displaced the investigatory aims of physic-theology for Kant, making the clearer formulation of rational faith all the more pressing. Reason, as Kant saw it, both generates and determines itself, and it is only as such that it could ground both the certainty of cognition within the sensible realm and our duties and character in the moral realm.

Kant was fully prepared to emphasize this aspect of Reason, by employing vocabulary borrowed from the language of organic growth and development when discussing it, and by describing reason's development from infancy to adulthood as an organic course of formation as a case of the "sheer self-development of reason." Rehearsing this, Kant explained,

Systems seem to be formed in the manner of lowly organisms, through a *generatio aequivoca* from the mere confluence of assembled concepts, at first imperfect, and only gradually attaining to completeness, although they have one and all had their schema, as the original germ, in the sheer self-development of reason. Hence, not only is each system articulated in accordance with an idea, but they are one and all organically united in a system of human knowledge, as members of one whole, and so as admitting of an architectonic of all human knowledge (KrV, A835/B863).

What this history of reason demonstrated for Kant was that all attempts at metaphysics had been "organically united," that they were connected by virtue of their common origin in

the germ of reason, and that they had been differentiated only as part of reason's own path of self-development. The history of reason thus provided its investigators with a genuine natural history, for each of its varieties could be traced in their entirety to their point of origin, a common descent that had been easy to overlook given the enormous modifications taking place in the history of the species as a whole. As varieties of reason, the systems of metaphysics functioned organically, like "members of one whole," so Kant could be precise when describing the manner by which reason had grown into a unified system. As he defined this organic growth, "The whole is thus an organized unity (*articulation*), and not an aggregate (*coacervatio*). It may grow from within (*per intussusceptionem*), but not by external addition (*per appositionem*). It is thus like an animal body, the growth of which is not by the addition of a new member, but by the rendering of each member, without change of proportion, stronger and more effective for its purposes" (KrV, A833/B862).⁴⁴ Kant believed that the connection between the parts of the system could be likened to the organic interworking of the organs in an animal body because the unity of the system, like the unity of an organism, determined not only the exact number and placement of its members but the end toward which they aimed. In each of these cases this was an end that had been reflexively defined from the start; in the case of reason it had been contained within the system as an idea of its completion from the very first moment of its self-conception. The end of the history of reason, that is, its idea of itself as a fully developed whole, was originally present within reason—present as an "original germ in the sheer self-development of reason"—a germ or idea that both set the goal for reason's completion and somehow also grounded the possibility of its actual achievement.⁴⁵

It is in light of all this that I am hesitant to say that the biological theory of epigenesis functioned merely as an analogy or had only metaphorical value for Kant. For after reviewing all the evidence surrounding Kant's use of epigenesis in cognition, he seems, in the end, to have thought of Reason as something that was in fact spontaneous and free, a self-born activity that was both cause and effect of itself. Despite the radicality of Kant's claim, it is easy to see that only such a claim could guarantee both morals and certainty against the threat of scepticism so far as Kant understood the stakes of Hume's challenge. Indeed, it was not the autochthonous status of Reason that Hegel, for example, criticized in Kant—it was the checks Kant put in place on Reason's power.

By way of closing I just want to point finally to the surprising turn that has been taken in the life sciences today. We have, it seems, entered a post-genomic era. Only 20 years ago researchers could still rely on the explanatory power of the gene, or at least the information conveyed by that name—as the biologist Ernst Mayr had observed: development may be epigenetic, but inheritance of type depends on the gene—to explain the constancy of forms in biological life. Today, however, the very notion of a 'genetic programme' is under attack, and preformationism in the guise of the gene has been demoted as researchers turn instead to the field of epigenetics. It is hard to imagine that Kant would not have appreciated the possibilities for thought opened up by these discussions. The least tenable model has suddenly become the most plausible one for imagining the irreducible quality of the organism, one demanding our amazement not because of the intricate operations of its parts, but because we have been forced to acknowledge the primacy of the living organic context, the environmentally porous state

within which such parts can emerge in order to mechanically function at all. This was precisely the kind of organic model that Kant had in mind when trying to grasp Reason, and in my view it is what locates him as a genuine forerunner of the organicism of both his own day and ours.

ABSTRACT: Although scholarly attention has been mostly paid to the many connections existing between Kant and the *exact* sciences, the landscape of Kant studies has begun to noticeably change during the last decade, with many new pieces devoted to a consideration of Kant's relation to the life sciences of his day. It is in this vein, for example, that investigators have begun to discuss the importance of Kant's essays on race for the development of Anthropology as an emerging field. The bulk of the contributions to this recent trend, however, have focused on Kant's remarks on organic life in the *Critique of Judgment*, such that Kant's "theory of biology" is now seen to be firmly located in that text. Amidst such consolidation, there are a few pieces that have begun to address Kant's appeal to organic vocabulary within the context of his theory of cognition, though these too remain dominated by the interpretive template set by the third *Critique*. My own strategy in this essay will be different. Kant did indeed borrow from the life sciences for his model of the mind, but in a manner that would reject a naturalized account. His preference for epigenesis as a theory of organic generation needs to be carefully distinguished, therefore, from the use he would make of it when discussing a metaphysical portrait of reason.

KEYWORDS: Kant, Buffon, Generation, Reason, Epigenesis

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NOTES

1 Jennifer Mensch specializes in the intellectual history of the Enlightenment with a special emphasis on the intersection of philosophy and the life sciences. Her recent book, *Kant’s Organicism. Epigenesis and the Development of Critical Philosophy* (Chicago: University of Chicago Press, 2013), traces the influence of life science debates regarding biological generation on Kant’s theory of cognition. She is currently Assistant Professor of Philosophy at the University of Waterloo (Canada), where she teaches philosophy and the history of science and medicine.

2 MENZER (1911, 404–445). For a more recent version of this view see Günter Zöller, who regards Kant’s critical doctrines and his anthropological works to be in a “mutually supplementary relation,” see Zöller (2011, p. 131–161).

3 Kant used Basedow’s *Methodenbuch* as a textbook when lecturing on pedagogy during the winter semester of 1776–1777. A good sense of Kant’s commitment to Basedow’s school during this period emerges from his letter exchanges regarding it, see esp. 10:191–195. There have been a number of commentators in recent years interested in connecting Kant’s early views of education and his developing approach to character. On this see especially MUNZEL (1998; 2012) and also Louden’s “Not a Slow Reform, but a Swift Revolution: Kant and Basedow on the Need to Reform Education,” in LOUDEN (2012 and 2011, esp. ch. 11).

4 On this see especially KLEINGELD (2012). Robert Bernasconi has done the most work to investigate Kant’s published essays on the natural history of race in terms of their implications for the ethical program developed during the 1780s and ’90s. See especially BERNASCONI (2003, p. 13–19, and 2002, p. 145–166).

5 Thomas RAMSAY in praise of the naturalist Thomas Pennant (1774, p. 174).

6 Lisbet KOERNERS (1996, p. 145).

7 A helpful discussion of this is in Phillip SLOAN (1972, p. 1–53).

8 As Koerners recounts, Linnaeus “believed it [the natural system] was somehow encrypted in the relation between all seven basic parts of fructification (calyx, corolla, pericarp, pistil, seed, stamen, and receptacle). Another clue, he suspected, was to be found in his hypothesis that modern species, while probably fixed in the present, had hybridized from a small number of Edenic life-forms, each representing one of the present-day orders.” In KOERNERS (1996, p. 148).

9 A.G. Morton details Linnaeus’s awareness of this problem, describing its resolution as the precondition for a shift toward the concept of organic evolution, see MORTON (1981, pp. 262–276, esp. p. 270).

10 Cited in Lisbet KOERNERS (1996, p. 146).

11 The earliest edition appeared as *Histoire Naturelle, générale et particulière*, 15 vols. (Paris: Imprimerie Royale, 1749–1767).

12 BUFFON (1981, p. 89-128). Also available as BUFFON (1976, p. 133-181). A helpful discussion of the tensions between Linnaeus and Buffon is Phillip SLOAN (1976, p. 356-375).

13 BUFFON (1981, p. 105). Between the inability to determine criteria capable of determining essential divisions between species (since this required agreement regarding their 'essence'), and the empirical experience of the fluidity of forms (an experience frequently undermining belief in fixed essences at all), deep tensions within taxonomy had arisen by mid-century between arbitrarily determined criteria like reproductive organs and conflicting experience with respect to claims regarding biological affinity. Linnaeus understood this all well enough, but though he grasped not only the logical problem but the practical tensions within taxonomical science, the problem was in fact exacerbated by his defaulting, as a matter of practical necessity, to the idea of species fixity. Julius VON SACHS details this tension in particular when discussing Linnaeus (1906).

14 BUFFON (1981, p. 102). Cf. "Nature has neither classes nor species; it contains only individuals. These species and classes are nothing but ideas which we have ourselves formed and established" in BUFFON (1797, vol. 3, p. 326).

15 BUFFON (1981, p. 111).

16 Buffon provided an entry specifically devoted to the topic of generation only at the end of volume 14 in 1766, see "De la dégénération des Animaux" in BUFFON (1749-1767, p. 311-374).

17 Buffon summarizes this connection before his investigation into the specific manner by which reproduction occurs: "[I]n the same mode as gravity penetrates all parts of matter, so the power which impels or attracts the organic particles of food, penetrates into the internal parts of organized bodies, and as those bodies have a certain form, which we call the internal mould, the organic particles, impelled by the action of the penetrating force, cannot enter therein but in certain order relative to this form ... and if in the organized body, expanded by this means, there are some particles whose external and internal forms are like that of the whole body, from those reproduction will proceed." See "Of Nutrition and Growth," in BUFFON (1749-67, p. 46).

18 A complicated exception here would be Robert Boyle's work to understand organic generation according his notion of material seminal principles. For Boyle, the sheer complexity of organic life exceeded the chance that its original formation had been due to the principles of secondary motion alone. Against the theory proposed by Descartes and his followers, therefore, Boyle argued for an original act of divine artifice that "did more particularly contrive some portions of that matter into seminal rudiments or principles, lodged in convenient receptacles (and, as it were, wombs), and others into the bodies of plants and animals." These seminal principles took on a formative function in directing the material unity of the organism, for "some juicy and spirituous parts of these living creatures must be fit to be turned into prolific seeds, whereby they might have a power, by generating their like, to propagate their species." See BOYLE (1991, p. 70). Of course, Boyle's recourse to a physical yet "plastick" principle when explaining generation nicely demonstrates the genuine difficulties faced by midcentury theorists in accounting for biological processes. As Peter Anstey describes Boyle's position, "Study of Boyle's theory of seminal principles reveals a Boyle who is in tension, not a Boyle who abandons the corpuscular hypothesis when intruding on the biological domain and not a Boyle who is unaware of the need to reach beyond the sparse ontology of mechanical affections of matter. Boyle was unable to resolve this dilemma in his natural philosophy and as interpreters we should not do it for him." See ANSTEY (2002, p. 628).

19 Malebranche, the earliest proponent of this view, argued that all future generations of the human race existed as fully formed minuscule beings whose embryological development was nothing more—so far as form was concerned—than enlargement. Because Malebranche believed that future generations were contained in the sexual reservoirs of current ones, his position is referred to as *embôtement* or "encasement theory." Initially, these minuscule "homunculi" were thought to be contained in the female, a position called "Ovism"; once the Dutch microscopist Antonin Leeuwenhoek discovered what he called "spermatic animalcules" under the microscope in 1674, the testes were thought instead to be the storage site, a determination that was referred to as "Spermism." As positions like Malebranche's began to suffer under the pressure of evidence for a shared parental inheritance, or discoveries of the regenerative capacities of certain species, preexistence theories were gradually adjusted until they became by the mid-eighteenth century, with Bonnet, arguments for the preexistence of only preformed germs for the species lines. Detailed discussions of the main figures associated with generation theory leading up to Kant can be found in the opening chapters of Elizabeth GASKING (1967), and in Jacques ROGER (1997, especially pp. 205-369). For essays devoted to connecting life science theory and early Modern philosophy see Justin SMITH's anthology (2006).

20 See "Experiments on the Method of Generation," in BUFFON (1797, p. 76), corresponding to "Exposition des Systèmes sur la génération," BUFFON (1747-67, vol. 2, p. 164).

21 MAUPERTUIS (1761, §§3, 4, p. 15). A comprehensive listing of Maupertuis' unusually complicated publication history—a history comprising multiple editions under different titles, often published anonymously or even pseudonymously—is in Giorgio TONNELLI's "Introduction. Bibliographie et histoire du texte" included in Maupertuis's works, see P.L. Moreau de MAUPERTUIS (1974, vol. 1, p. XI-LXXXIII). Maupertuis' publications regarding generation theory started in 1744 with three successive pamphlet editions of an anonymously written discussion of biological generation, a discussion occasioned by the sensation created in Parisian salon culture by an albino boy (born to African slaves living in colonial South America) who had been paraded around Paris by the aristocracy as a curiosity that year, see "Dissertation physique à l'occasion du nègre blanc" (1744). The following year this piece was reissued (and slightly changed) as an essay "Concerning the Origin of Animals" and printed together with a separate essay on "Varieties in the Species of Man" under the title *Venus Physique*—this too was published anonymously, with neither publisher nor location identified, only the date, 1745. In 1751 Maupertuis returned to the issue, this time publishing his essay

in Latin as a (fake) thesis from Erlangen written by a student identified only as Dr. Baumann, the original is no longer extant but at the time it was published (in Berlin, not Erlangen) as *Dissertatio inauguralis metaphysica de universali naturae systemate* (1751). An edition of Maupertuis's collected works appeared in 1752 which included the *Venus Physique*, thus revealing Maupertuis's authorship, see MAUPERTUIS (1752). In 1754, Maupertuis anonymously reissued the Baumann thesis from 1751, now under the title *Essai sur la formation des corps organisés* (1754). The *Essai* was reissued two years later under the title *Système de la nature* for the next edition of Maupertuis's collected works, revealing thereby Maupertuis's authorship of the *Essai* (and the Baumann thesis), see MAUPERTUIS (1756). Finally, in 1761, an anonymous translator working out of Potsdam issued a German translation of the Baumann thesis as *Versuch von der Bildung der Körper, aus den Lateinischen des Herrn von Maupertuis* übersetzt von einem Freunde der Naturlehre (1761); it was this edition which Kant owned.

22 MAUPERTUIS (1761, §33, pp. 30–31).

23 Before Buffon, Louis Bourguet had insisted that something like an internal mold (*Moule*) determined the organization of the organic material when forming the organism and that this kind of mold was unique to organic mechanism. Whereas a crystal simply repeated the same mold or shape over and over again, the organism needed a different means for accounting for the innumerable different parts of its organization. This is not to say that the organism was reducible to its organization for Bourguet; as a Leibnizian, Bourguet took the entire process to be a case of mechanical accommodation to an underlying dominant monad. See BOURGUET (1729, p. 146, 165).

24 Georges Buffon, "Of Nutrition and Growth," chap. 3 of *History of Animals*, in BUFFON (1797, 2, p. 302).

25 BUFFON (1797, 2, p. 303). Buffon repeatedly defended the use of analogies in line with Newton's own practice of reasoning. For example, "In my theory of expansion and reproduction, I first admit the mechanical principles, then the penetrating force of gravity, which we are obliged to accept, and, from analogy and experience, I have concluded the existence of other penetrating forces peculiar to organized bodies", in BUFFON (1797, 2, p. 48).

26 BUFFON (1797, 2, p. 272).

27 The terms "preexistence" and "preformation" are frequently used interchangeably by commentators to capture the difference between a description of embryological formation where the problem of form is "solved" and a description, as in the case of epigenesis, where it is not. Jacques Roger, and Peter Bowler after him, have argued for the need to clearly distinguish between these terms. "Preexistence," as Roger sees it, should strictly refer to those theories proposing that all individual embryos were made by God at the moment of creation, so that all embryos thereby "preexist" their moment of specific temporal development. "Preformation," according to Roger's distinction, should be reserved for a position like Buffon's for the reasons described above. On the argument for severing preexistence and preformation, see ROGER (1997, p. 259–260); and Peter J. BOWLER (1971, p. 221–244). Against this distinction, see J. S. WILKIE (1967, p. 138–150).

28 The German translation of Buffon's *Natural History* was published as *Allgemeine Historie der Natur: nach ihren besonderen Theilen abgehandelt*, trans. Abraham Gotthelf Kästner (1750–74). Although Buffon originally published the first three volumes together in 1749, Kästner translated and published only the first two of these into German in 1750; volume three appeared in German translation in 1752. Kant started teaching a course on physical geography in 1756, and anyone reading through Kant's course outline for his first courses on "physical geography" in the mid-1750s would have immediately seen just how closely acquainted Kant had already become by then with Buffon's early volumes. A helpful discussion of Kant's earliest lectures, including his likely sources, is provided by Werner Stark as part of the editorial apparatus put together for the recent Academy edition of Kant's so-called "diktat text" from 1756–58, see STARK (2009, esp. the "Einleitung" and the footnotes accompanying parts 2 and 3, p. 85ff.).

29 Haller's prefaces are available in English translation. See HALLER (1991, p. 322).

30 STARK (2009, p. 320). These were of course the identical grounds upon which Caspar Friedrich Wolff attacked Blumenbach's *Bildungstrieb*, since force, as Wolff saw it, was an entirely different biological entity than the intelligent guidance which Blumenbach had mapped on to it. An account of Wolff's continued critique of Blumenbach is in Shirley ROE (1981).

31 In these passages David Walford has translated *Fortpflanzung* ("reproduction" in English) as "propagation." Within the context of Walford's translation as a whole, I think that this choice might be misleading at points, although propagation is good for capturing the nonsexual nature of reproduction according to encasement theory. Kästner used "*Vermehrung*" as a translation of Buffon's description of the "augmentation" of an embryo in preexistence theories. The taking in of nutrition, for example, yields "eine Vermehrung" and "diese Vermehrung der Größe nennet man das Auswickeln, weil man sie dadurch zu erklären hat, daß man sagte, das Tier sey in kleinen gebildet, wie es seiner völligen Größ nach beschaffen ist, und daher, liese sich leicht begreifen, wie sich seine Theile auswickelten, indem nach und nach eine dazu kommende Materie alle in gehörigen Ebenmaße vergrößerte," in BUFFON (1750–74, p. 27).

32 A helpful discussion of Kant's attempt to synthesize preexistence theory and epigenesis in this section is in Mark Fisher, "Kant's Explanatory Natural History: Generation and Classification of Organisms in Kant's Natural Philosophy," in HUNEMAN (2007, p. 101–121).

33 Paul Menzer takes Kant—wrongly, in my view—to have Caspar Wolff's position in mind in the opening lines of this passage. See MENZER (1911, p. 104). That said, in Herder's notes from Kant's lectures on metaphysics during the same period as the 1763

piece it is clear that, without naming them, Kant could have understood that the specific difficulty facing Haller and Wolff was the lack of any decisive evidence in favor of one position versus the other. As Herder recorded him, “*Die Physikalischen beobachtungen zeigen, daß der Körper zuerst gebildet wurde, andere daß sie bei der Schöpfung gebildet sei*” (V-Met/Herder, AA 28: 889). In his notes Herder went on to report that the main conceptual difficulty facing the life sciences was twofold, at least so far as Kant understood their attempt to discern the processes of generation, namely, the conception of freedom on the one hand, and its generation in the world (*die Zeugung seines gleichen im Raum*) on the other.

34 In spite of this, Kant simply could not include organic generation as an example of natural laws at work for unlike the demonstrable laws guiding cosmological construction, the structure of plants and animals appeared to be unconstrained or contingent while still being oriented somehow toward particular ends. In Kant’s words, “Große kunst und eine zufällige Vereinbarung durch freie Wahl gewissen Absichten gemäß ist daselbst augenscheinlich und wird zugleich der Grund eines besondern Naturgesetzes, welches zur künstlichen Naturordnung gehört. Der Bau der Pflanzten und Thiere zeigt eine solche Anstalt, wozu die allgemeine und nothwendige Naturegesetze unzulänglich sind” (BDG, AA 02: 114).

35 Kant liked the theory in 1790 for much the same reasons he had liked its outlines in 1763: epigenesis reduced an appeal to supernatural agency to a bare minimum, since it relied on God for only the original construction of the forms that the species lines would take, and it balanced a mechanical account of nutrition and growth with a teleological explanation of the organism’s purposive development. And Kant singled out Blumenbach’s notion of a *Bildungstrieb* for praise, precisely because it seemed to offer empirical evidence of the theory of generic preformation itself. Nonetheless, Kant’s tone of caution regarding the life sciences was unchanged. However convincing our intuitions regarding nature’s organic capacities might be, however promising the advances made by the life sciences might seem, the operating principles of the organism would simply never be revealed in an empirical investigation. Although much has been made of Kant’s endorsement of Blumenbach and of questions regarding Blumenbach’s influence on Kant in his discussion of epigenesis, one should not forget that, whatever influence might be claimed, Blumenbach in fact transgressed a clear boundary set by Kant between thinking about nature as purposive and claiming that nature was in fact purposive. Robert J. Richards emphasizes this difference between Kant and Blumenbach in RICHARDS (2000, p. 11–32). See also RICHARDS (2002, chap. 5., p. 216–237). As Timothy Lenoir describes Blumenbach’s position, “The *Bildungstrieb* was not a blind mechanical force of expansion which produced structure by being opposed in some way; it was not a chemical force of ‘fermentation,’ nor was it a soul superimposed on matter. Rather the *Bildungstrieb* was conceived as a teleological agent which had its antecedents ultimately in the inorganic realm but which was an emergent vital force.” See LENOIR (1980, p. 83). It was precisely this interpenetration of form and force—something Kant explicitly liked about Blumenbach’s theory—that caused Caspar Wolff, the first author to describe vegetative growth and reproduction as a form of epigenesis, to complain about Blumenbach’s position. For Wolff, force simply could not by definition also be responsible for form. See Wolff, “Von der eigenthümlichen und wesentlichen Kraft der vegetabilischen sowohl als auch der animalischen Substanz,” in WOLFF (1789).

36 A reprint of Baumgarten’s text is included in the academy volume devoted to the notes Kant made in his own copy of the text. See HN, AA 17: 5–226. All of Kant’s notes made within Baumgarten’s text are identified in terms of their location and arranged according to their supposed chronology, such that, for example, Kant’s various remarks on §§770–775, “*Origo Animae Huminae*,” can be traced throughout Kant’s career. Since Kant taught this text every year, determining the chronological sequence of any notes made for a given section is necessarily imprecise in that it can rely only upon placement, ink color, and so on. The academy edition’s two volumes devoted to Kant’s notes on metaphysics (vols. 17 and 18)—including numerous pieces written on so-called loose sheets—follow Erich Adickes’s dating system, a system explained by Adickes at the start of the volumes devoted to Kant’s notes, marginalia, and assorted *Nachlaß* (HN, AA 14: lx–lxi). Adickes’s system is almost always followed by the Cambridge edition of Kant’s notes, though the editors often suggest longer possible time frames for a given text. Translations are here taken from the Cambridge edition wherever possible. See KANT (2005).

37 Kant’s elaboration of the epigenesis alternative can be compared to the relatively brief remarks—at least so far as Herder recorded them—when discussing this section of *Metaphysica* in 1762–1763, see V-Met/Herder, AA 28: 889.

38 Discussing the same passage in Baumgarten thirty-three years later, for example, Kant continued to use the term “epigenesis” in contrast to the preexistence theory of origin, but in place of his concern with the physical process of blending—in fact, in place of any consideration of biological generation at all—Kant focused on the Aristotelian-derived account of “concreationism” in Baumgarten’s text, rejecting this option on principle, given the soul’s nature as simple substance. In language deliberately borrowed from chemical analyses, Kant here characterized the soul as either an “educt”—a thing that preexisted its new form—or as a “product,” something newly produced via epigenesis. The latter theory was completely impossible, according to Kant, because a noncomposite substance like the soul could not be expected to transfer a part of itself to its offspring (V Met/Dohna, AA 28: 684—these comments are taken from student lecture notes, “*Metaphysics Dohna*,” from Kant’s metaphysics course in 1792–1793). Kant made additional notes for this passage, rejecting the soul’s epigenesis because of its immateriality (HN, AA 18: 190) and its immortality (HN, AA 17: 672, HN, AA 18: 429). Kant also considered the epigenesis of the soul separately in terms of a potential transfer of good or bad character (VARGV, AA 23: 106–107).

39 The assumption that Kant’s attitude toward epigenesis in biological organisms is the key to interpreting his account of the epigenesis of reason, is made by the majority of commentators, including Phillip Sloan’s influential essay, see SLOAN (2002, p. 229–253); and John Zammito’s several discussions indebted to Sloan’s interpretation on this point, including most notably ZAMMITO (2003, p. 73–109). Ingensiep’s response to the Sloan-Zammito interpretation is worth noting: INGENSIEP (2006, esp.

p. 70–73). Marcel Quarfood reaches different conclusions than Sloan and Zammito regarding Kant's supposed attitude toward preformation, but he follows the approach starting with Kant's biological discussions when considering the epigenesis of reason. See QUARFOOD (2004). This is also the case in Helmut Müller-Sievers's discussion of Kant in MÜLLER-SIEVERS (1997); and in DUCHESNEAU (2000, p. 233–256).

40 I lay out the case for this in MENSCH (2013, chapter 4).

41 Kant would subsequently point to reason as the birthplace of the moral law as well. Thus in the *Groundwork*, for example, Kant would explain that “it is here that she has to show her purity as the authoress of her own laws—not as the mouthpiece of laws whispered to her by some implanted sense,” but also not as having received them from experience, which “would foist into the place of morality some misbegotten mongrel patched up from the limbs of a varied ancestry and looking like anything you please, only not like virtue” (GMS, AA 04: 425–426). Morality would instead have to be born from out of pure reason itself, for only that kind of pedigree could ensure its sovereignty over the will on the basis of birthright alone. This account of reason's role in giving birth to individual morality ran parallel to its work to achieve the moral advancement of the species as a whole. Perfect moral advancement would culminate in the creation of a “kingdom of ends,” according to Kant, and bring with it the completion of the history of reason. This was an idea of moral perfection born out of reason itself, an idea that lay invisibly within humanity as something whose conception was “self-developing” (*sich entwickelnden*) and whose existence needed to be understood as a “self-fertilizing germ” (*besamenden Keim*) of goodness in the species as a whole (MS, AA 06: 122). It was just this aspect of Kant's philosophy that would earn harsh criticisms from Hegel, however, since he took Kant's notion of pure reason to be impotent, something capable of supplying only an empty notion of unity, that is, one that had never been lifted out of intellect by the intellectual intuition of itself. On the basis of such sterility, as Hegel saw it, Kant could never explain how practical reason “is nonetheless supposed to become constitutive again, to give birth out of itself and give itself content.” See Hegel's *Faith and Knowledge*, in HEGEL (1977, p. 80).

42 I defend this claim at length in MENSCH (2013, chapter 7).

43 Kant was clear regarding their identity: “practical reason has the same cognitive faculty for its foundation as the speculative, so far as they are both pure reason” (KpV, AA 05: 90; cf. MS, AA 06:382). But he was also delighted by the manner in which their investigation had proceeded in identical ways. As he summarized his findings in the analytic of practical reason, “Here I wish to call attention, if I may, to one thing, namely, that every step which one takes with pure reason, even in the practical field where one does not take subtle speculation into account, so neatly and naturally dovetails with all parts of the *Critique of Pure* (theoretical) *Reason* that it is as if each step had been carefully thought out merely to establish this connection” (KpV, AA 05: 106). It was precisely because of this that Kant felt confident in pursuing the strategy he had followed in the first *Critique* with respect to identifying the table of judgments as the genealogical basis of both the categories and the ideas of reason; in this case, with respect to the genetic grounds upon which he could identify causality and freedom (KpV, AA 05: 55–57, 5: 65–67, 5: 68–70).

44 Medieval philosophers described the work that Aristotle had attributed to the “nutritive soul” as a process of absorption, which they termed “intussusception.” This term was later taken up by René Réaumur in 1709 to describe the processes of shell formation in “De la formation et de l'accroissement des coquilles des animaux tant terrestres qu'aquatiques, soit de mer soit de rivière,” in RÉAUMUR (1709, p. 364–400, esp. 366, 370). Bourguet took the term from Réaumur but insisted on the interiority of intussusception (71) in contrast to the kind of external, mechanical accretion occurring in crystals or shell formation. Buffon used the term “intus-susception” in line with Bourguet's account of an internal absorption or assimilation (e.g., *History of Animals*, chap. 3, “Of Nutrition and Growth”), as did Kant when arguing in the above citation that systems may “grow from within (*per intussusceptionem*), but not by external addition (*per appositionem*)” (KrV, A833/B861). The appearance of “intussusception” after Kant shows its meaning to have changed again, in this case via Schelling, who used it in his philosophy of nature to identify the universal tendency of attraction in nature. See *First Outline of a System of the Philosophy of Nature* (2004, p. 7). A brief review of Bourguet's position is in ROGER (1997, p. 300–303). For a fuller treatment see DUCHESNEAU (2003, p. 3–31). Thomas Hankins describes Buffon's “popularization” of Bourguet's main tenets in HANKINS (2005, p. 128–129).

45 Kant made the same point in the *Metaphysics of Morals*: “Since, considered objectively, there can be only one human reason, there cannot be many philosophies; in other words, there can be only one true system of philosophy from principles, in however many different and even conflicting ways one has philosophized about one and the same proposition”; only by paying attention to that fact, according to Kant, would it be possible to demonstrate the “unity of the true principle which unifies the whole of philosophy into one system” (MS, AA 06:207). In *Religion Within the Bounds of Reason Alone* Kant also described the historical self-development of religion in a manner that was indebted to his description of reason. For example, “we must have a principle of unity if we are to count as modifications of one and the same church the succession of different forms of faith which replace one another . . . for this purpose, therefore, we can deal only with the history of the church which from the beginning bore with it the germ and the principles of the objective unity of the true and *universal* religious faith to which it is gradually being brought nearer” (MS, AA 06:125). This point would be mirrored in the social and political sphere once Kant took up the history of civil constitutions in his essay *Perpetual Peace*, a history whose epochal determinations were unified throughout, as Kant saw it, by the unfolding of reason's concept of right (Zef, AA 08: 350)—a point that Kant repeated in terms of the “evolution of a constitution” in both the *Conflict of the Faculties* (SF, AA 07: 87, see also 07: 91) and the *Metaphysics of Morals* (MS, AA 06: 340). In his *Philosophy of Art* Schelling mirrored, therefore, Kant's account of philosophy's organic development across history, in Schelling's words: “There is only *one* philosophy and *one* science of philosophy. What one calls different philosophical sciences are mere

presentations of the *one*, undivided whole of philosophy under different ideal determinations. ...The relationship between the individual parts in the closed and organic whole of philosophy resembles that between the various figures in a perfectly constructed poetic work, where every figure, by being a part of the whole, as a perfect reflex of that whole is actually absolute and independent in its own turn." See SCHELLING (1989, p. 281–282).

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KANT ON HISTORY

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While Kant's writings on the philosophy of history have always been an object of interest, his views on history as such have not yet been studied in detail perhaps because there was never a clear notion that his views on the subject deserved attention at all or perhaps, too, because they were thought merely to be a part of his practical philosophy², not always easy to reconcile with it³. The fact that his *Physical Geography* has recently become an object of attention⁴, however, has prepared the way for going back to his works in search of his thoughts on this matter because, in Kant's view, geography and history belong together as a way of expanding the realm of experience⁵.

Nevertheless, Kant's *Physical Geography* is neither the only nor even the most important source for uncovering his views on history. As shown below, the notes available from his *Lectures on Logic* contain many observations about the nature of historical knowledge, its method, and the specific challenges it poses for a philosophical mind. This alone could be a reason to qualify the traditionally held view that Kant's remarks on history are merely an afterthought of his other epistemological interests⁶. It would be more accurate to claim that his remarks on historical cognition constitute a paradigmatic reflection of his general epistemological views. For Kant "historiography is a respectable discipline"⁷ with its own object and method. Still, it is true that his remarks on history also pave the way to inquire after the ultimate meaning of historical events⁸ as a whole and, hence, after a philosophy of history.

1. NATURE AND DIVISIONS OF HISTORICAL KNOWLEDGE

As Michael Young notes, Jäsche's *Logic* manual, based on notes provided by Kant, should be treated with caution⁹. Still, to the extent that most of the fragments on history collected in Jäsche's *Logic* also appear almost word for word in other surviving transcripts of Kant's lectures¹⁰, there is some reason to think that those texts are representative of his views of history as a particular kind of cognition. The strong parallelisms among them also suggest that throughout the years, Kant's views on history did not change in significant ways. Continuity is found, for example, in the Lectures on Logic in which Kant divides cognition into historical and rational cognition. "The latter – he says – includes, e.g. mathematica, and philosophy, the former geography and the proper history of history". (V-Lo/Blomberg, AA 24.1:290.21-24). While this is a division according to the object, he also observes that not only the object (the subject matter), but also the perspective (the form) can be either historical or rational¹¹:

All learned writings are either historical or dogmatic. Writing can be historical both as to its material, if it is something that really happened or cognition of the individuo, and as to its form. That form which is not rational, where I do not derive by means of universal cognition of the grounds, is called historical (...) (V-Lo/Blomberg AA 24.1:296.32-297.3)¹².

The text is noteworthy because of the distinction it introduces between subject matter and form, at least in the sense that it leaves room for rational subjects to be treated historically. Although at first sight it might seem that Kant is introducing the issue of genres, his approach is an epistemological one, that is, if a given cognition does not spring from reason, it can be called historical, both from the perspective of the object, as well as from the perspective of the matter¹³. As Muglioni summarizes, "the word 'historical' – *historisch* - designates empirical knowledge in general, *ex datis*, by opposition to rational knowledge, *ex principiis*"¹⁴. Thus, in the quoted passage, the object as such is regarded as historical insofar as it revolves around something that has happened or involves cognition of individual things. In Kant's view, however, dealing with individual and contingent things, entails that history as such has nothing to do with reason, for he expounds rationality in terms of necessary connection to universal principles¹⁵. This thought is explicitly conveyed in the *Philippi Logic*¹⁶. History is not concerned with necessary laws or universal principles, but rather, with "actualia quae sunt objecta sensum" (V-Lo/Philippi, AA 24.1,398.33). This contrast between reason and the senses is at the bottom of the two basic perspectives, with which, according to Kant, cognition can be approached:

The division of cognitions according to concepts is a logical division; the division according to time and space is the physical one. Through the former we get a system of nature; through the latter, a geographical natural description (...) we can both, history and geography, equally characterize as descriptions, with the difference that the former is a description according to time, and the latter according to space (PG, AA 09:159.34-2; 160.28-30).

The distinction between "system" and "descriptions" goes back to the distinction between the universal cognition of the foundations, proper to rational knowledge, and the sensible knowledge of "what happens", the object of historical cognition, which is marked by

its contingent character. This means that historical cognition cannot be explained in terms of the universal concepts of the power of understanding, but only registered in terms of the *a priori* forms of sensibility, namely, in terms of space and time: “Everything that happens is considered in connection with space and time...” (V-Lo/Blomberg, AA 24.1:297.7-8). Hence, history and geography are not primarily concerned with providing a system of nature, but are rather engaged in a description of phenomena, according to space and time.

Given the dignity of rational knowledge – its connection with necessary principles – Kant’s account of historical-geographical knowledge just in terms of “description” could seem to demean those activities. To see this approach in a more favourable light, however, it is advisable to take a look at the way he introduces his *Physical Geography*. In this work, Kant explains that the sources of our knowledge are pure reason or experience, whereby reason is instructed by experience starting with our senses¹⁷. Yet, the senses just provide us with knowledge about the present world¹⁸, which is not enough in order to know the world, for, on the one hand, we only live a short period of time and, on the other, we cannot visit all places. We must, instead, rely on the experience of others through stories and descriptions. History and Geography represent, therefore, two ways of expanding our experience, our knowledge of the world¹⁹. Thus, although similar events or actions may invite us to draw regularities that, in certain cases, may even resemble the regularities of rational cognition, what makes historical cognition unique is that it increases experience, with the knowledge of individual cases irreplaceable in space and time.

Indeed, historical cognition thus understood, i.e., as dealing with “what happens”, is to be divided into history and geography. Kant often observes that history and geography should not be kept separate²⁰ since they represent two complementary approaches to the description of individual events responsible for enlarging the realm of our experience. Accordingly, in the *Physical Geography*, Kant defines history by reference to geography, as “eine kontinuierliche Geographie”²¹. More generally, geography represents the reference point available to all sorts of cognitive approaches²² just like in the *Philippi Logic*, where Kant speaks not only of physical geography, but also of political geography, theological geography, and moral geography²³. In the *Blomberg Logic*, however, he seems to privilege the historical perspective, insofar as he describes the difference between history and geography by resorting merely to “time”. Accordingly, the defining mark of history consists in its consideration of “what happens” through time; by contrast, the defining mark of geography consists in its consideration of “what happens” at the same time:

When one considers what happens insofar as it is at different times, however, this is called history, but insofar as it is at the same time it belongs to the field of geography. There are various kinds of geography and history (V-Lo/Blomberg, AA 24.1:297.7-11)²⁴.

Can any conclusion be drawn from the characterization of geography by reference to “time” instead of “space”? Perhaps the only conclusion to draw is that Kant thinks of space in terms of time, namely, in terms of “any given point in time”. But there is perhaps a further reason for this. Consider the fact that in dealing with geographical entities he is also dealing with things “that happen”, i.e. historical cognitions and the fact that time is the “substance” of what happens, or rather, its lack of substance. In any case, the fact that history – both history

and geography – deals with “what happens” leaves room for further division of its object, according to a diversity of cognitive interests, whose only point in common is the fact that they extend reason, and provide material – in Kant’s own words — “for the use of reason”.

Along these lines, Kant also divides history “into political history, church history, learned history and private history”. While, in this case, Kant leaves out “natural history”, which he extensively treated in three of his other essays – *On the Different Races of Human Beings* (1775), *Determination of the Concept of a Human Race* (1785), *On the Use of Teleological Principles in Philosophy* (1788) — he does explicitly mention what he calls “moral history”, which he considers “the morals of common life and also moral data”. (V-Lo/Blomberg AA 24.1:297.16-17)²⁵. It is clear that by referring to “moral data”, Kant is not referring to morality in its strict sense since, by definition, the moral dimension of an action cannot be observed from the outside; in this context, “moral data” are nothing other than the “mores”, which are also the object of his *Anthropology*, and could eventually become the object of sociology, as in Durkheim’s case. This, at least, is implicit in the analogy he draws between biography— “the life of a single subject”— and history, which chronicles the life, the moral data, of an entire society and even, of the entire human species. From this perspective, even the discussion of the concept of race may be found to serve a moral purpose since Kant sees racial differences as dependent on climate adaptation, meaning that there is no fundamental difference among races, but rather a single human species, which can eventually be considered the subject of a single universal history²⁶.

The practical purpose of all historical knowledge, however, is present in Kant’s observation that “all history, of whichever kind it may be, should have the end of extending reason; it should provide the material for the use of reason”. (V-Lo/Blomberg, AA 24.1:297.18-20). Indeed, in exploring the “use of reason”, Kant already points to the fact that historical knowledge is not an ultimate end; rather, it furnishes reason with data useful for rational knowledge²⁷ or, more generally, for a variety of purposes, which, in Kant’s terms, is another name for “culture”. This is at the basis of the distinction that Kant introduces between “learned history” and “pragmatic history”:

That history which becomes useful through universal rules is called pragmatic; this can have a relation either to speculation or to practical reason. If one learns merely the names of the sovereigns and knows their reigns, then this provides little material for the use of reason, i.e. for speculation, or for practical rules. In the beginning, nonetheless, one must abstract from the use of reason and equip oneself optimistically with many historical cognitions. Learned history becomes pragmatic when one considers learnedness in relation to human reason, if one looks to its growth or to the causes by which it is held back (...) (V-Lo/Blomberg, AA 24.1:297.22-32).

In all this, Kant’s focus is on history proper, that is, human history or the history of freedom rather than “natural history”²⁸, as shown above. While one could consider the exclusion of natural history a sign that only humanity can be considered an intrinsically historical subject²⁹, this view would contradict Kant’s approach in other texts, where he signals that the strict use of the term “history” only requires being able to recount any process from its origins. Thus, for example, in the *Physical Geography*, he sustains that the designation “natural

history” is not adequate based on the fact that nobody can really provide a complete, written account of natural events starting at the beginning of time.³⁰ Still, according to the *Philippic Logic*, Kant says that the mere description of nature would also count as historical knowledge³¹ simply because it deals with “*actualia quae sunt objecta sensuum*” whose description is carried out through a period of time³². Along the same lines, in the *Critique of Judgment*, he explicitly says that natural history is concerned with a description of nature— or, rather, of its origins— conjectured on the basis of observable phenomena³³. As Monique Castillo notes, the contrast Kant intends to draw between a description of nature and a history of nature points at the crucial difference between mere recollection of facts and the introduction of a narrative thread³⁴.

2. HISTORICITY, HISTORICAL SCIENCE, AND NARRATIVE

From a contemporary perspective, it might seem that Kant’s concept of history is very rudimentary, insofar as he reduces the historical dimension to the empirical recounting of “*actualia quae sunt objecta sesuum*” regardless of whether these objects are linked to the exercise of human freedom or to the evolution of natural processes³⁵. While he was certainly aware of the difference between a history of nature and a history of freedom, his main explicit concern was to show that the “historical” account of events is not in conflict with the “scientific” approach to those events in terms of “natural laws”. Indeed, as we know, Kant also takes human events as subject to this twofold consideration³⁶ such that, although they are attributable to freedom from a practical perspective, as appearances they are not very different from other natural events, equally subject to natural laws³⁷. From this perspective, they, too, should be explained in conformity with some sort of universal laws, to be inferred from observable history, as he writes in his *Idea for a Universal History*:

Whatever concept one may form of freedom of the will in a metaphysical context, its appearances, human actions, like all other natural events, are certainly determined in conformity with universal natural laws. History –which concerns itself with providing a narrative of those appearances, regardless of how deeply hidden they causes may be –allows us to hope that if we examine the play of the human will’s freedom in the large, we can discover its course to conform to rules as well as to hope that what strikes us as complicated and unpredictable in the single individual may in the history of the entire species be discovered to be the steady progress and slow development of its original capacities (IaG, AA 08:17.1-12).

With those words, Kant makes clear his approach to history in terms of narrative³⁸, which is supposed to make sense of observable facts or events by suggesting a regular course of events that is only discoverable by going beyond the individual perspective to adopt the perspective of the entire species. This regularity does not coincide with the universal laws in charge of providing us with a causal explanation of phenomena: while universal laws of nature can explain the physical existence of certain facts – be they natural or human facts- they are insufficient for making those facts intelligible to us. Intelligibility requires finding a connection between facts and the interests of reason. As argued below, for Kant, this comes to be the

ultimate reason of historical *narrative*, providing human beings with a connection between otherwise unintelligible human events and the ends of reason³⁹.

From this perspective, historical narrative responds primarily to the third interest of reason that asks “what may I hope?” (A805/B833). This mitigates Kant’s own distinction between “learned history” and “pragmatic history”, if only we take the “pragmatic” bent of history broadly enough to encompass intelligibility and hope. Kant himself, however, took the pragmatic character of history in more conventional terms: while learned history looks at knowledge *per se*, pragmatic history looks to the possible employment of that knowledge. Such a distinction not only projects upon historical knowledge the difference between speculative and practical reason, but is also relevant for identifying the specific character of scientific knowledge when deprived from subordination to any other interest. Indeed, because of its interested character, all pragmatic history goes beyond the rules of science, even if it has to maintain the requirements of healthy reason, and its logical perfection: “in all sciences and learnedness the method of healthy reason must reign”, even if “everything that occurs in learnedness need not also, conversely, occur in healthy reason”. According to Kant, the defining feature of “healthy reason” is its embodiment in particular experiences. By contrast, the defining feature of learnedness is the acquisition of knowledge in abstraction of any possible use:

In all sciences I look not to how something appears in employment, but instead to how it can be judged before any employment. I look to how something can be thought *in abstracto*, too; but if, on the contrary, I proceed according to the rules of healthy reason, then I must show everything *in concreto*. The second kind is a cognition that brings with it a certain life. The first, however, serves only for speculation and curiosity (V-Lo/Blomberg, AA 24.1:290.10-17).

Now, in my view, the distinction between speculative-learned and lively-pragmatic history may also be relevant for understanding the difference between history as a science and a philosophy of history. Indeed, although no philosophy of history can be considered simply in narrow “pragmatic” terms, it could be so considered if only we widen the scope of human interests so as to include the fundamental interests of reason, since the latter is interested in making sense of human history in general so that human beings can find a hospitable soil for the hopeful exercise of moral freedom in nature.

3. HISTORY AS A SCIENCE

In the PhL, Kant distinguishes between *doctrine* (a complex of different cognitions), a *discipline* (if that complex is subject to a method) and a *science* (cognition, according to method— hence a discipline - brought into completion). (See V-Lo/Philippi, AA 24.1: 483.20-25). To the extent that he is ready to accept that not all science follows a deductive pattern, Kant takes history to be a science; sometimes he suggests it can also be a doctrine in the sense previously indicated— a complex of different cognitions. In this vein, in the *Blomberg Logic* he says that history “belongs to no doctrine, but it is just as much a doctrine as dogmatic truths”. (V-Lo/Blomberg, AA 24.1:293.1-2). Being a doctrine in this sense does not entail being a

discipline, although it does not exclude it either. At other times, however, Kant reserves the term “doctrine” for the science that can be proved from *a priori* principles such that neither history nor any other empirical science could be called a doctrine (V-Lo/Pöhlitz, AA 24.2: 506.5-10). Still, not being a doctrine in this sense does not prevent him from recognizing the scientific character of history because there can be science without demonstrations and the example he gives of this is precisely history⁴⁰.

Lacking “demonstration”, however, is not the same as lacking certainty. If historical cognition is to be regarded as a science, it has to strive for certainty. This certainty, however, is of a peculiar kind. Kant stresses that for the most part, our historical knowledge stems from belief⁴¹. This highlights the importance of witnesses; depending on whether they are “eye-witness” or “ear-witness”, “subordinate witnesses” or “coordinate witnesses”, the certitude of the experience they transmit decreases or increases⁴². Resorting to citations rests upon beliefs⁴³. In the *Blomberg Logic* Kant speaks of “comparative certainty”, as opposed to the apodictic certainty proper to rational cognition:

Comparative certainty is the relation of the grounds of the holding-to-be-true to the grounds of the opposite. Apodictic certainty, however, is absolute and consists in the relation of the grounds of the holding-to-be-true to the sufficient ground. History is certain merely comparative, never apodictically. . . Morals, however, and therein the *jus naturale* in particular, contains many apodictic certainties. Also distinct from apodictic certainty is mathematical certainty in intuition, which is evident (V-Lo/Blomberg, AA 24.1:225.23-31).

While the certainty proper to rational cognitions is ultimately referred to the principle of sufficient ground, the certainty proper to historical cognitions rests upon comparison of empirical cognitions⁴⁴ or competing explanations. At any rate, in order to achieve this kind of certainty, historical knowledge must follow a method. The lack of method results in “tumultuous” thinking⁴⁵. Method alone brings knowledge into *discipline*, preparing the path for science. Now, according to Kant,

In historical sciences one has two methods, the chronological and the geographical. The two can be combined with each other. The last is better than the first. In all cognitions that hang together one must first take into consideration the whole rather than its parts, and of the parts the large ones rather than the small ones, the higher division rather than the lower (V-Lo/Blomberg, AA 24.1:292.27-33)⁴⁶.

Interestingly enough, in spite of explaining geography in terms of time— geography deals with natural events in present time — Kant tends to subordinate history to geography⁴⁷ and speaks of a “geographical method” that he holds superior to the chronological method⁴⁸. To judge from the above quote, this preference is based on the fact that the geographical method, by allowing one to consider “what happens” at any given moment in time, paves the way for the consideration of a whole (*globus terraqueus*, he says in MS, AA 06:352.10-11) and thus, for a kind of knowledge that resembles more the idea of systematic knowledge. He holds that human beings have a natural drive towards systemic knowledge⁴⁹, be it rational or historical

systems. By contrast, one of his frequent concerns about historical knowledge has to do with its extensiveness and indeterminacy:

Many sciences are of such a kind that, with the passage of time, human capacities will be overstepped by their extent. Thus history, e.g., is already very extensive: with time and its duration, more and more is always happening. These all add to history, and this science finally will thus become extensive and grow, so that our memory will finally be far too small. For it is already quite hard now (V-Lo/Blomberg, AA 24.1:74.15-16).

Kant somehow anticipates the “tragedy of culture” (Simmel) resulting from the split between objective and subjective culture, which he conveys in terms of history (as a science) and memory (as a subjective capacity). Yet, in order to prevent this result, he is also ready to develop an alternative, rational account of history, which, as anticipated above, resembles natural science insofar as it takes a universal approach to human affairs and aims at discovering regularities in historical events⁵⁰. Before turning to this alternative account— which is, in fact, an anticipation of sociological science — it is worth considering his other remarks about method, given that they offer some clarification on his approach to history as a science.

There are two methods of composing dogmatic writings, either tumultuously or methodically. The latter method brings about a system. A system is a whole. Systematic writings differ from tumultuous writings in that they constitute a whole that fits together. Excerpts are actually systems. The principia of dogmatists have to be expounded in dogmatic writings, then pulled together and considered *in concreto*. And one must mix with this something historical, in order to provide evidence (V-Lo/Blomberg, AA 24.1:297.32-298.4).

The role of method is to systematize knowledge. Writing methodically is opposed to writing tumultuously; although Kant seems to refer to the composition of dogmatic writings in the previous passage, this division is also relevant to the distinction drawn below between polyhistory and rational history because polyhistory is marked by its indefiniteness, while rational history is marked by its systematic ambitions, which is to say, its philosophical ambitions. As conveyed in the *Jäsche Logic*,

Scholars in matters of reason are commonly ignorant historically. Historical knowledge without determinate limits is polyhistory (...) Mere polyhistory is cyclopic learnedness, which lacks one eye, the eye of philosophy, and a cyclops among mathematicians, historians, natural historians, philologists, and linguistics is a learned man who is great in all these matters, but who for all that holds all philosophy to be dispensable (Log, AA 09:45.20-21;28-32).

According to the *Philippi Logic*, Kant defines “polyhistory” as “historical knowledge of the total horizon of the human being” (V-Lo/Philippi, AA 24.1: 383.24-25). By “horizon” Kant means “the congruence of the limits of our cognition with the ends of mankind and of men. Thus, it is a complex of cognition which, taken together, are adequate to our ends” (V-Lo/Wiener, AA 24.2: 814.10-12)⁵¹. While the horizon of historical knowledge resists exact determination⁵², the philosophical eye can help us discern the purpose of all knowledge,⁵³ so as to avoid mere polyhistory⁵⁴. At any rate, the fact that Kant reflects on the need for

a philosophical eye to avoid mere polyhistory does not prevent him from considering the specificity of the historical method in a more mundane way by, for instance, noting the difference between working from primary sources and working as a *compiler*:

The method where one does not draw cognition from one's own sources but instead takes from those who have drawn from the source, is called compilation. History is compiled if I have assembled it not from primary sources but instead from later ones. One can also compile philosophy, where one gathers together what others have thought by means of reason. One proves his skill, however, if, with clever selection, one pulls together the most important things from authors who possess great acuity, from the most through histories. The compiler is distinct from the *plagiarius*, of course. This last pretends to have drawn from the primary learned sources, although he only exhibits someone else's product (V-Lo/Blomberg, AA 24.1:298.6-17)⁵⁵.

While distinguishing the *compiler* from the true historian, Kant does recognize a skill proper to the good compiler, namely, her ability to select “the most important things”. This skill, however, requires acquaintance with a vast amount of knowledge. Accordingly, the good compiler is usually someone deserving of the name “polyhistor”.

4. THE NOTION OF “POLYHISTORY”

As noted above, Kant distinguishes between rational and historical cognitions, that is, between sciences of reason and historical sciences. Following the *Dohna-Wundlacken Logic*, he equates historical sciences and learnedness: “the complex of historical sciences is learnedness”. By contrast, “the complex of sciences of reason has no particular name, for its parts, philosophy and mathematics, are simply too very different”. In this account of his *Logic*, Kant would apply the name “polyhistory” to “the complex of all sciences” (V-Lo/ Dohna, AA 24.2:715.29-33).

In the *Vienna Logic*, by contrast, he distinguishes between “historical polyhistoria”—meaning “learnedness extended without determinate limits”—and “polymathia”—meaning “the knowledge of reason extended without determinate limits”. “The two together”, he adds, “can be called pansophia”⁵⁶, a term that is obviously different from “philosophy” in that the latter does not necessarily bring with it an incredible amount of knowledge, but rather a legislation of reason and a principle of judgment. The conceptual distinctions introduced in the *Vienna Logic* are more closely aligned than the *Dohna-Wundlacken Logic* with the most reliable text we have, the *Jäsche Logic*, in which Kant distinguishes between *polyhistory*, *polymathia*, and *pansophia*:

Scholars in matters of reason are commonly ignorant historically. Historical knowledge without determinate limits is polyhistory; this puffs one up. Polymathy has to do with cognition of reason. Both historical and rational knowledge, when extended without determinate limits, can be called pansophy (Log, AA 09:45. 20-24).

At the same time, a similar reference to “cyclopic” learning in the *Jäsche Logic* gives ground to think that “polyhistory” can be applied generally to vast learnedness in all branches of knowledge. No matter how we delimitate the term “polyhistory”, the basic idea is clear: “in the sciences... there is a difference between those that can be drawn from reason and those that

must not be taught based on reason, such as geography, etc”. Likewise, it is clear that, while recognizing that “in the previous *seculum* the inclination of most men ran towards polyhistoria”, Kant is particularly interested in providing knowledge— including historical knowledge— with a philosophical eye. Now, “historical knowledge includes the science of the tools of learnedness —philology, which comprises a critical acquaintance with books and languages (literature and linguistics)”. (Log, AA 09:45.24-27). Philology thus understood does not merely include the cultivation of science, but also the cultivation of taste. Indeed,

One part of philology is constituted by the *humaniora*, by which is understood acquaintance with the ancients, which furthers the unification of science with taste, which rubs off coarseness and furthers the communicability and urbanity in which humanity consists (Log, AA 09:45.33-37).

This is consistent with the characteristics of the polyhistor that Kant presents in the *Dohna-Wundlacken Logic*. The polyhistor must be a humanist “well-acquainted with the ancients and the fine arts (poetic and rhetorical art)”, he must be a linguist “well-acquainted with ancient languages, because here it is a matter of independent, lasting models”, and he must be a literator, i.e., “someone well-acquainted with books” (V-Lo/Dohna, AA 24.2:714.33). As suggested above, this brings him close to the philologist since “philology is the complex of all instruments of learnedness” the “cognition of the tools for the study of the ancients” (V-Lo/Wiener, AA 24.2: 818.13), and is completed by adding the taste of the humanist⁵⁷. The fact that both history and philology come together under the figure of the polyhistor is significant of the intimate relation between history and philology, insofar as historians work with ancient documents and languages⁵⁸. Now, according to Kant, the knowledge acquired by the polyhistor, admirable as it is, calls for a philosophical eye, which Kant first introduces for moral reasons:

He who is acquainted with many languages is a linguist, and taken together these constitute the great learned man. This is great knowledge, of which Paul says it inflates. For if the polyhistor is acquainted with so many books, he believes he knows as much as those who wrote them, although he is acquainted with them only historically. Philosophy can tear down pride and make evident one’s true ends. Learnedness without philosophy is cyclopic learnedness. Philosophy is the second eye, and it sees how all the cognitions of the one eye with reference to a common end (V-Lo/Wiener, AA 24.2: 818.26-35).

While many would surely be moved to discuss the idea that philosophy tears down the pride instilled by great knowledge, the most relevant point here is the reference to philosophy as “the second eye”, which brings all other cognitions towards a common end. Indeed, philosophy’s desire for unity introduces order in the vast knowledge available to the polyhistor by referring it to the needs and the ends of reason. This is part of what Kant sees as to “orient oneself in thinking”⁵⁹, which is at the basis of any historical narrative, and, ultimately, at the basis of any philosophy of history.

5. PHILOSOPHY OF HISTORY

As advanced above, historical narrative is responsible for providing human beings with a link between human events and the interests of reason. Now, while reason is ultimately interested in making sense of worldly appearances so as to encourage hope in the realization of the human moral vocation, this big, ultimate narrative, does not necessarily exclude other intermediate narratives that serve other short-term interests. This applies, for example, to what Kant calls “pragmatic history”, an aspect of that “knowledge of the world” required for the advancement of human interests and happiness. Moreover, history as such could be viewed in this pragmatic light to the extent it enlarges our “knowledge of the world” and makes us cultured beings, i.e., skilled for many purposes⁶⁰. From this perspective, even natural history belongs to historical knowledge insofar as it helps explain the emergence of human nature and races— what is called physical or physiological anthropology— and thereby serves not only the interest of knowledge, but also broadens the realm of human experience in ways that can be found useful for orienting ourselves in the world. Yet, in the light of the human moral vocation, all this knowledge calls for a philosophical eye that articulates it so as to attempt to satisfy reason’s interest in hope. This philosophical labour, which as we read below takes the form of a “moral history”, is ultimately necessary because hope in human progress towards the good may actually be challenged by the multiplicity and strangeness of human events:

If it is asked whether the human race at large is progressing perpetually toward the better, the important thing is not the natural history of man (whether new races may arise in the future), but rather his moral history, and more precisely, his history not as a species according to the generic notion (*singulorum*), but as the totality of men united socially on earth and apportioned into peoples (*universorum*) (SF, AA 07: 79.12-17).

In speaking of “moral history” (*Sittengeschichte*), Kant is thinking not in the history of the human species as such, i.e., as a specific natural kind, but rather in the history of the human species as subject to a common and politically articulated moral destiny: “the totality of men united socially on earth and apportioned into peoples”. To this end, however, we need more than a scientific account of events, which is the role of historical science. Instead, Kant calls for a *narrative* stemming from reason’s interests, specifically, reason’s interest in realizing the highest good in spite of all appearances. Indeed,

A certain feeling of indignation when one sees men’s actions placed on the great stage of the world and finds that, despite some individuals’ seeming wisdom, in the large everything is finally woven together from folly and childish vanity and often childish malice and destructiveness. In the end, one does not know what concept one should have of a species so taken with its own superiority (1aG, AA 08: 17.32-18.5).

Kant’s philosophy of history, then, constitutes a narrative starting out of a moral concern, as a sort of “anthropodicy”, a justification of the human species in spite all historical appearances. As Castillo points out, history presents itself as the first enemy of the idea of progress⁶¹. The purpose of Kant’s philosophy of history is to provide us with sufficient ground for hoping that current injustice and stupidity is not the last word on humanity, for hoping that the seeds of

good implicit in man's moral vocation will prevail above all evil appearances. The question is how to construct such a narrative so that it does not become just a nice, but baseless story. Kant is well aware that "the philosopher cannot assume that in the great human drama mankind has a rational end of its own" since appearance alone does not justify that thought. Therefore, he speculates on the possibility of finding a guiding thread that, while overcoming particular human intentions, nevertheless contributes to the fulfilment of the moral end sketched above: "the totality of men united socially on earth and apportioned into peoples". He expects to find this guiding thread in "nature", which, as we know from his writings on philosophy of history, is just another name for Providence. Thus, the philosopher's

only point of departure is to try to discover whether there is some natural objective in this senseless history of creatures who proceed without a plan of their own but in conformity with some definite plan of nature's (IaG, AA 08:18.6-9).

This is exactly the purpose of his essay *Idea for a Universal History with a Cosmopolitan Intent* (1784). It amounts to "finding a guiding thread for such a history", which, nevertheless, he does not plan to write himself, but rather, already in an exercise of hope, leaves "to nature to produce the man who is in a position to write it" (IaG, AA 08:18.13) just like it produced a Kepler or a Newton in unexpected ways. This reference to Kepler and Newton is suggestive of the kind of history Kant considers necessary to write in order to make sense of human events; he is not interested in a merely faithful register of individual actions and events, but rather is interested in a search for regularities that can be explained in the light of general rules and deciphered by the philosopher in terms of "the plan of nature" to help fulfil the human moral vocation. If those words, in general, can be taken to advance the seeds of a social theory, delineated according to the model of natural science, they also display a peculiar reflexivity that constitutes a nascent sociology of knowledge. Indeed, the man in charge of writing that history, supposedly in the name of nature, would be himself a product of nature. Now, is this not the characterization of genius?

Genius is the talent (natural gift) that gives the rule to art. Since the talent, as an inborn productive faculty of the artist, itself belongs to nature, this could also be expressed thus: Genius is the inborn predisposition of the mind (*ingenium*) through which nature gives the rule to art (KU, AA 05: 307.11-15).

While Kant is far from equating science and art, his words do invite the reader to discover the analogy between creativity in art and creativity in the sciences⁶². In his *Idea for a Universal History*, however, he is interested in providing a reasonable narrative that, along with being the basis for the scientific account of history that ultimately equates to social sciences, can also justify human hope in the face of apparently senseless events. While this narrative requires inserting some speculative considerations into historical discourse, it should nevertheless be distinguished from fiction:

Surely it is permissible to insert speculations in the progression of a history in order to fill out gaps in the reports, because what comes before, as distant cause, and what follows, as effect, can give a fairly reliable clue for discovering the intervening causes so as to make the transition comprehensible. To produce a

history entirely from speculations alone seems no better than to sketch a romance. Thus it could not go by the name of speculative history but rather only that of fiction (MAM, AA 08: 109. 1-9).

Some have argued that, when Kant wrote these words, he had Herder's speculative history in mind. Precisely in order to distinguish his philosophy of history from that of Herder, Kant deliberately set limits to speculation⁶³ by resorting to an analogy with nature with the assumption that nature's stability provides a basis for inferring the first development of human freedom:

What may not be ventured regarding the progression of the history of human actions, can nonetheless be attempted through speculation regarding their first beginnings, as far as these are made by nature. For this speculation need not be fictional, but can instead be based on experience, if one presupposes that in their first beginnings these actions were no better or worse than we now find them to be, a presupposition that conforms to the analogy of nature and has no risky consequences. A history of freedom's first development, from its original capacities in the nature of man, is therefore something different from the history of freedom's progression, which can only be based on reports (MAM, AA 08: 109.9-20).

Accordingly, his "guiding thread" for scientific history is conjectured from a reflective consideration of nature. Indeed, in a move clearly aligned with the Stoic tradition, Kant takes nature to convey the basic wisdom upon which every other principle of judgment rests. While, as Allison has remarked⁶⁴, Kant's own philosophical foundation for this thesis is provided in the third *Critique*⁶⁵, it is in *Idea* where he more explicitly articulates the principle inspiring this sort of historical narrative: "all of a creature's natural capacities are destined to develop completely and in conformity with their end" (IaG, AA 08:18.19-20)⁶⁶. Once this principle is assumed⁶⁷, one has to conclude that the subject of that "history" cannot be the individual, but rather the human species⁶⁸. Indeed,

Each individual man would have to live excessively long if he were to make complete use of all his natural capacities; or if nature has given him only a short lease on life (as is actually the case), she requires a perhaps incalculable sequence of generations, each passing its enlightenment on to the next, to bring its seeds in our species to the stage of development that completely fulfills nature's objective. And the goal of his efforts must be that point in time, at least among the ideas of men, since the natural capacities must otherwise be regarded as in large part purposeless and vain. In that case all practical principles would have to be given up, and nature, whose wisdom serves as a fundamental principle in judging all other arrangements, would in the sole case of man have to be suspected of childish play (IaG, AA 08:19.3-16).

Kant does not want to renounce all rationality in human affairs and he therefore looks to nature for a basic rationality that no human action can ever overturn. This move, however, goes in both directions: while he looks to nature for a basic rationality in human affairs, he assumes that reason has a natural interest in rationality. In other words, nature is to be found, first of all, in reason itself and constitutes another name for the interests of reason. On this basis, Kant's argument follows easily: nature would contradict reason if it had provided us with capacities that remain undeveloped. Since they do remain undeveloped at the individual level, we should assume that they will be developed throughout history⁶⁹. This, of course, entails

“upgrading” the historical unit from the individual to the species. Although this shift might suggest a certain depreciation of the individual, Kant backs his position with a moral argument that ultimately serves to preserve individual dignity: were we not to defend nature’s rationality, with the sort of argument presented above, “all practical principles would have to be given up” (IaG, AA 08:19.13).

If it is true that, by advocating the rationality of nature as the corner stone of scientific knowledge of history and as the basis of practical principles, Kant takes sides with teleology against Epicureanism (IaG, AA 08:25.9), then, by assuming that there is a meaningful historical narrative, he projects that teleology upon the human species. While this thought is explicitly articulated in the third Critique, it was already anticipated in pre-critical writings⁷⁰. In the context of this teleological approach to nature, and somehow replicating the *ergon* argument that Aristotle used for the individual on the level of the human species, he wonders: “is it truly rational to assume that nature is purposive in its parts but purposeless as a whole?” (IaG, AA08: 25.31-33). Now, what is the purpose of history as a whole? As indicated above, Kant suggests that it is the realization of humanity’s natural capacities; yet, to this end, he thinks it is important to advance “an internal, and... also an externally perfect national constitution”:

One can regard the history of the human species, in the large, as the realization of a hidden plan of nature to bring about an internally, and for this purpose, also an externally perfect national constitution, as the sole state in which all of humanity’s natural capacities can be developed. This thesis is a consequence of the foregoing one (IaG, AA08:27.1-8).

Yet, is there any empirical basis to support this idea, apart from the rationality of nature? Can we recognize any sign that suggests a development towards betterment? This is a question that Kant explicitly raises in *An Old Question Raised Again*, where he explicitly sets out to find a “historical sign”, which supports the idea of the progress of the human species towards a moral state. Already in *Idea* he had noted that in order to support this position, it is important to find a basis in experience:

One sees that philosophy also has its chiliastic vision, but one whose occurrence can be promoted by its idea, through only from afar, and it is thus anything but fanciful. The issue, then, is whether experience can uncover something like a course leading to this objective of nature’s (IaG, AA 08: 27.8-12).

At this precise point, based again on the systemic structure of the universe, Kant draws a significant analogy with astronomy: just as astronomical observation allows us to discover the existence of a system of stars, observation of human affairs should lead us to think of a historical cycle, the only problem being that cycles take such a long time to complete that we cannot infer the relationship of the parts to the whole with much certainty (see IaG, AA 08:27.12-19). Yet, since there is no agreement as to the order of history, Kant needs to prove first that history can be regarded as a whole⁷¹ and he does so by resorting again to the systemic order of nature, as required by the interest of reason:

Nonetheless, based on the premise that the universe has a systematic structure, and from the little that man has observed, we can justifiably conclude that such a cycle actually exists. Furthermore,

human nature is so constituted as to be incapable of indifference toward even the most distant epoch through which our species must go, if only it can be expected with certainty. This is especially so in the present case, where it appears that we can by our own rational organization hasten this happy time for posterity. For this reason its faintest signs of approach will be very important to us (IaG, AA 08:27.19-29).

Both arguments lead us to the possibility and convenience of a philosophical history, i.e., “a universal history of the world in accord with a plan of nature that aims at a perfect civic union of the human species must be regarded as possible and even as helpful to this objective of nature’s” (IaG, AA 08:29.1-6). While Kant is perfectly aware of the strangeness of this attempt, his main concern is to stress that sketching a universal history in accordance with a rational goal does not result in a “romance”, a novel, but it is rather an internal requirement of reason (IaG, AA 08: 29.10). In this spirit, he dares to project his philosophical eye upon history from Greece to his own times only to discover “a course of improvement conforming to rules in the constitutions of the nations on our continent (which will in all likelihood eventually give laws to all others)” (IaG, AA 08:30.26-27). Summarizing ideas already found in Hume’s account of the civilizatory process, he sketches a philosophy of history, which revolves around the introduction of civil constitutions and laws, as the basis for human progress and enlightenment. In this juridical reading of history he believes that he

discover[s] a guiding thread that can serve not only to clarify the thoroughly confused play of human affairs, or to aid in the political art of prophesying future changes in and among nations (a use that has already been made of history, even when it has been regarded as the incoherent product of ungoverned freedom). It will also clear the way for (what, without presupposing a plan of nature, one cannot reasonably hope for) a comforting view of the future, one in which we represent from afar how the human species finally works its way up to that state where all the seeds nature has planted in it can be developed fully and in which the species’ vocation here on earth can be fulfilled (IaG, AA 08:30.8-18).

Far from mixing historical knowledge and philosophy of history⁷², Kant views this latter endeavor as a way of justifying nature— i.e., providence. This represents “no unimportant motive for adopting a particular perspective in observing the world” (IaG, AA 08:30.20). Established on the grounds of a teleological conception of nature, this justification is required by reason’s inborn interest in meaning and hope:

For what use is to laud and recommend observing the majesty and wisdom of creation in the non-rational realm of nature, if that part of the great theatre of supreme wisdom that contains the purpose of all the rest- the history of the human race- should remain an endless reproach to it, the sight of which compels us against our wills to turn our eyes away from it and, since we despair of ever finding a perfectly rational objective in it, brings us to the point of hoping for that end only in another world? (IaG, AA 08:30.21-28).

In light of these latter words, it is possible to conclude that Kant’s philosophy of history is meant to provide a justification of humanity in its worldly existence. Indeed, while not excluding a further reflection on religion and hence a philosophy of religion, the specific outcome of his reflection on history provides an “objective narrative” to encourage human

hope in the realization of the human moral vocation, in spite of all appearances, i.e., in spite of evil and disaster. The compatibility of this “objective” narrative of hope with a “subjective” narrative of moral responsibility has often been seen as problematic⁷³. Indeed, if nature works secretly and somewhat independently from individual human agents, for the realization of the human moral vocation, does it not make moral agency superfluous?

While Kant’s answer to this question largely depends on keeping the morality and the efficacy of human agency strictly separate, the question *per se* invites reflection on two fronts. On the practical side, it invites reflection on the role that practical faith can play in the mobilization of historical responsibility; on the theoretical side, it invites reflection both on nature’s resourcefulness, which, through man’s unsocial sociability pragmatically “forces” mankind to enter into a civil constitution⁷⁴, and also on the role a self-conscious writer, enjoying freedom of speech, can play to advance the cause of enlightenment and freedom by developing this teleological narrative. At least, this is something that Kant himself suggests at the end of his short essay, as he tries to explain the peculiar character of the “a priori” history he has attempted to sketch. He assumes almost as a natural fact that future generations will be interested in historical events and processes only insofar as these advance the cause of freedom and cosmopolitanism; but awareness of this fact, which the philosopher of history is meant to awaken among his fellow citizens, may become a pragmatic incentive for political leaders, willing to be remembered by history, to act so as to advance that very end (See IaG, AA 08:31.5-10). With this view, Kant does not merely reflect upon the public role intellectuals can play to advance the cause of freedom⁷⁵; he also unveils the pragmatic side of the “prophetic history” whose birth he advances⁷⁶. This “prophetic history”, however, has another side to it that is directly related to the history of freedom and that cannot be written merely by resorting to a teleological account of nature, but rather also requires a specific hermeneutic of historical signs.

6. HERMENEUTIC OF HISTORICAL SIGNS

In *An Old Question Raised Again*, Kant once more takes up the question of human progress, elaborating the notion of a “prophetic history” of humanity in more detail. Specifically, he says that such a “history” is possible “if the diviner himself creates and contrives the events which he announces in advance” (SF, AA 07:80.1-2). To illustrate this idea, he mentions the examples of the Jewish prophets and suggests that politicians also try to play the same role because, by advancing certain intentions, they contribute their share to the realization of those very intentions: “So far as their influence extends, our politicians do precisely the same thing and are just as lucky in their prophecies...” (SF, AA 07:80.14-15). Implicit in those words is the idea that the discourses we introduce into the public sphere pragmatically contribute to the realization of certain purposes. As mentioned above, this is also the case of any account of history; because of its effect upon human agents, things may evolve very differently depending on whether we advance a catastrophist discourse (*terroristische Vorstellungsart*, in Kant’s own words), a eudaemonist discourse (chiliasm), or “stagnation in matters of morality” (*abderistism*).

At any rate, Kant thinks that the question at stake—whether the human race is constantly improving—cannot be resolved by a direct resort to experience “for we are dealing with beings

that act freely, to whom, it is true, what they ought to do may be dictated in advance, but of whom it may not be predicted what they will do” (SF, AA 07:83.12-15) and whose behaviour is marked by inconstancy. Could perhaps this inconvenience be solved by adopting a different perspective? To a certain extent, Kant pursues this strategy in *Idea for a Universal History* where, drawing on a significant analogy between a “scientific” approach to human affairs and the procedure of natural sciences, he suggests adopting the perspective of nature⁷⁷. On this occasion, he elaborates the same idea with more detail, explicitly taking the Copernican turn as a model (SF, AA 07:83.25). However, unlike the approach taken in *Idea*, he now seems more aware of the difficulties involved in adopting the perspective of Providence, the only position that would permit us to predict the *history of freedom*:

But, and this is precisely the misfortune, we are not capable of placing ourselves in this position when it is a question of the prediction of free actions. For that would be the standpoint of Providence which is situated beyond all human wisdom, and which likewise extends to the free actions of man; these actions, of course, man can see, but not foresee with certitude (for the divine eye there is no distinction in this matter): because, in the final analysis, man requires coherency according to natural laws, but with respect to his future free actions he must dispense with this guidance or direction (SF, AA 07:83.30-84.4).

While in *Idea* Kant bases his general approach to history solely on the concept of a teleological nature that cannot leave undeveloped human natural capacities and in *Speculative Beginnings* he rests upon the constancy of nature to sketch the origins of human history, in *An Old Question Raised Again* he explicitly deals with the history of freedom, along the lines already advanced in *Speculative Beginnings*: “the history of nature... begins with good, for it is God’s work; the history of freedom begins with badness, for it is man’s work” (MAM, AA 08:115.32-34). Now, Kant thinks that, given the “mixture of good and evil” found in human predisposition, it is difficult to predict with certainty whether human beings, of themselves, are willing to contribute to that end. A mere change in their point of view will not do the job⁷⁸. Therefore, while asserting that the problem of progress cannot be solved by directly resorting to experience, he nevertheless affirms that it should *start* from experience⁷⁹, meaning that we need to discover some sign that, when characterizing humanity, authorizes us to give more weight to good than to evil:

There must be some experience in the human race which, as an event, points to the disposition and capacity of the human race to be the cause of its own advance toward the better, and (since this should be the act of a being endowed with freedom), toward the human race as being the author of this advance (SF, AA 07:84.13-17).

Kant makes clear that in order to judge whether a particular event is significant for human disposition itself to cause its own progress, we need to focus not only on the event as such, but also on the accompanying circumstances, which, along with said disposition, made it possible. The important thing, however, is not the event as such, but rather the meaning it conveys to the philosophical eye. Indeed, the event should not be taken

as the cause of history, but only as an intimation, a *historical sign* (*signum rememorativum, demonstrativum, prognostikon*) demonstrating the tendency of the human race viewed in its entirety,

that is, seen not as (a sum of) individuals (for that would yield an interminable enumeration and computation), but rather as divided into nations and states (as it is encountered on earth) (SF, AA 07: 84.29-35).

The cosmopolitan character of Kant's approach to history comes again to the fore because it is narrowly linked to moral character. Yet, what kind of event, because it unveils humanity's moral disposition, could be taken as a sign of moral progress? According to Kant, this event need not be anything "momentous" or "magic":

It is simply the mode of thinking of the spectators which reveals itself publicly in this game of great revolutions, and manifests such a universal yet disinterested sympathy for the players on one side against those on the other, even at the risk that this partiality could become very disadvantageous for them if discovered. Owing to its universality, this mode of thinking demonstrates a character of the human race at large and all at once; owing to its disinterestedness, a moral character of humanity, at least in its predisposition, a character which not only permits people to hope for progress toward the better, but is already itself progress in so far as its capacity is sufficient for the present (SF, AA 07: 85.9-18).

The enthusiastic and sympathetic reaction of contemporaries to the French Revolution, more than the revolution as such, captured Kant's attention as a hopeful sign for human progress, in spite of all appearances. He takes that reaction as a particular sign of "a moral cause inserting itself in history". Kant asserts that this event's occurrence justifies the prophetic history of humanity along the lines he depicts, no matter if the revolution as such goes wrong (SF, AA 07: 88. 20 ff).

ABSTRACT: This essay intends to show how Kant's approach to history paves the way for his philosophy of history. In order to do so, I will first draw on some texts included in the transcripts of Kant's *Logic Lectures* to articulate his views on history. I will then argue that Kant's philosophy of history constitutes his particular way of making sense of the contingency proper to historical knowledge in light of the interests of reason.

KEYWORDS: Historical sciences – geography – polyhistory – narrative - moral history.

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NOTES

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2 Thus, as Christoph Wild notes, even neokantians such as Rickert or Windelband thought it necessary to go beyond Kant in order to develop a critical approach to history. In addition, Wild himself thinks that Kant's remarks about history were just a part of his practical philosophy. See WILD (1970, p. 260-275).

3 See LOUDEN (2002 p. 141).

4 ELDEN & MENDIETA (eds) (2011).

5 See PG, AA 09:160.31-161.2. I follow the quotation procedures established by *Estudos Kantianos* for Kant's writings. Yet, wherever possible, I use the Cambridge Edition for translation of Kant's texts into English.

6 See MEDICUS, F. von (1902, p. 5): "Kants Philosophie der Geschichte, I", *Kant Studien*, p. 3. "Hier muss es mit dem Hinweis darauf genug sein, dass Kant unter geschichtsphilosophischen Untersuchungen keine Erörterungen über die historische Methode verstanden hat, und dass er im Begriff der historischen Erfahrung irgend welche erkenntnistheoretischen Aufgaben gesehen hätte, die nach Beantwortung der Frage: Wie ist reine Naturwissenschaft möglich? noch ungelöst zurückbleiben könnten".

7 FACKENHEIM (1956-57, p. 385).

8 This is actually the problem that William J. Booth considers central in Kant's philosophy of history: "How ought we to view history, and what compels us to adopt a viewpoint at all? For history, as Kant frequently comments, is like a play, a theatrical spectacle—a tragedy, a comedy, or both. But what a curious sort of play! In it we are at once actors, authors and spectators". BOOTH, W. J. (1983, p. 56).

9 I. Kant, *Lectures on Logic* (1992, p. xvii). The handwritten notes that Kant gave to Jäsche are on AA 16; the manual is on AA 9.

10 I will refer to the *Blomberg* and the *Philippi Logic*, which are based on Kant's lectures in the early 1770's; the *Politz*, the *Hechsel* and the *Vienna Logic* are from the 1780s; and the *Busolt* and *Dobna-Wundlacken Logic* are from 1789 and the 1790s. More information on the logic lectures can be found at the following website: <http://www.manchester.edu/kant/notes/notesLogic.htm>

11 "Alle Systeme sind historisch oder rational. In jenen ist empirische, in diesen rationale Einheit; in jenen ist synthetische Einheit... in diesen analytische...". R AA 16: 277.15-278.1. n. 2227.

12 "Alle gelehrte Schriften sind entweder historische oder dogmatische. Eine Schrift kann historisch sein sowohl der Materie nach wenn sie etwas wirklich geschehenes oder eine Kenntniss vom Individuo ist, als auch der Form nach. Die Form heisst historisch die nicht rational ist; wo ich nicht durch allgemeine Erkenntniss der Gründe was herleite". V-Lo Philippi, AA 24.1: 490.28-32.

13 "Dogmatische und historische Wahrheiten werde unterschieden... Erkenntnisse, in so ferne nicht durch de Verstand und die Vernunft und nicht nach dessen Gesetzen in uns entspringen sid historisch z. B. Naturbeschreibung, Geographie und die Philosophie selbst kann historisch erkannt werden, wenn man nicht nach de Gesetzen des Verstandes verfährt". V-Lo Philippi, AA 24.1: 398.19-25.

14 MUGLIONI (2011, p. 82-83).

15 V-Lo Philippi, AA 24.1: 398.19-25.

16 "Die historische Erkenntniss hat nichts mit der Vernunft zu thun". V-Lo Philippi, AA 24.1, 319. 12.

17 As Kaulbach notes: "Das Geschichtliche, Historische ist das von reiner Vernunft aus nicht Konstruirbare. Es ist ihm das Verfahren des Empirischen, schlechten und schlichten Beschreibens, angemessen: man sieht, dass hier die von Leibniz eingeführte Unterscheidung zwischen den vérités de raison... und den vérités de fait". KAULBACH (1965-66, p. 432).

18 PG, AA 09: 156.20.

19 PG, AA 09: 159.14-20.

20 "Geschichte d.i. Betrachtung der nach einander geschehenen Begebenheiten kann von der Geographie nicht getrennt werden; so wenig als diese von jeer. Denn jede Begebenheit ist mit dem Umständen des Orts und mit andern Dingen connectiert; und ich kann den jezigen Zustand nicht recht erkennen, wenn ich nicht die vorhergegangenen Veränderung weiss". V-Lo Philippi, AA 24.1: 491.24-29.

21 "Die Geschichte desjenigen, was zu verschiedenen Zeiten geschieht, und welches die eigentliche Historie ist, ist nichts anders als eine continuirliche Geographie, daher es eine der grössten historischen Unvollständigkeiten ist, wenn man nicht weiss, an welchem Orte etwas geschehen sei, oder welche Beschaffenheit es damit gehabt habe. Die Historie ist also von der Geographie nur in Ansehung des Raumes und der Zeit verschieden. Die erste ist, wie gesagt, eine Nachricht von Begebenheiten, die auf einander folgen, und hat Beziehung auf die Zeit. Die andere aber ist eine Nachricht von Begebenheiten, die neben einander in Raume vor sich gehen. Die Geschichte ist eine Erzählung, die Geographie aber eine Beschreibung. Daher können wir denn zwar auch eine Naturbeschreibung, aber keine Naturgeschichte haben". PG, AA 09:161.3-14.

22 See PG, AA 09: 164-165, where Kant briefly explains the meaning of mathematical geography, moral geography, political geography, mercantile geography and theological geography.

23 "Eine politische Geographie wäre die Wissenschaft, wo man die Verfassung des Staats, wie sie zu einer Zeit ist, betrachtet. Theologische Geographie ware wo man die Religione verschiedener zu einer Zeit lebenden Völker betrachtete... Eine moralische Geographie die die Sitten der Völker, wie sie jetzt sind oder zu alten Zeiten gewesen sind erwägt... Es giebt auch eine Geographie der Gelehrsamkeit, wenn ich zeige, auf welcher Stufe die Wissenschaften jetzt sind. Denn Geographie begreift alles was in der Welt zugleich ist. Wenn ich aber zeige, was die Gelehrsamkeit für fata gehabt, so gehört das in die Historie". V-Lo Philippi, AA 24.1: 491.17-34.

24 See also: “Alles was da geschicht wird betrachtet in Verbindung mit Raum und Zeit. Wenn man das was da geschicht betrachtet, in sofern es zu verschiedener Zeit ist, so heisst da Historie: sofern es zu gleicher Zeit ist, so gehört's is Feld der Geographie”. V-Lo Philippi, AA 24.1:491.9-12.

25 See also V-Lo Philippi, AA 24.1: 491-2.

26 See CASTILLO (1990, p. 82 ss.). “L'option kantienne pour l'épigénèse est bien révélatrice d'une philosophie d l'histoire qui veut préserver l'indépendance théorique et philosophique de l'universalisme”. CASTILLO (1990, p. 87).

27 “Die Historie schafft nur Gegenstände zur rationalen Erkenntniss”. V-Lo Philippi, AA 24.1: 377.22-23.

28 Kant makes this distinction in his *Speculative Beginnings of Human History*. For an interesting account of the significance of freedom in this context, see FACKENHEIM (1956/57, p. 389): “Kant establishes history as a special sphere by showing two things: that freedom can appear and develop; and that there is cultural as well as moral freedom”.

29 Medicus attempts to argue in this direction. See MEDICUS (1902, p. 10-12).

30 “Diese letztere Benennung (Naturgeschichte) nämlich, wie sie von Vielen gebraucht wird, ist ganz unrichtig. Weil wir aber gewöhnlich, wen wir nur den Namen haben, mit ihm auch die Sache zu haben glauben: so denkt nun niemand daran, wirklich eine solche Naturgeschichte zu liefern. Die Geschichte der Natur enthält die Mannigfaltigkeit der Geographie, wie es nämlich in verschiedenen Zeiten damit gewesen ist, nicht aber, wie es jetzt zu gleicher Zeit ist, denn dies wäre ja eben Naturbeschreibung. Trägt man dagegen die Begebenheiten der gesammte Natur so vor, wie sie durch alle Zeiten beschaffen gewesen, so liefert man, und nur erst dann, eine richtig sogenannte Naturgeschichte. ... Denn die Naturgeschichte ist um nichts jünger als die Welt selbst, wir können aber für die Sicherheit unserer Nachrichten nicht einmal seit Entstehung der Schreibekunst bürgen”. PG, AA 09:161.15-18.

31 “Die dogmatische Erkenntniss der Wahrheit hat zum Gegenstand die allgemeine Beschaffenheiten der Dinge, die historische Wahrheit hat zum Object actualia quae sunt objecta sensum. Jede Begebenheit ist historisch: alle Sätze sind dogmatisch. Die theoretische Physik ist dogmatisch: die Beschreibung der Naturbegebenheiten historisch”. V-Lo Philippi, AA 24.1: 398.31-35.

32 “Man kann die Dinge der Welt insofern sie zu gleicher Zeit geschehen hervorzählen; dann gehört das zur natürlichen oder physischen Geographie. Man kann erzählen was zu verschiedenen Zeiten in der Natur sich zugetragen: dann heisst dies Naturhistorie”. V-Lo Philippi, AA 24.1: 491.13-17.

33 “If the name natural history that has been adopted for the description of nature is to remain in use, then one can call that which it literally means, namely a representation of the ancient condition of the earth –about which, even though there is no hope for certainty, there is reasonable ground for making conjectures –the archaeology of nature, in contrast to that of art. To the former belong fossils, just as to the latter belong carved stones, etc. For since we are really constantly if also, as is fitting, slowly working on such archaeology (under the name of a theory of the earth), this name would not be given to a merely imaginary branch of research into nature, but to one to which nature itself invites and summons us”. KU, AA 05:428. 28-37.

34 “Une description de la nature est une méthode d'observation anthropologique: la géographie, la physiologie servent à réunir simplement des faits. Mais l'histoire a besoin d'un il directeur qui en contient l'unité possible et en indique l'orientation à venir”. CASTILLO (1990, p. 171).

35 “La pensée Kantienne tend moins à constituer une théorie de l'histoire au sens general d'une rationalisation du devenir temporel et actuel qu'a dévoiler une certaine Idée de l'historicité interne de l'humanité, celle du progrès vers sa destination”. CASTILLO (1990, p. 144).

36 “The two elements in Kant's Copernican revolution both involve the spectator and his relation to the object: the first part of this revolution shows that experience is not possible without synthesis, i.e., a spontaneous power of the mind, and that therefore the given and the mind or spectator are co-equal ingredients of experience. The second part of Kant's revolution shows that the same event can be viewed now as a phenomenon necessitated by other causes in nature, now as something with a free cause”. BOOTH (1983, p. 57).

37 See KAULBACH (1965/66, p. 433; p. 442).

38 For a discussion of the narrative form of Kant's philosophical history as an alternative account to the narrative form of the novel, see WILLIAMS (2013).

39 “Die Vernunft nämlich sieht sich durch solche Zufälligkeit, die in Geschichte und Erfahrung auftritt, herausgefordert: sie will auch diesem ihr fremden Bereich gegenüber das ihr lebensnotwendige Prinzip der Einheit durchsetzen und sucht diese Einheit dort, wo sie ihr auf einer niedrigeren Stufe versagt worden ist, auf einem höheren Stand zu gewinnen”. KAULBACH (1965/66, p. 432).

40 “Man muss unterscheiden doctrin und discipline. Jede Institution kann negative sein d.h. vor Irrtümer bewahren, den ist sie discipline, oder positive d.h. Erkenntnisse erweitern, denn ist sie doctrin. – Kritik ist das, was vorhergeht ehe ich Erkenntnisse

als Doctrin oder discipline vortrage.... Wissenschaft... ist demonstrierte Disciplin, das ist falsch, sie kann doctrin sein, und kann Wissenschaft sein ohne Demonstration wie z. E. Historie". V-Lo/Pöhlitz 24.2:600.31-39.

41 Der größte Theil unsrer historischen Erkenntniss entspringt aus dem Glauben. Es ist ei grosses Hülfsmittel unsre Erkenntniss zu erweitern dass wir fremde Erfahrung adoptire können. Bey dem historischen Glauben setz man voraus eine Neigung zur Wahrheit die aus Ehrliche entspringt". V-Lo Philippi, AA 24.1: 450.10-14.

42 "Ein Augenzeuge ist der Seine eigene Erfahrung hat, ein Hörenzeuge aber der andrer Zeugnis hat. Dieser hat nur eine mittelbare Glaubwürdigkeit. In der Reihe der subordinierten Zeuge nimmt die historische Glaubwürdigkeit ab; in der Reihe der coordinierte Zeuge nimmt sie zu. Die Reihe der coordinirten Zeugnisse heisst das öffentliche Gerüchte, der subordinierte Zeugnisse hingegen eine mündliche Ueberlieferung. Wenn in den coordinirten Zeugnissen der Augenzeuge unbekannt ist, so heisst eine gemeine Sage". V-Lo Philippi, AA 24.1: 450.20-28.

43 "Alle Citationes haben eine historische Glauben und die Anrufung der Zeugen ist in Ansehung des Empirischen ganz nothwendig, weil wir nicht alles selbst erfahren können". V-Lo/Pöhlitz, AA 24.2: 562.28-30.

44 As a matter of fact, in the *Pöhlitz Logic* he divides certainty into "empirische" and "apodiktisch" certainty. See V-Lo/Pöhlitz 24.2: 560.19.

45 V-Lo Philippi, AA 24.1: 483.36.

46 Also in the *Philippi Logic*: "In historischen Wissenschaften hat man zwei Methoden, die chronologische und die geographische. Beide sind zu vereinbaren. Die letztere scheint mir vorzüglicher zu sein als die erste, ob man gleich sich derselben nicht bedient. In allen zusammenhängenden Erkenntnissen muss man eher das Ganze als seine Theile, und von den Theilen eher die grossen als die kleinen, eher die Ober- als Untertheilungen in Erwägung ziehen". V-Lo Philippi, AA 24.1:483.9-15.

47 "Aber was war früher da, Geschichte oder Geographie? Die letztere liegt der erstern zum Grunde, denn die Begebenheiten müssen sich doch auf etwas beziehen. Die Geschichte ist in einem unablässigen Fortgange; aber auch die Dinge verändern sich und geben zu gewisse Zeiten eine ganz andre Geographie. Die Geographie also ist das Substrat. Haben wir nun eine alte Geschichte, so müssen wir natürlich auch eine alte Geographie haben". PG, AA 09:163.4-10.

48 "Jene trägt die Dinge der Welt vor nach ihrer Verbindung im Raum, diese nach ihrer Verbindung in der Zeit. Die erstere muss der letztern zum Grund liegen". V-Lo/Pöhlitz 24.2:600.29-31.

49 "Der Mensch strebt von Natur nach Lehrgebäuden. Das Ideal oder Ganze geht vorher, und und nur im Ganzen lasse sich die Theile denken". V-Lo Philippi, AA 24.1: 399.36-38.

50 This is related to Kant's use of statistics: "L'importance accordée à la méthode statistique indique le souci d'une technique d'observation globale, linéaire, généralisate, celle d'un spectateur 'objectif', en tant qu'extérieur. Mais Kant s'efforce plutôt d'allier la méthode statistique à la méthode cosmopolitique". CASTILLO (1990, p. 72).

51 "Der Horizont der menschlichen Erkenntniss ist der Umfang der Erkenntnisse die der menschliche Vollkommenheit angemessen sind (...) Wenn die Grenzen der Erkenntniss mit den Grenzen der Vollkommenheit congruiren; so ist der Bezirk de sie einschliessen der für Menschen bestimmte Horizont". V-Lo Philippi, AA 24.1: 274. See also V-Lo/Pöhlitz 24.2: 521.7-15.

52 "Der Horizont der historischen Erkenntnisse ist nicht möglich genau zu bestimmen, wiewol gewissermassen. Was von neuem hinzukommt, das vergisst sich vom Alten... Der Mensch kann nicht alles fassen. Die Historie schafft nur Gegenstände zur rationalen Erkenntniss". V-Lo Philippi, AA 24.1: 377.15-23.

53 "A philosopher is not a learned man; rather, he looks at what the value of learnedness finally is. He must possess learnedness, however, in order to make use of philosophy". V-Lo/Wiener, 24.2: 813.14-15.

54 "Das historische Wissen ohne bestimmte Gränzen ist Polyhistorie". V-Lo/Pöhlitz 24.2, 522.35.

55 See also V-Lo/ Philippi, AA 24.1:493.6-14.

56 V-Lo/Wiener, AA 24.2: 818. 5-8. See also V-Lo/Pöhlitz, AA 24.2:522.39.

57 V-Lo/Wiener, AA 24.2:818.18 "Philology is the complex of all instruments of learnedness. The philologist is the connoisseur of the tools of learnedness, the humanist is the connoisseur of the cultivation of taste. Humanity is always at the same time popular. Only dead languages can become models of taste, not living ones, for the latter simply change too often, and words and whose meaning was noble have a lower meaning. To have lasting taste, one must study the ancients. If the ancients were to be lost, one has to fear the spread of barbarism". V-Lo/Dohna, 24.2:714-5.34-715.3. See the same ideas in the *Jäsche Logic*: "One part of philology is constituted by the *humaniora*, by which is understood acquaintance with the ancients, which furthers the unification of science with taste, which rubs off coarseness ad furthers the communicability and urbanity in which humanity consists. The *humaniora*, then, concern instruction in what serves the cultivation of taste, in conformity with the models of the ancients. This includes, e.g., eloquence, poetry, wide reading in the classical authors, etc. All these humanistic cognitions can be reckoned in the practical part of philology, which aims in the first instance at the cultivation of taste. If we separate the mere philologist from the humanist,

however, the two would differ from one another in that the former seeks the tools of learnedness among the ancients, the latter the tools for the cultivation of taste. The belletrist, or bel sprit, is a humanist according to contemporary models in living languages. He is not learned, then, for only dead languages are now learned languages, but is rather a mere dilettante in cognitions of taste in accordance with fashion, with no need for the ancients. We could call him one who apes the humanist. The polyhistor must, as philologist, be a linguist and a literator, and as a humanist a classicist ad expositor of the classics. As philologist he is cultivated, as humanist civilized". Log, AA 09:45.33-46.17.

58 In Kant's view, "a linguist is one who studies ancient languages with critique, and if he chooses them as models of taste, then he is a humanist. Only the ancients will always remain models of genuine taste, because their languages are dead languages. Now the literator is one who can name many books of the ancients, as to their editions, their authors. He who is acquainted with many books is a literator". V-Lo/Wiener, AA 24: 818.20-24.

59 See BOOTH (1983, p. 58).

60 "The culture of skill is certainly the foremost subjective condition of aptitude for the promotion of ends in general". KU, AA 05: 431.37.

61 CASTILLO (1990, p. 22).

62 "Sentiment and spirit belong to genius. The power of judgment and taste do not produce anything, but only administer either in relation to the object or to each other. What corresponds with the subjective laws of the understanding has spirit. What enlivens belongs to sentiment and spirit; what preserves and protects, to the power of judgment and taste. Genius is architectonic. It creates. The power of judgment and taste administer". R AA 16:136.7-15; n. 1847.

63 See CASTILLO (1990, p. 23).

64 ALLISON (2012, p. 236-253).

65 See especially paragraphs 82-84; KU, AA 05: 425-436. Attempting a unitary reading of the third *Critique*, which makes sense of the role biology plays and its relevance for a philosophy of history, FACKENHEIM writes (1956/57, p. 393): "According to Kant, the teleological concept, as the biologist must use it, lacks theoretical justification. Hence it is merely a heuristic, not an explanatory principle. But though we cannot connect it with the supersensible root of nature and morality, Kant clearly believes that it is connected with that root. Consequently, he can regard organic nature as evidence of a sort –evidence which is, to be sure, theoretically insufficient and morally unnecessary- of what he can loosely call providence. Regarding it in this light, he can ask whether it is reasonable to assume purposiveness in some parts of nature, but none in nature as a whole. In other words, he can connect biological with moral purposiveness. And he must then concentrate on that sphere which alone can directly link nature as a whole with morality, thus giving it value. That sphere is history. Thus a teleological biology can encourage a teleological history". By contrast, for Vanhaute, Kant's approach to history in the third *Critique* represents his effort to differentiate the teleology of biology and the teleology of history more sharply than they were in *Idea for a Universal History*. See VANHAUTE (2011, p. 155-169).

66 Other texts which insist upon the same principle: "... as a class of rational beings –each member of which dies, while the species is immortal- it is destined to develop its capacities to perfection". *Idea*, 20.

67 For a discussion of this assumption see AMERIKS (2012, p. 210-218).

68 See CASTILLO (1990, p. 155-169).

69 As Booth rightly points out, "it is man's capacities, his culture and civilization that are advanced by history, and not his morality. The distinction between culture and morality is crucial for understanding the limits of history, even a priori history". BOOTH (1983: p. 65). I have developed this idea in GONZÁLEZ (2011). By contrast, VANHAUTE's talk of "the historical development of mankind" as an "unavoidable process of moralization" (2011, p. 157) is misleading.

70 See KAULBACH (1965/66, p. 435-437) comments on Kant's *Naturgeschichte und Theorie des Himmels* (1755).

71 See GALSTON (1975, p. 213-215).

72 "It would be a misunderstanding of my point of view to believe that I want this idea of a world history that is to a certain extent led by an a priori guiding thread to take the place of history as such, whose composition is wholly empirical. This idea is only a reflection of what a philosophical mind (which must above all be well versed in history) could attempt to do from another perspective. Besides, the otherwise laudable detail with which men now record the history of their times naturally causes everyone concern as to how after several centuries our distant descendants will come to grips with the burden of history that we shall leave to them". IaG, AA 08: 30. 29-31.1

73 "Teleology, in the case of history, is moral teleology, which is to say that the end which all must subserve is moral freedom. And this may well seem to pose a fatal dilemma. Either moral freedom is independent of teleologico-mechanical necessity, in which case the connection between nature and morality breaks down; or else freedom is necessitated, in which case it is no longer freedom. In either case nature (and history) are mere facts without value. Whether this dilemma is indeed fatal depends on whether mechanism, teleology and moral freedom can all be brought together". FACKENHEIM (1956/57, p. 394).

74 See GONZÁLEZ (2011).

75 Cf. CASTILLO (1990, p. 68-69).

76 This is in tune with Booth's insight: "The facts themselves are less important than whether the way we see them produces in us moral cowardice, a comforting hope or a recognition of our moral superiority to their horrors". BOOTH (1983, p. 56).

77 See BOOTH, "Reason and history: Kant's other Copernican Revolution" (1983, p. 56-71). Unlike Booth, I don't think that both approaches— the "productive prophecy" and the change of viewpoints— are mutually exclusive.

78 Muglioni stresses this point in his interpretation of that passage. See MUGLIONI (2001, p. 133-135).

79 The *Anthropology* conveys a similar idea: "The human species should and can create his own good fortune. That he will do so, however, cannot be determined a priori from what is known to us about man's natural tendencies. It can be determined only from experience and history, with expectations as well-founded as necessary, that we should not despair about our species' progress toward the better, but instead further (each to his best ability) with all good sense and moral inspiration the approach to this goal" (Anth, AA 07: 328.27-329.6).

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IMMANUEL KANT

SOBRE A ILUSÃO POÉTICA E A POÉTICA DA ILUSÃO

(*Esboço de um discurso de arguição «Sobre as ficções poéticas»*)

*Apresentação, Tradução e Notas
por Leonel Ribeiro dos SANTOS*

A. APRESENTAÇÃO

1. O TEXTO: SUA ORIGEM, EDIÇÕES E TRADUÇÕES

A peça, de que adiante se oferece a tradução portuguesa, corresponde ao Esboço de Kant para um Discurso proferido na sua universidade, a 28 de Fevereiro de 1777, como arguição académica da *Dissertatio Philologico-Poetica de Principiis Fictionum Generalioribus* (Dissertação filosófico-poética acerca dos princípios mais gerais das ficções), apresentada por Johann Gottlieb Kreutzfeld, candidato ao lugar de professor de Poética nessa mesma universidade.

O texto original manuscrito, sem título, que pertencera ao espólio de G. B. Jäsche e deste passara a Karl Morgenstern e à sua Biblioteca, em cujo Catálogo (Dopart 1868) constava com o nº CCLXXX, foi transcrito pela primeira vez por Arthur Warda e, sob o título «Eine lateinische Rede Imm. Kants als ausserordentlichen Opponenten gegenüber Johann Gottlieb Kreutzfeld», publicado na revista *Altpreussische Monatschrift* (vol. 47, nº 4, 1910, pp.663-670), precedido apenas de uma breve nota a respeito da sua origem, deixando para a posterior integração nos volumes da Akademie-Ausgabe as notas críticas ou referências interpretativas. Logo no ano seguinte, Bernhard Adolph Schmidt publica a respectiva tradução alemã, com o título «Eine bisher unbekannte lateinische Rede Kants über Sinnestäuschung und poetische Fiktion», na revista *Kant-Studien* (vol. 16, 1911, pp. 5-21). Na versão original latina, com nova transcrição que corrige em muitos casos o *Reinschrift* de Warda e com o correspondente texto da dissertação de Kreutzfeld em fundo de página, a peça seria depois publicada, por Erich Adickes, como um “Apêndice”, no 2º tomo do volume da Akademie-Ausgabe, correspondente às *Reflexionen zur Anthropologie (Kant’s gesammelte Schriften, hrsg. von der Königlich Preussischer Akademie der Wissenschaften, Berlin, 1923, Bd. XV.2, pp 903-935)*. Para além da tradução alemã de Schmidt, há mais 4 traduções conhecidas da peça: uma russa por L. Stolovitsch (1985), uma inglesa por Ralf Meerbote (1988; reed. 1992) e duas italianas, respectivamente, por Maria Teresa Catena (1998) e por Oscar Meo (2000).

A tradução do texto não é fácil e todos os que já se deram a esse trabalho apontaram isso. As principais dificuldades resultam do seu carácter de esboço, suporte para uma intervenção oral, em muitos passos com versões alternativas riscadas ou com alusões e expressões não de todo explícitas, mas que certamente seriam explicitadas na apresentação oral.

Passo a uma rápida recensão das traduções existentes da peça que me foram acessíveis (excepção feita da tradução russa de L. Stolovitsch, publicada em «*Kantovsky Sbornik*», 10, 1985). Antes de mais, a de Bernhard Adolph Schmidt. Tem o mérito de propor dúvidas e sugerir algumas correções à transcrição do texto proposta por Warda. Todas as traduções posteriores da peça seguem mais ou menos de perto a de Schmidt, aceitando as suas correções à leitura e edição do texto por Warda e também as suas anotações e sugestões interpretativas, omissas naquela outra edição. Assim, a tradução inglesa de Ralf Meerbote diz-se feita a partir da edição original do texto latino por Arthur Warda, mas tendo em conta a tradução alemã de Schmidt e as correções deste, nomeadamente quanto à ordem das frases de Kant escritas sobre as páginas da tese de Kreuzfeld. As poucas notas são extraídas de Schmidt. É uma tradução que, em geral, se caracteriza pelo empenho de simplificar o texto. É precedida por uma «Introdução» que contextualiza a peça na *silent decade* e dá tópicos para a sua interpretação e inscrição no pensamento kantiano, sobretudo em torno da distinção entre *deceiving and not-deceiving semblance* e do estatuto da aparência e semelhança (*appearance and semblance*), no ensaio de 1777 e depois dele (nomeadamente, na *Crítica da Razão Pura* e na *Crítica do Juízo*). A tese central de Meerbote é a de que no ensaio de 1777 a noção de *appearance* não tem sentido epistémico, nem é uma noção proposicional. Esta distinção entre *epistemic representations* e *non-epistemic representations* domina a leitura que Meerbote faz do texto e do seu alcance. É difícil resumir a exposição muito analítica que propõe. Transcrevo apenas uma passagem da sua conclusão que sublinha o significado da peça na evolução do pensamento crítico de Kant: «Se a minha interpretação geral do Discurso é correcta, então Kant em 1777 está na posse de algumas posições que são importantes e preparatórias para a primeira *Crítica* [...] e também para certas perspectivas que dizem respeito à apreciação e avaliação estética que viriam a ser por ele formalizadas como parte do sistema na tardia *Crítica do Juízo*.» (p.166) Nesta conclusão, todos os tradutores da peça estão de acordo, com maior ou menor abundância de sugestões e de argumentos.

Na sua edição da tradução da peça kantiana, Maria Teresa Catena tem a vantagem de apresentar também a tradução da parte da Dissertação de Kreuzfeld comentada e discutida por Kant. Tem, além disso, um rico aparato de notas, seja ao texto de Kreuzfeld, seja ao de Kant, e apresenta um extenso estudo sobre esse episódio académico – *Inganno e illusione. Un confronto accademico* (pp.65-102), contextualizando-o (§ 1, pp.65-72), interpretando seja a posição de Kreuzfeld (§ 2, pp.73-77), seja mais extensamente a de Kant (§3, pp.78-92), também com amplas notas. Reconhecendo a dificuldade da peça, a tradutora mostra-se todavia menos preocupada com os seus aspectos linguísticos do que com o seu conteúdo conceptual, que identifica no confronto que Kant estabelece entre o mero engano e a ilusão.

Também Oscar Meo, em «Apêndice» ao seu livro *Kantiana minora vel rariora* (Genova: Il Melangolo, 2000, pp.113-132), oferece uma tradução desse texto de Kant, precedida de um

estudo que o situa no seu contexto próximo e no contexto geral da obra de Kant. A sua tradução é também apoiada por generosas notas filológicas, históricas, eruditas ou explicativas e justificativas das suas opções. O autor comenta e critica por vezes as opções de Schmidt e de Meerbote. Refere-se, de passagem, mas sem comentários, à tradução de M. T. Catena (p.117). Sobre o conteúdo da peça, escreve Meo, nisso em plena sintonia com Catena: «No que concerne à temática abordada por Kant no seu escrito, a mais importante é constituída pela distinção entre engano (em alemão: *Betrug*) e ilusão (em alemão: *Illusion*, ou também *Schein*): enquanto o primeiro é julgado negativamente [...], a segunda, que é o instrumento próprio do poeta, pode coexistir com a averiguação da verdade e aporta um específico prazer estético.» (pp.115-116)

Tal como Schmidt e Catena, também Meo aponta outros textos de Kant (publicados ou do espólio) onde a mesma distinção comparece, nomeadamente o § 13 da *Antropologia*, em vários passos das *Lições de Antropologia* (dos anos 1775/76, 1777/78, 1781/82 – AA 25:502;745;928-929) e numa das *Reflexões sobre Antropologia* (Refl. 1482; AA 15:683ss), relacionando o discurso também, na linha do que o fizera Meerbote e outros mais recentemente, com a Introdução à Dialéctica Transcendental da *Crítica da Razão Pura*, onde se trata da ilusão (*Schein*) ou “aparência transcendental”, que o filósofo aí identifica, distinguindo-a da mera ilusão ou aparência empírica (sensorial) e da ilusão ou aparência lógica. Destaca ainda a relação do tema com o tratamento que o filósofo faz no contexto ético, onde, apesar da geral condenação da mentira, Kant considera que a aparência de moralidade, que o homem assume na convivência social, mesmo quando não é interiormente movida por genuínos princípios éticos, não deve ser tida por engano e sim por ilusão que tem apesar de tudo um sentido positivo, representando um tributo à virtude e um estímulo para ela. Por fim, já num contexto estético, aponta a abordagem da natureza da poesia que é feita nos §§ 53 e 54 da *Crítica do Juízo*, que têm óbvia e directa relação com o tema central deste discurso kantiano. E conclui: «Compreende-se por estes breves acenos que a distinção entre engano e ilusão estabelece-se como núcleo, pelo menos potencial, de desenvolvimentos filosóficos extremamente interessantes, mesmo se – no conjunto da obra de Kant ela é tratada somente de maneira episódica e a maior parte das vezes em exposições complementares e não destinadas a publicação. Se se considerarem as coisas desde este ponto de vista, o atender a escritos menores, como é o discurso contra Kreutzfeld, permite que se captem os fios escondidos da meditação kantiana, e se perceba o quotidiano trabalho de tecelagem de que resultaram as obras maiores.» (p.116)

2. QUE TÍTULO DAR AO TEXTO?

Não tendo, bem compreensivelmente, um título dado pelo seu autor, a peça tem tido diferentes títulos, segundo os seus editores ou tradutores. Se se tomar por base a dissertação de Kreutzfeld nela discutida – *Dissertatio philologico-poetica de principiis fictionum generalioribus* –, o título deveria ser algo do género: *Sobre a ficção poética*, ou *Sobre os princípios mais gerais das ficções poéticas*. Assim o interpretou efectivamente Schmidt, que o apresenta na *Kant-Studien* sob o título «*Discurso de Kant acerca dos enganos dos sentidos e da ficção poética* (<Rede Kants> über Sinnestäuschungen und poetische Fiktion). Ralf Meerbote segue Schmidt, propondo o título dado por aquele, apenas vertendo-o ao inglês: «*Concerning Sensory Illusion and Poetic Fiction*».

Mas, com um tal título, o conteúdo do discurso kantiano fica refém da tese de Kreuzfeld que nele se comenta, se discute e se refuta. É com plena pertinência, pois, que Maria Teresa Catena, na sua tradução, dá para o texto o título «*Inganno e illusione*», realçando a distinção estabelecida por Kant ao longo do seu discurso, demarcando o sentido positivo da ilusão (poética) do sentido negativo do mero engano (dos sentidos), e assim também vendo, no esboço de ensaio kantiano e na dissertação que lhe deu ocasião, o significado de um confronto académico de perspectivas. Por sua vez, Oscar Meo propõe para a peça o título «*Sul l' illusione poetica*», tendo igualmente em consideração a temática específica que Kant nela trata.

A questão está, pois, no acento que se põe em algum dos três termos: ou na **ficção**, ou no **engano**, ou na **ilusão**. Eu próprio hesitei acerca do título a atribuir à peça. Sucessivamente escrevi – e depois risquei e reescrevi e risquei de novo –, alguma das seguintes versões: «Ilusão poética e poética da ilusão» ou «Ficção poética e poética da ficção»; ou «Da ficção poética à poética da ficção»; ou ainda: «Sobre o engano, a ilusão e a ficção». Mas, tendo em conta que o uso do termo **ficção** aparece no texto kantiano sobretudo sob a forma adjectiva e aparentemente induzido pelo título e texto da dissertação de Kreuzfeld, acabei por decidir-me pelo que me parece explicitar melhor o conteúdo peculiar da arguição kantiana, propondo como título: *Sobre a ilusão poética e a poética da ilusão*. Com ele pretende-se sublinhar não só o tema central da reflexão própria de Kant, mas também o teor dessa reflexão, que é o de apontar o modo de funcionamento da mente na produção das – e no jogo com as – suas ilusões pelas quais todavia não é enganada ou não se deixa ludibriar. Em sede de teoria poética, seria possível traçar uma linha directa – não, por certo, de influências, mas de verdadeira afinidade intelectual – entre este discurso kantiano de ocasião, o ensaio do jovem Nietzsche *Über Wahrheit und Lüge im aussermoralischen Sinn* (Sobre a verdade e a mentira numa perspectiva extra-moral, 1873) e o «Anhang über Kant und Nietzsche» (Apêndice sobre Kant e Nietzsche), que Hans Vaihinger coloca no final da sua obra *A filosofia do como se* (*Die Philosophie des Als Ob*, 1911).¹ Mas, como espero mostrar, a ideia central exposta nesta peça faz pensar também naquilo a que Kant chamará, alguns anos depois, a «ilusão transcendental» da razão pura (*KrV* B 352-353), que esta não pode evitar e que, no fundo, quando pelo exercício da Crítica a consciencializa, acaba a razão por descobrir que – mesmo sendo uma ilusão – ela lhe é, não só necessária e inevitável, como até útil e fecunda, mesmo para o seu trabalho especulativo.

A tradução que aqui se oferece segue o texto da Akademie-Ausgabe, cotejado com o da transcrição e primeira edição por Arthur Warda.² Eliminaram-se na tradução as palavras iniciais de cumprimentos. De igual modo, as palavras que vão entre parênteses rectos e em corpo mais pequeno não são traduzidas, a não ser quando fazem sentido completo. Tratando-se de um manuscrito de trabalho, elas correspondem a primeiras redacções, posteriormente corrigidas ou riscadas pelo autor. Em contrapartida, são traduzidas as palavras que vão entre parênteses curvos. Manteve-se, sempre que possível, a proximidade semântica entre o Português e o Latim. Mas devem apontar-se algumas dificuldades.

Antes de mais, e sobretudo, o riquíssimo vocabulário kantiano da **ilusão**, que constitui um campo semântico muito variado e muito subtil de matizes, que nem sempre se conseguem verter com total felicidade para o Português ou para outras línguas. Kant usa e explora as

potencialidades da rica semântica (seja na forma activa ou passiva) do verbo latino **ludo**: *brincar / jogar, iludir*; seja na forma passiva – **ludor** (*ludificari*): *ser jogado, ser enganado, ser iludido, ser vítima de ilusão*. De onde: *ludibrium/ludibria, illudens, illudere – ludibrio(s), que ilude, iludir*; de onde também: *illusio, illusiones – ilusão, ilusões*. Atente-se ao jogo entre o uso dos verbos *fallit / (fallere)* e da mesma forma *fallor (falli)* e *decipi (decipere)*: *engana / sou enganado, ser enganado / ser decepcionado / decepcionar*; e, por outro lado, *ludo / illudit (illudere)*: *jogar / iludir (produzir ilusão)*. Os primeiros têm um sentido negativo; já o último tem um sentido positivo – precisamente o sentido estético-poético. O uso de um ou de outro, marca a diferença entre os desqualificados **engano** ou **fraude** e a qualificada **ilusão** ou **ficção poética**. Segundo o autor do discurso de arguição, a **ilusão poética** pode ter – e tem – um sentido positivo, produtivo e fecundo, de libertação, de fortalecimento, de animação e revitalização do espírito. Uma ideia que receberá o pleno desenvolvimento em alguns parágrafos (nomeadamente nos §§ 49 a 53) da terceira *Crítica*, onde também o tópico do **jogo**, atribuído aí já expressamente à imaginação (*Spiel der Einbildungskraft*) na sua livre criação de “ideias estéticas”, sem estar subordinada à coacção de regras (*ohne Zwang der Regeln / die Einbildungskraft in ihrer Freiheit von aller Anleitung der Regeln*), mas ao mesmo tempo em espontânea, e contudo pertinente (*dennoch als zweckmässig*) e harmoniosa, relação com as outras faculdades (AA 05:317-318), de tal modo que os seus produtos ou criações são, não só pertinentes, como plenos de sentido.

Próximo do campo semântico da **ilusão** está o da **ficção** – *Fictio / fictas / Fictiones* –, uma família de termos que tem alguma recorrência no texto de Kant, mas que parece ser manifestamente induzida pelo título e texto da tese de Kreuzfeld. Com toda a evidência, também neste Discurso, ao vocabulário da *ficção*, Kant parece preferir o da *ilusão*.³

Seja, ainda, o par de termos **Species e apparentia**. Serão equivalentes? Alguns tradutores assim o entendem, vertendo um pelo outro. E, na verdade, na pág. 908, linha 9, Kant dá-lhes para isso azo, pois no seu texto a expressão *Rerum apparentiae* substituiu *Species rerum*, que era a primeiramente escrita. Nesta peça, preferimos, porém, verter *species* por *imagem*, e *apparentia* por *aparência*, para evitar tanto quanto possível o amalgamento semântico do vocabulário kantiano.

E, por fim, há a expressão *Veritas phaenomenon*, que ocorre na peça uma única vez. Como traduzi-la? Várias hipóteses se oferecem, todas elas possíveis: *Verdade fenoménica, Verdade <como / enquanto> fenómeno, Fenómeno <aparência> enquanto verdade, Verdade <enquanto> aparência <aparente>*. É de notar a analogia com outras expressões do mesmo teor usadas por Kant na sua *Dissertação de 1770 – mundus phaenomenon, omnipraesentia phaenomenon, aeternitas phaenomenon, universum phaenomenon*. Traduzo aqui, em coerência com o que fiz ali, por *verdade enquanto fenómeno*.

O vocabulário do Discurso não é todavia totalmente novo, podendo reconhecer-se a proximidade de linguagem e até de alguns tópicos com os que aparecem em reflexões e escritos anteriores.⁴ Mas a proximidade é ainda mais visível em escritos da mesma época ou em obras posteriores; nomeadamente, na *Antropologia* (§13), mas também na própria *Crítica da Razão Pura*, na Introdução à Dialéctica Transcendental, ela mesma apresentada como uma «lógica da aparência» – ou da «ilusão» (*Logik des Scheins*), tratando-se aí, não já da ilusão poética,

mas de identificar a «aparência» ou «ilusão transcendental» (*transzendente Schein*) de que é vítima a razão quando, sem a advertência da Crítica, pretende estender o uso das categorias do entendimento para além do campo da experiência. Encontra-se, de facto, nesse parágrafo da *Crítica*, o mesmo vocabulário do «Entwurf» de 1777, por certo já ampliado com novas distinções e agora vertido ao alemão: *Erscheinung* (aparência, fenómeno), *Schein* (aparência, ilusão), *Täuschung* / *Illusion* (ilusão), *Betrug* (enganho), *Blendwerk* (ludíbrio, miragem). Mas também aqui é difícil fixar o preciso sentido dos termos, deslizando-se facilmente de um para o outro, como se fossem entre si sinónimos ou se precisassem uns dos outros para se explicar. Isso pode comprovar-se nas traduções propostas para esse vocabulário, por alguns exemplos. Antes de mais, pela que fez Friedrich Gottlieb Born da *Crítica da Razão Pura* para o Latim. Ele verte *Schein* por *species*, *Erscheinung* por *visum*, *Blendwerke* por *praestigia*, *Illusion* por *illusio*.⁵ Por sua vez, na tradução portuguesa da *Crítica da Razão Pura*, por Manuela Pinto dos Santos e Alexandre Fradique Morujão (Lisboa: F. C. Gulbenkian), nos mesmos passos da Introdução à Dialéctica Transcendental (B 349-355; AA 03: 234-237), *Schein* é vertido por *aparência*; *Erscheinung* por *fenómeno*; *Blendwerk*, uma vez por *miragem*, e outra por *ilusão*; *Illusion* é sempre vertida por *ilusão*. Se alargássemos a pesquisa a traduções para outras línguas, o resultado não seria muito diferente. Seja como amostra a tradução francesa da mesma obra (*Oeuvres philosophiques*, I, Paris: Bibliothèque de la Pléiade) feita por Alexandre J.-L. Delamarre e François Marty (a partir da tradução de Jules Barni): *Schein* é vertido por *apparence*; *Erscheinung* por *phénomène*; e *Illusion* vertido sempre por *illusion*; *Blendwerk*, nos dois casos em que aparece, por *illusion*. A versão de A. Tremesagues e B. Pacaud (Paris: PUF) adoptara as mesmas soluções. Mas já o tradutor da obra para o espanhol, Pedro Ribas (Madrid: Alfaguara), verte *Schein* por *ilusión*, (daí a “ilusión trascendental” e a “razón como sede de la ilusión trascendental”), *Erscheinung* por *fenómeno*, *Blendwerke* por *espejismo* e *Illusion* igualmente por *ilusión*. Na literatura inglesa sobre Kant, o *Schein* da Introdução à Dialéctica Transcendental é preferentemente vertido por *Illusion* (Grier 2002).

Ora, esta falta de acordo na determinação do vocabulário do campo semântico da ilusão e termos próximos verifica-se também nas traduções do «Entwurf» de 1777. Assim, Schmidt traduz: (*Fictas*) *species* por (*vorgetäuschten*) *Schein*; *Species* por *Schein*; *Apparentiae*, ora por *Schein* ora por *Erscheinung*; *Praestigiis* por *Blendwerke*; *Illusio(nes)* por *Täuschungen* e *spielenden Schein*; *Ludibria* por *Spielereien* e (*vana*) *ludibria* por (*nichtiges*) *Spiel*. Ou seja, a mesma palavra latina – *illusio* – é vertida por duas expressões alemãs: *Täuschungen* e *spielenden Schein* (sendo significativamente evitado o termo *Illusion*, que a língua alemã também consentiria e que Kant de resto usa); inversamente, duas palavras latinas – *Species* e *Apparentia* – são vertidas pela mesma palavra alemã: *Schein*; ou, ainda, uma mesma palavra latina – *Apparentia* – é vertida por duas alemãs: *Schein* e *Erscheinung*. Quanto a Ralf Meerbote, de todos o mais austero, mas não por isso sempre o mais pertinente, traduz: (*vana*) *Ludibria* por (*deceptive*) *Play*; (*Fictas*) *species* por (*shammed*) *semblances*; *Species* por *semblances*; *Apparentia* por *appearance*; *Praestigiis* por *deceit*; *Illusio(nes)* por *illusion(s)*. Por seu turno, Maria Teresa Catena verte: *Ludibria* por *illusioni*; *Fictas species* por *apparenze fittizie*; *Species* por *apparenze*; *Apparentiae* por *apparenze*; *Praestigiis* por *inganni*; *Illusio(nes)* por *illusioni*. Em dois casos, uma mesma palavra italiana serve para duas latinas: *apparentiae* e *species* são vertidas por *apparenze*, e *ludibria* e *illusio* são vertidas por

illusione. Já Oscar Meo traduz: *Ludibria* por *illusioni*; *Fictas species* por *apparenze ingannevoli*; *Species* por *apparenze*; *Apparentiae* por *apparenze*; *Praestigiis* por *illusioni*; *Illusion(nes)* por *illusioni*. Neste caso, uma mesma palavra italiana – *illusione* – serve para verter três latinas – *illutio*, *praestigia*, *ludibria*; e uma mesma palavra italiana – *apparenze* – serve para traduzir dois termos latinos – *species* e *apparentia*.

O mínimo que se pode dizer, perante a amostra apresentada, é que o vocabulário da ilusão – da aparência, da ficção, do engano – é fluido e deslizando, se não mesmo indeterminado, ambíguo e confuso. Não só não há unanimidade entre as diferentes versões, como nem há plena coerência dentro de uma mesma proposta. E, todavia, vê-se que precisamente o intuito e o esforço de Kant, não só no «Entwurf» como também nos citados passos da *Antropologia* e da *Crítica*, é dar a esse vocabulário uma melhor determinação, operando subtis distinções, tentando destacar um sentido qualificado desses termos, intuito e esforço estes, que, aparentemente, os seus tradutores parecem não ter percebido completamente ou, se o compreenderam, não conseguem sempre expressá-lo adequadamente. Mas como acusá-los disso, se, de resto, também Kant, apesar do seu notável esforço de clarificação (como se pode ver pelos passos citados da *Crítica da Razão Pura* e por muitos outros da *Antropologia*, das *Lições de Antropologia*, das *Reflexões*), nem sempre consegue manter-se absolutamente fiel às suas distinções?

3. UMA POÉTICA IN NUCE

Apesar de constituir um esboço redigido para a circunstância de uma prova académica, não destinado nem preparado para publicação, o Discurso é tudo menos um escrito cujo alcance se esgote na circunstância que o suscitou e na função a que respondeu. Como sublinha Meerbote, esta peça torna-se ainda mais importante por ser um documento que dá conta de aspectos do pensamento de Kant numa época a respeito da qual poucos testemunhos existem, a chamada «década silenciosa», na qual o filósofo pouco publicou. Com efeito, à época, Kant, que desempenhava as funções de Reitor da Universidade, andava intensamente ocupado com a redacção daquela que viria a ser a sua obra maior, que tardará, porém, ainda 4 anos até sair do prelo.

De facto, com esta peça, Kant não apenas cumpre a função académica de comentar e apreciar a tese de Kreutzfeld, mas faz considerações expondo convicções próprias, as quais implicam posições contrárias às defendidas pelo candidato. São três as principais teses que Kant contrapõe a Kreutzfeld: 1ª) a reivindicação da peculiar especificidade da ilusão poética, a qual não cabe na categoria de vulgar engano dos sentidos; tanto Catena como Meo viram bem que é este ponto que constitui o núcleo da tese kantiana; 2ª) a refutação da ideia segundo a qual os sentidos são por natureza enganadores; todo o ponto IV do discurso desenvolve esse tópico, revelando o filósofo crítico como defensor do estatuto e função positivos da sensibilidade não só no plano estético, mas antes de mais no próprio plano cognitivo, como já o fizera na Dissertação de 1770, no que, como é sabido, se demarca estrategicamente da escola leibniziano-wolffiana que considerava o conhecimento sensível como uma forma de conhecimento confuso e inferior; 3ª) a defesa da função educadora, mediadora e domesticadora da poesia (e em geral

da arte) e das suas ilusões: ela prepara o espírito sem violência, libertando-o do domínio bruto e rude da animalidade, para aceitar sem resistência o domínio da razão.

Para Kreutzfeld, tudo cai na noção geral de **ficção**, entendida como «qualquer opinião poética que seja congruente não tanto com a verdade objectiva ou absoluta, mas com a verdade aparente ou relativa» (*qualiscunque opinio poetica, non tam veritati obiectivae, seu absolutae, quam apparenti seu relativae congrua*). Em contrapartida, o vocabulário de Kant é muito matizado: há ficções de muitos tipos, que não devem ser confundidos uns com os outros. Assim, a principal censura que, enquanto arguente, o Professor Kant faz ao candidato é a de que ele incorre no vício de generalização, sendo levado a tomar como idêntico o que é diferente (por ex., o engano e a ilusão) e a meter no mesmo saco muitas coisas heterogêneas (a magia, os presságios, a astrologia, o politeísmo, as hipóteses filosóficas, a numerologia pitagórica, a cabala, as figuras silogísticas dos lógicos), e de dar fácil acolhimento a preconceitos filosóficos vulgares, como, por exemplo, o de que os sentidos são apenas fonte de engano e de ilusões. Esta tese, é inequivocamente refutada por Kant, podendo ver-se neste discurso de arguição lançado o mote que Kant desenvolverá nos §§ 8-11 da *Antropologia*, em forma de explícita causa forense, na qual se institui como “advogado da sensibilidade”, colocando-se do lado das pessoas de gosto, contra os lógicos e filósofos.⁶

Na verdade, esta peça oferece-nos – e isso nos parece um dos aspectos da sua originalidade – um esboço do que se poderia considerar a Poética kantiana *in nuce*. Poder-se-á considerar estranho que um filósofo, professor de Lógica e Metafísica, fosse convocado para arguir uma tese de Poética numa prova de concurso para a cátedra de Poética. Mas essas matérias estavam longe de ser alheias a Kant. Ele próprio já fora convidado, em 1764, para assumir a função de professor de Poética na sua universidade, convite que recusou. E o teor da sua arguição é uma eloquente prova da sua competência nessa matéria, a respeito da qual, como se vê, tinha ideias próprias e originais, que ultrapassam de longe as do candidato, se não por certo em erudição, sim em originalidade e amplitude de perspectivas. Mas a pequena peça dá também testemunho da cultura poética de Kant, através das citações explícitas ou implícitas de poetas e escritores latinos. Neste caso, a circunstância e o assunto não só consentiam como até recomendavam a discreta prova de sua familiaridade com os poetas latinos: são feitas quatro referências a Horácio (uma delas repetida), duas a Virgílio, uma a Ovídio, uma a Lucrécio, uma a Terêncio, uma a Plauto. Mas, mesmo nas suas obras maiores e mais austeras, Kant dá igualmente ampla prova de um natural e ágil convívio e familiaridade com os poetas latinos, e até mesmo com os poetas modernos (Alexander Pope, Albrecht von Haller, Addison), ele que, numa célebre nota ao § 53 da *Crítica do Juízo*, não terá pejo em confessar: «um belo poema sempre me proporcionou um puro prazer».⁷ Na qualidade de arguente, Kant poderia ter-se limitado a comentar a dissertação em apreço e a apontar-lhe méritos ou defeitos. Mas explicitamente faz questão de preceder a sua apreciação da tese por um conjunto de considerações próprias, que expressamente vão em sentido oposto ao que é pressuposto e defendido na tese de Kreutzfeld. Mais tarde, sobretudo no § 49 e seguintes da sua *Crítica do Juízo*, ele explicitará a sua Poética. Mas este discurso de arguição do ano 1777 constitui já um expressivo sumário das principais teses mais tarde desenvolvidas. Essa Poética é uma poética da mente. Não há ainda uma especificação das faculdades nela envolvidas e muito menos o reconhecimento do papel criador da imaginação.

Kant usa aqui os termos *mens* e *animus*. É de notar, todavia, que esse procedimento da mente ou do ânimo é já apresentado como sendo um **jogo**, um jogo que **a mente joga sem ser ela mesma jogada** (isto é, um jogo com o qual ela ilude e até se auto-ilude, mas sem ser por isso enganada ou induzida ela mesma em erro). Kant ainda atribui essa operação de jogo ilusionista à *mente* (*mens ludit*). Não será descabido relacionar este jogo da mente com a temática do *als ob* (como se): a capacidade de ver uma coisa como a outra, sabendo que o modo de a ver não é a coisa mesma, mas ao mesmo tempo compreendendo que só desse modo ela ganha pertinente significado para o sujeito que sobre ela reflecte. No seu discurso de arguição Kant começa discutindo uma tese sobre a ilusão ou ficção poética mas acaba deixando luz também sobre a poética da ilusão ou da ficção. Há passagens na peça que mostram claramente como Kant passa de uma abordagem da natureza da ilusão poética à abordagem do que se poderia chamar uma fenomenologia da ficção ou uma economia poética da ilusão (veja-se o caso da sua referência à instituição, por Petrarca, de Laura como objecto inesgotável de criação poética, e não como objecto de consútil prazer físico).

Como já referido, não passa despercebida a relação deste texto com outros lugares de seus escritos posteriores onde o filósofo trata da ilusão, da ficção e da poesia. Assim, na *Crítica do Juízo*, falando da Poesia e do seu peculiar estatuto entre as belas artes, ao mesmo tempo que declara o alto apreço em que a tem, Kant escreve, usando precisamente os mesmos tópicos do seu Discurso de 1777 (jogo, engano, ilusão): «Ela joga com a aparência que ela produz a seu bel-prazer, sem contudo enganar através disso, pois ela declara a sua ocupação como sendo um mero jogo, o qual, ao mesmo tempo, pode ser usado pelo entendimento e para a ocupação deste de uma forma pertinente.»⁸

E, da mesma forma, na *Antropologia de um ponto de vista pragmático*, no já referido § 13, dedicado ao «jogo artificial com a ilusão dos sentidos» («Von dem künstlichen Spiel mit dem Sinnenschein»), onde se explicitam distinções qualitativas nesse jogo, que vão do mero engano ou fraude até à ilusão e fascinação. Todo o vocabulário kantiano da ilusão ou aparência aí comparece (*Schein*, *Blendwerk*, *Tauschung*, *Illusion*, *Betrug*, *Bezauberung*), como se esse parágrafo fosse o desenvolvimento da ideia central do discurso de 1777. Sobretudo importa ressaltar a distinção aí proposta entre *ilusão* (*Illusion*) e *engano* (*Betrug*), que replica a do discurso de arguição: «**Ilusão** é aquele ludíbrio que permanece, mesmo que se saiba que o suposto objecto não é real. – Este jogo do ânimo com a aparência dos sentidos é muito agradável e divertido, como, por exemplo, o desenho perspectívico do interior de um templo, ou, como Rafael Mengs diz do quadro da escola dos peripatéticos (quanto a mim, do Correggio): “que, se para ele olharmos longamente, eles parecem andar”; ou como uma escada pintada na Câmara de Amesterdão com uma porta meio aberta, que convida quem a contempla a que suba por ela, e outras coisas semelhantes. – Porém, o **engano** dos sentidos é quando, logo que se sabe como é feito o objecto, também a aparência de imediato desaparece.»⁹

Note-se, também aqui, como, para falar de um termo, o filósofo tem de recorrer aos outros que lhe são próximos ou (quase) sinónimos, mesmo sendo ele da opinião de que na economia de uma língua não há, propriamente falando, termos sinónimos.¹⁰ Note-se a dificuldade também da tradução: pois os termos *Illusion*, *Schein* e *Blendwerk* poderiam igualmente (e correctamente)

ser vertidos por *ilusão*. A grande proximidade entre o texto tardio da *Antropologia* e o discurso de arguição não é casual, pois que terá sido precisamente no âmbito das *Lições de Antropologia* desde meados dos anos 1770 que o tópico começou a ser tratado pelo filósofo, como amplamente o documentam os registos dessas Lições e foi apontado pelos editores destas, Reinhard Brandt e Werner Stark.¹¹ Assim, lê-se precisamente na versão do Curso de 1777/78: «Há uma grande diferença entre engano [*Betrug*] e aparência [*Schein*]. Ilusão [*Illusion*] é uma aparência [*Schein*] que não engana [*nicht betrügt*], mas ainda deleita mais, pois há muita aparência [*Schein*] que quando é descoberta desagrada. Mas as ilusões [*Illusionen*] são-nos necessárias, pois muitas vezes temos de encobrir o pior. Podemos chamar ilusões [*Illusionen*] a tudo aquilo em que se dá uma ligação entre o entendimento e a aparência [*Schein*].»¹²

Como já foi apontado, o «Entwurf» de Discurso pode também ser aproximado pertinentemente da própria *Crítica da Razão Pura* e de um dos seus núcleos problemáticos centrais, como é o da «ilusão transcendental» (ou «aparência transcendental», segundo a versão que se adopte), de que trata a Dialéctica Transcendental, concebida ela própria como uma «lógica da ilusão» ou da «aparência» (*Logik des Scheins*). De facto, a Introdução à Dialéctica Transcendental, no seu § 1, ocupa-se de estabelecer distinções entre **engano** (*Betrug*), **ilusão** (*Tauschung, Illusion*), **aparência** ou **ilusão** (*Schein*), **fenómeno** (*Erscheinung*). A tarefa aí visada é não já a ilusão lógica (resultante apenas de uma desatenção na aplicação da regra lógica), nem a ilusão empírica (a óptica, por exemplo), mas sim a ilusão ou aparência transcendental, a qual, contra todas as advertências da Crítica, nos leva para um uso das categorias completamente para além do uso empírico e assim nos engana com a miragem (ou ilusão) de uma extensão do puro entendimento ao domínio dos supostos objectos supra-sensíveis.¹³ Esta “ilusão/aparência transcendental”, de que se trata na *Crítica da Razão Pura*, terá algo a ver com a ilusão poética de que se fala no Discurso de 1777? Pode esta iluminar aquela? Alguma literatura kantiana recente tem deixado aberta essa linha de interpretação. Por certo, do que se trata na *Crítica* é da distinção entre ilusão empírica (óptica), ilusão lógica e ilusão transcendental. As duas primeiras desaparecem, logo que advertidas e corrigidas. A terceira, porém, mesmo depois de descoberta e de reconhecida a sua causa (que é subjectiva), não desaparece. Kant diz mesmo que essa é não só «natural como inevitável». A Dialéctica ou lógica antinómica é a estratégia que o filósofo propõe como adequada para lidar com esse tipo de ilusão, de modo a que – tomando desprecavida e erroneamente o que é um jogo subjectivo por algo que é objectivo – não engane e prejudique, mas antes sirva os verdadeiros interesses da razão. Não se fala aí da ilusão poética. Mas não deixa de ser visível que esta revela algum parentesco com a ilusão transcendental, a qual, mesmo se descoberta, não desaparece, e que, se esclarecida pela Crítica, não mais ilude o espírito, mas lhe é útil e até necessária para o seu trabalho, mesmo no plano do conhecimento no campo da experiência. (DÖRFLINGER / KRUCK, 2011). Michele Grier, no que é um dos estudos mais sérios (de resto, raros) sobre o tema da ilusão transcendental, evoca a tradução de Meerbote do Discurso de arguição e outros textos kantianos correlatos, e conclui que «o apelo de Kant à doutrina da ilusão em cada um destes textos sugere que um exame da ilusão transcendental, tal como esta ocorre na filosofia teórica, poderá ser iluminado se a relacionarmos também com outras obras de Kant.» (GRIER, 2002:12-13)

Mas o tema nuclear do Discurso – a aparência que ilude mas não engana e até deleita – tem história também para além de Kant. Já mencionámos Nietzsche e Vaihinger. Mas é de referir também Friedrich Schiller, para quem a essência do estético precisamente reside na livre aparência – a “liberdade na aparência” ou no “fenómeno” (*Freiheit in der Erscheinung*) –, e que disso tratou, nomeadamente, nas *Kallias-Briefe* e na 26^a das suas *Cartas sobre a educação estética do ser humano*, mostrando, aqui, até a natural reconciliação da «aparência estética» (*ästhetische Schein*) com a verdade moral¹⁴, e também na 15^a, sobre o «instinto de jogo» ou a antropologia do lúdico. Schiller, que, numa carta a Kant de 1 de Março de 1795, lhe confessava considerar essas suas *Cartas* como expressão do genuíno espírito da filosofia kantiana,¹⁵ também neste ponto não traía essa sua íntima convicção.

4. A PRESENTE EDIÇÃO

Como já referido, para a tradução que a seguir se oferece tomou-se por base a edição do «Entwurf» pela Akademie-Ausgabe, sendo a paginação desta intercalada, entre parênteses angulares, no corpo do texto. Quanto às Notas, praticou-se o princípio de parcimónia, privilegiando-se as referências citadas ou evocadas por Kant de poetas ou de autores antigos. As poucas notas explicativas de algumas passagens do texto são inspiradas nas que Adickes propôs para a sua edição do texto na Akademie-Ausgabe. Ocasionalmente, seguem-se também sugestões de Schmidt, de Catena e de Meo. Não tendo sido possível, como era intenção inicial, fazer acompanhar a tradução portuguesa com o texto latino de Kant, optou-se por apresentar no texto da tradução, entre parênteses e em itálico, algumas expressões do texto original consideradas estratégicas.

Este pequeno trabalho de tradução vai dedicado, como homenagem póstuma, ao Prof. Valerio Rohden. Tive a muito grata felicidade de beneficiar da sua amizade e apreço e de saber o quanto esta temática lhe interessava, tendo ele mesmo dedicado um ensaio ao tópico «Aparências estéticas não enganam», que é também a ideia central e seminal desta peça kantiana de 1777. Na última vez que com ele estive, num colóquio kantiano na UFSC (Florianópolis), em Agosto de 2010, manifestou-me a intenção de traduzir um dia esse texto de Kant. Faleceria poucas semanas depois, e penso que não terá podido realizar o desiderato. Esse texto também a mim desde há muito me despertou interesse. Fiz uso dele num meu ensaio sobre a interpretação que Vaihinger propôs da filosofia kantiana como sendo um ficcionalismo, baseando-se na recorrentíssima expressão kantiana do *als ob* (*como se*). Invocava e citava aí, a propósito, passagens dessa peça de 1777, que Vaihinger não cita¹⁶, para reforçar a minha leitura da interpretação vaihingeriana de Kant, e também de Nietzsche, como sendo, sobretudo este último, um filósofo movido pela “vontade de ilusão” ou de “aparência” – pela *Wille zum Schein*. (SANTOS 2009,2012).

Tendo tido recentemente a possibilidade de regressar a Florianópolis, beneficiando de uma bolsa CAPES, e de aí, num seminário de pós-graduação oferecido na UFSC, comentar textos kantianos relacionados com a ideia de uma **Poética da Razão** – ideia que tem presidido a boa parte das minhas pesquisas e dos meus trabalhos sobre a filosofia de Kant –, tive

oportunidade e condições para traduzir o texto e pô-lo à disposição dos meus alunos para comentário em algumas sessões do seminário. Agradeço aos participantes nesse seminário o vivo interesse com que o acompanharam e o estímulo que desse modo me proporcionaram. Os meus agradecimentos vão também para o Prof. Doutor Ubirajara Rancan de Azevedo Marques, que gentilmente se dispôs a acolher esta tradução na revista *Estudos Kantianos* do Centro de Pesquisas e Estudos Kantianos “Valerio Rohden” da UNESP (*Campus* de Marília), e, entre outras muitas ajudas, me conseguiu resolver a dificuldade de acesso à primeira edição do Discurso kantiano por Arthur Warda. Da mesma forma, agradeço ao Doutor Gualtiero Lorini, que oportuna e gentilmente me enviou cópias da tradução inglesa de Meerbote e da tradução italiana de Maria Teresa Catena. Por fim, devo agradecimento à CAPES pela bolsa de PVE que me concedeu, assim me permitindo, entre outras, também a realização desta tarefa.

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ESTUDOS SOBRE A TEMÁTICA DO TEXTO:

A bibliografia proposta nesta alínea, refere-se não apenas à peça traduzida, mas aos tópicos que, sendo nela tratados (**ilusão, ficção, aparência**), também o são, seja em contexto poético-estético ou metafísico, em outras obras de Kant, podendo, por isso, iluminar, de qualquer maneira que seja, o presente discurso kantiano.

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NOTAS

1 Veja-se o meu ensaio: «A "vontade de aparência" ou o Kantismo de Nietzsche segundo Hans Vaihinger», *O que nos faz pensar*, Revista de Filosofia da PUC, Rio de Janeiro, nº 32, Dezembro de 2012, pp.227-243.

2 Warda oferece uma transcrição limpa do texto, eliminando as palavras riscadas ou corrigidas no manuscrito, as quais, em contrapartida, são reproduzidas, na edição da AA, em corpo mais pequeno e entre parênteses. Na transcrição de Warda é também praticada uma austera parcimónia na pontuação.

3 Segundo sugere Meo (*o.c.*, p. 117). Assim o aponte também no ensaio «As ficções da razão. Hans Vaihinger e o Kantismo como ficcionalismo», in. Leonel Ribeiro dos Santos, *Ideia de uma Heurística Transcendental. Ensaios de Meta-Epistemologia Kantiana*, Lisboa: Esfera do Caos, 2012, pp. 188-191.

4 Veja-se a Dissertação de 1770 (*De mundi sensibilis atque intelligibilis forma ac principiis*, §§ 24 ss), onde se fala das *praestigiae intellectus* e do *ludibrium phantasiae* (§ 27n), num desenvolvimento que constitui já o núcleo seminal da futura Dialéctica Transcendental e que remete para aquela conhecida reflexão – «eu suspeitei que havia uma ilusão do entendimento» – *ich eine Illusion des Verstandes vermutete* – Refl. 5037, AA 18:69), que, a julgar pela tardia carta a Garve (21.09.1798 – AA 12:225), poderá ter desencadeado todo o trabalho da Crítica, como esforço por esclarecer e resolver as antinomias da razão. Também se pode reconhecer o uso já intenso de algum desse vocabulário, "imitando o método do médico", no *Versuch über die Kankheiten des Kopfes* (1764) e sobretudo em *Träume eines Geistersehers, erläutert durch Träume de r Metaphysik* (1766) (WEISSBERG, 1986).

5 Imm. Kantii, *Opera ad philosophiam criticam, volumen primum cui inest Critica rationis purae*, Lipsiae: E.B. Schwickert, 1796, pp.230 ss.

6 *Anthropologie*, AA 07:143-146.

7 «Ich muß gestehen: daß ein schönes Gedicht mir immer ein reines Vergnügen gemacht hat.» Veja-se: K. A. Rosikat, *Kant's Kritik der reinen Vernunft und seine Stelle zur Poesie*, Königsberg, 1901. Com agrado aqui registro que o Congresso Kantiano Internacional de Viena (2015) anuncia, entre os principais tópicos previstos, também este: «Os poetas de Kant».

8 «Sie spielt mit dem Schein, den sie nach Belieben bewirkt, ohne doch dadurch zu betrügen, den sie erklärt ihre Beschäftigung selbst für bloßes Spiel, welches gleichwohl vom Verstande und zu dessen Geschäfte zweckmäßig gebraucht werden kann.» (Ak V, 326-327)

9 **Illusion** ist dasjenige Blendwerk, welches bleibt, ob man gleich weiß, daß der vermeinte Gegenstand nicht wirklich ist. – Dieses Spiel des Gemüths mit dem Sinnenschein ist sehr angenehm und unterhaltend, wie z.B. die perspectivische Zeichnung des Inneren eines Tempels, oder, wie Raphael Mengs von dem Gemälde der Schule der Peripatetiker (mich deucht, von Correggio) sagt: „daß, wenn man sie lange ansieht, sie zu gehen scheinen“; oder wie ein im Stadthaus von Amsterdam gemalte Treppe mit halbgeöffneter Thür jeden verleitet, an ihr hinaufzusteigen, u.d.g. – **Betrug** aber der Sinne ist: wenn, so bald man weiß, wie es mit dem Gegenstande beschaffen ist, auch der Schein sogleich aufhört.»

10 Imm. Kant, *Einige Bemerkungen zu L.H.Jacob's Prüfung der Mendelssohn'schen Morgenstunden* (AA 08:152-153): «Ainda que numa língua algumas palavras sejam usadas em múltiplos e variados significados, isso não se manterá senão até ao momento em que aqueles que de início estavam em desacordo acerca do respectivo uso se dêem conta do equívoco e em lugar delas usem outras: de tal modo que por fim há nela tão poucos verdadeiros homónimos como sinónimos.» Veja-se o nosso ensaio «A filosofia como análise e reinvenção da linguagem», in: *A razão sensível. Estudos Kantianos*, Lisboa: Colibri, 1994, pp.62-63.

11 «Einleitung» a Immanuel Kants, *Vorlesungen über Anthropologie*, Berlin: Walter de Gruyter, 1997 (AA 25:XXXVII-XXXIX).

12 «Es ist ein grosser Unterschied zwischen Betrug und Schein. Illusion ist ein Schein der nicht betrugt, sondern noch ergötzt, denn mancher Schein wenn er entdeckt ist missfällt er. Illusionen sind uns nöthig weil wir das Schlechtere oft verdecken müssen. Man kann alles das Illusionen nennen wo eine Verbindung zwischen dem Verstande und dem Schein statt findet.» *Anthropologie Pillau*, AA 25:745.

13 «Unser Geschäfte ist hier nicht, vom empirischen Scheine (z.B. dem optischen) zu handeln,... sondern wir haben es mit dem **transcendentalen Scheine** allein zu thun,... der uns selbst wider alle Warnungen der Kritik gänzlich über den empirischen Gebrauch der Kategorien wegführt, und uns mit dem Bendwerke einer Erweiterung des reinen Verstandes hinhält.» Krv B 351-352; AA 03:235.

14 Escreve Schiller: «À questão 'Em que medida pode a aparência estar no mundo moral?', a resposta é a seguinte e sem rodeios: na medida em que é aparência estética (ästhetische Schein), isto é, em que não representa a realidade nem precisa de ser representada por ela. A aparência estética nunca pode ser prejudicial à verdade dos costumes (Der ästhetische Schein kann der Wahrheit der Sitten niemals gefährlich werden)». Über die *ästhetische Erziehung des Menschen*, in: *Sämtliche Werke*, Darmstad: WBG, Bd. V, 660.

15 *Kant's Briefwechsel*, AA 12:7-8.

16 O texto acabava de ser editado e traduzido ao alemão (e publicada a tradução na revista *Kant-Studien* por ele fundada), precisamente quando saía o seu *Die Philosophie des Als Ob* (1911), estando o seu autor já limitado pela cegueira que o atingira anos antes.

B. TRADUÇÃO

IMMANUEL KANT

ESBOÇO DE UM DISCURSO DE ARGUIÇÃO

<SOBRE AS FICÇÕES POÉTICAS>

[AA 15:903-934]

<903> É admirável, e quase inacreditável, a propensão da mente humana para os vãos ludíbrios [*vana ludibria*] e para as imagens ficcionadas das coisas [*fictas rerum species*], a tal ponto que se deixa enganar não só facilmente <905> como até gostosamente. Daí vem aquele conhecido provérbio: **o mundo quer ser enganado**; ao qual os artífices de fraudes acrescentam: **seja, pois, enganado**. De bom grado reconheço que este artifício, que a execranda fome do ouro¹ ensinou aos charlatães ambulantes, aos demagogos e não raro até aos hierofantes, a saber, a habilidade para, com o objectivo do lucro, enganar a multidão incauta, é totalmente alheio ao espírito dos poetas, cujos corações dificilmente são movidos pela cupidez do ouro e a respeito dos quais escreveu Horácio: Não é de temer o espírito avaro do poeta; o que ele ama são os versos, e só disso se preocupa.²

<906> Mas há uma certa maneira de enganar [*quodam fallendi genus*], que, embora não seja lucrativa, não é contudo ingloriosa, a qual lisonjeia os ouvidos e com imagens ficcionadas das coisas [*fictis rerum speciebus*] estimula o ânimo e diverte-o, e foi a essa que os poetas dedicaram o seu esforço.

Uma vez que a presente dissertação versa toda sobre os artificios dos sentidos enganadores [*artificiis falendorum sensuum*], na medida em que eles servem aos poetas, considero que não será desajustado que comece por lembrar algumas considerações a respeito dessa maneira de enganar [*fallendi genus*] jucunda e sem mistura de dolo.

Há, com efeito, certas imagens das coisas [*rerum species*], mediante as quais a mente **joga** [*ludit*], mas não é por elas **iludida** [*ludificatur*], através das quais o artista não induz os incautos no **erro**, mas exhibe aos olhos a **verdade decorada**, vestida com a veste da **aparência** [*apparentiae*], a qual não ofusca a sua compleição interior, que não defrauda os ingénuos e crédulos com adorno e <907> enganos [*praestigiis*], mas, acrescentadas as luzes dos sentidos, leva à cena a árida e seca imagem da verdade coberta com as cores dos sentidos.

Se algo há em tal imagem das coisas [*rerum specie*], pelo que vulgarmente se diz que engana [*fallere*], isso deve antes ser chamado **ilusão** [*illusio*]. A imagem que **engana** [*species quae fallit*],

logo que percebida a sua vacuidade e ludíbrio [*vanitate et ludibrio*], **desaparece**; mas a que **ilude** [*illudens*], dado que não é senão a **verdade enquanto fenómeno** [*veritas phaenomenon*], mesmo quando é realmente descoberta, não deixa de permanecer e, ao mesmo tempo, mantém num agradável movimento o ânimo, fazendo-o como que flutuar nas fronteiras entre o erro e a verdade, e estimula-o admiravelmente, pois ele está **consciente** da sua sagacidade contra as seduções da aparência [*apparentiae seductiones*].

A imagem que **engana** [*fallit*] desagrada, a que **ilude** [*illudit*], **agrada sobremaneira** e deleita. Assim, começa por atrair-me o ilusionista de quem se diz que tira objectos da cartola e que, para testar a minha perspicácia contra a sua astúcia, <908> tenta enrolar-me de modo fraudulento; mas, logo que descubro o engano, **desprezo-o**; se o repete, **experimento fastio**; se depois mo esconde, **odeio-o**, continuando **incrédulo**,³ sem dúvida, admirado, mas, ao mesmo tempo, indignado, por ter sido vencido pela astúcia do impostor.

Pelo contrário, nas ilusões ópticas [*illusionibus opticis*], ainda que percebendo perfeitamente a aparência e advertido contra o erro, contudo, da mesma forma me deleito. Porque nesse artifício a imagem deleita precisamente porque não engana, mas alicia ao erro (todavia em vão). Pelo que as aparências das coisas [*rerum apparentiae*],⁴ enquanto **enganam** [*fallunt*], produzem **tédio**, mas enquanto só nos **iludem** [*illudunt*], produzem **prazer**. E tal é a distinção que separa as vulgares falácias dos sentidos [*fallacias sensuum*] e as ilusões [*illusiones*] familiares aos poetas. <909> No entanto, a dissertação que tenho em mãos trata de extrair todos os prazeres e as lautícias da arte poética daquela fonte impura e de tal modo imagina a índole da mente propensa para os vãos ludíbrios, que, quanto mais é enganada pela vacuidade das imagens, mais se acreditaria ser maior a alegria que toca o coração. Mas se as coisas se passassem assim em relação ao tão celebrado artifício dos poetas, parece-me que tal arcano deveria **ser mantido em segredo** pelo aluno de Apolo, para que a sua arte, caindo nas mãos do vulgo, não fosse prejudicada e os admiradores da poesia, de início captados pela sua doçura, uma vez detectada a fraude, indignados, dela se afastassem.

Certamente há ainda uma certa maneira de enganar do sentido [*sensus fallendi*], graças à qual a arte poética parece levar a palma sobre todas as outras, e por isso mesmo deve ser louvada **pelo Filósofo**, pois promovendo o **império** da mente sobre o ignóbil vulgo dos sentidos, de algum modo o prepara para obedecer às leis da sabedoria.

<910> Tanta é, porém, a **força indómita** dos sentidos e, por outro lado, a **impotência da razão**, certamente daquela que é recta mas fraca no mover, que, se não é possível atacá-los de um modo aberto, o mais aconselhado é miná-los pela astúcia. E isto faz-se habituando o ânimo aos encantos tanto das letras como das artes elegantes, desse modo libertando-o a pouco e pouco da bruta cupidez como de um agreste e furioso senhor. Para este objectivo, que, por conseguinte, com um certo direito se pode chamar uma pia fraude, não é pequeno o contributo da arte poética, que, por isso, também é do número das artes nobres e liberais, ou seja, daquelas que promovem a liberdade do ânimo, na medida em que, moderando os sentidos, elas iludem a ávida expectação destes e, prendendo-os pelas suas elegâncias, levam-nos a perder a sua ferocidade, tornando-os assim tanto mais obedientes aos preceitos da sabedoria.

<911> O momento e o lugar mandam, porém, que não me alongue neste assunto, mas que exponha a tese que a vossa dissertação desenvolve **acerca da natureza da poesia**, na medida em que ela brota do próprio seio dos sentidos humanos. Assim, cinjo-me a examinar **os principais pontos** deste aliás douto e elegante tratado, a respeito dos quais se me levantaram dúvidas, pedindo com o devido respeito que me seja concedida a liberdade consentida neste lúdico certame e a permissão para atacar qualquer ponto.

I

Como, porém, na matéria em apreço, podemos comodamente dispensar-nos dos constrangimentos dos silogismos, prosseguirei expondo os argumentos propostos num discurso livre. <912> É meu propósito fazer uma apreciação geral do vosso comentário, antes de avançar para uma discussão de especialidade.

E, em primeiro lugar, no título da Vossa dissertação, vejo **dependurada a hera**, mas no tratado mesmo não consigo encontrar **vinho que se venda**.⁵ O ensaio de Vossa Excelência intitula-se: *Dissertação filológico-poética*. Mas qualquer tratado poético deve necessariamente constar de versos e, por isso, um tratado sobre a **Poesia** não se pode chamar **poético**, do mesmo modo que não chamaremos tratado **filosófico** a uma *história da filosofia*, ou estudo **matemático** a um *encómio da Matemática*. O predicado, tirado de uma arte ou de uma ciência, não indica de facto o **objecto** mas o **modo** segundo o qual o expomos. Uma dissertação filológico-poética seria aquela que, tal como o célebre poema de Horácio sobre a arte poética, fosse composta em versos e ao mesmo tempo ilustrada com abundantes notas filológicas.

<913>

II

Passo agora à **segunda** observação geral.

Censuro o excelentíssimo Autor da dissertação por ter metido a foice em seara alheia, pois, de facto, enquanto no curso deste ensaio deveria sair à cena como poeta, repentinamente ele faz de filósofo. Esta dissertação poderia, com efeito, servir ainda melhor para o lugar de <professor> ordinário de **Metafísica**, mudando apenas o título, de tal maneira que fosse chamada **Dissertação acerca das falácias dos sentidos e da sua influência nas artes e no conhecimento vulgar dos homens**. De um modo por certo hábil e arguto, desde a pág. 3 à pág. 8, o Autor expõe as falácias dos sentidos em geral e depois os vãos ludíbrios da mente que delas nascem: recita, de um só golpe, os augúrios, a magia, a astrologia, o politeísmo, o acervo das hipóteses filosóficas e muitas outras coisas e, depois, acrescenta ainda os números pitagóricos, a cabala, o *Barbara* e o *Celarent* dos lógicos. Contudo, perante tudo isto é lícito dizer com Horácio: mas não era este o seu lugar.⁶

Exemplos poéticos, nadando embora dispersos no imenso oceano⁷, também o filósofo poderia acomodá-los ao seu objectivo, mesmo que ignorasse, com os mais ignaros, o que se requer para forjar poemas de modo elegante.

Pelo que, conjecturo que, mediante esta dissimulada mudança para um outro assunto,⁸ com um título assim especioso, o Autor da dissertação quis precisamente dar um exemplo do artifício dos sentidos enganadores.

Suponhamos que, interpretando o papel do filósofo, o Autor da dissertação tivesse falhado na sua esperança; isso, porém, nada retiraria à sua honra de poeta <915> (daria por certo prova de ser um mau psicólogo, mas um excelentíssimo poeta); e assim podes ver que não submeteste aqui a exame uma peça para o lugar de professor de <arte> poética.

III

Passo ao meu terceiro argumento geral.

Depois de ter declarado que as falácias dos sentidos constituem a parte mais importante da arte poética, o Autor da douta dissertação compara de tal modo o Poeta com o Filósofo que atribui a ambos uma sorte muito semelhante neste perigoso terreno, embora com os seus exemplos comprove que a realidade mesma é completamente oposta. Da mesma forma que o Poeta engana de modo excelente com a vã imagem dos sentidos, assim o Filósofo é por ela enganado de modo vergonhoso. Por conseguinte, o Poeta retira uma coroa de louros, enquanto o Filósofo na maior parte das vezes retira infâmia, e aquilo <916> que a um serve de louvor ao outro serve de opróbrio. Mas nesta comparação o Autor cometeu dois pecados: em primeiro lugar, ao comparar duas coisas que, segundo o seu próprio testemunho, são opostas, ele contradiz-se a si mesmo, e depois porque, exaltando os Poetas (p. 2) e desonrando os Filósofos (p. 8 e 10), ele foi injusto para a outra parte. No que ao primeiro respeita, por certo o Filósofo é sem dúvida **enganado** pelos sentidos, na medida em que **não** é Filósofo; ao passo que o Poeta **engana** com os ludíbrios dos sentidos, precisamente na medida em que é Poeta. Mas qual a semelhança que existe em sorte tão diversa? Aqui não se encontra uma razão de semelhantes mas de opostos. O que respeita a um, a saber a injúria atribuída ao Filósofo, isso parece dever ser compreendido tanto mais energicamente quanto na presente dissertação o próprio Autor desviou para os seus próprios campos os ribeiros dos Filósofos.

IV

O quarto argumento geral é dirigido contra a sentença do Autor, difundida por todas as páginas da dissertação, que constitui o gonzo em torno do qual ela gira. <917> A saber, que o Poeta se serve das falácias dos sentidos como sendo os mais importantes ornamentos dos poemas. Sentença que é frontalmente contrariada tanto pela **recta razão** quanto por uma multidão de importantes **exemplos**. No que ao primeiro respeita, as falácias dos sentidos, das quais é lícito ao poeta fazer uso, deveriam ser tiradas das comuns e geralmente difundidas,

como prescreve Horácio: **A matéria pública torna-se de direito privado.**⁹ Porém, as comuns falácias dos sentidos nada têm de agradável, seja porque o entendimento, pelo costume, se livra delas naturalmente, seja porque o poeta, uma vez desaparecida a **falácia**, não pode mais aliciar a mente mediante as aparências das coisas, na medida em que elas contêm falácias.

No que respeita ao outro ponto, a saber, os exemplos tirados dos poetas (segundo a minha opinião) provam o contrário. Baste citar os que o próprio Autor apresenta na página 12--, dos quais resulta claro que todos os poetas, qualquer que seja o assunto escolhido para cantá-lo, o pintam <918> com a maior luz possível dos **sentidos**. Para este objectivo, **sendo dada a obra**, eles não procuram os enganos dos sentidos, mas, pelo contrário, usam-nos porque a aparência do objecto, que deveria descrever a natureza com perfeita similitude, não pode prescindir deles. O que aparece no exemplo virgiliano que aduziste, onde o Poeta, para aumentar a admiração pela obra de Vulcano e para comover o ânimo com estímulos sensíveis recolhidos de muitas partes, nomeia muitas coisas que não poderiam absolutamente entrar na oficina de Clipeia.¹⁰ A partir destes exemplos, tu próprio vêes que o poeta procura somente revestir a sua primeira ideia com um grande séquito de imagens aderentes, nas quais só **acidentalmente** se encontram **aparentes falácias**; e o Poeta não pode prescindir disso, se quer pintar um **quadro vivo**.¹¹

<919> Passo ao segundo género de argumentos, abordando alguns pontos particulares da Vossa Dissertação e, com a Vossa licença, assinalando algumas críticas.

O 1º parágrafo começa assim: <Já falámos da disciplina dos sentidos – dos quais todo o conhecimento humano se serve como de primeiros guias e mestres – e dissemos que são a fonte primeira das ficções; avançamos agora para as falácias dos sentidos, que constitui certamente outro princípio das imagens.>¹²

<920> Nas duas partes da sua obra, o Autor da Dissertação [que acuso de meter a foice em seara alheia, pois com este expediente põe de repente o poeta em cena mas inopinadamente faz de filósofo] explica que o ânimo humano deve ser originariamente instruído pelos sentidos e que é desta instrução que ao mesmo tempo são hauridos os primeiros rebentos da arte poética. Na primeira parte, diz que os sentidos servem de mestres, ao passo que, nesta segunda parte, afirma que eles são impostores. Em ambas as partes, porém, sustenta que eles podem ser usados de modo **excelente e elegante**. Mas como é que estas coisas se conciliam entre si? De facto, se somos enganados pelos sentidos, não somos por eles instruídos. Se o conhecimento humano é adulterado pelas falácias, que coisa será o poeta, que vive da venda destas, se não um falsário?

[Mas não vos demorarei mais nisto] Advirto (ainda), *de passagem*¹³, que a expressão **disciplina dos sentidos** [*sensuum disciplinae*] da primeira parte da Dissertação é tomada num sentido muito distorcido. Efectivamente, entre os antigos, os sentidos nunca exercem uma disciplina, mas submetem-se a ela, na medida em que são dobrados <921> até que obedeçam ao governo da mente. Era este o objectivo que tinham os exercícios telésticos¹⁴ outrora difundidos.

Poderias ter dito **instrução** dos sentidos [*sensuum institutionem*], da qual haurimos os primeiros elementos do conhecimento. Mas passo adiante. –

No § 3º, o Excelentíssimo Autor enumera como falácias dos sentidos muitas coisas que me parece claramente não deverem ser referidas como tais: a Magia, os Augúrios, a Astrologia,

etc. Considero que devem ser consideradas falácias dos sentidos apenas aquelas coisas que **provêm dos olhos ou são apreendidas pelo sentido**, de qualquer maneira que seja, ainda que na realidade sejam um erro do juízo precipitado. Aquilo, porém, que com probidade sei que não **sentí** ou acerca do qual estou consciente de apenas o afirmar **conjecturando** ou **raciocinando** de qualquer modo, tais coisas, sendo embora errôneas, não podem todavia ser chamadas falácias dos sentidos (vulgarmente são chamadas antes da razão raciocinante). Assim, no voo das aves ou na posição dos astros, a superstição nunca julgou <922> **ver e ler caracteres fatídicos**. É antes o homem, feito pela natureza para o consórcio com seres inteligentes, que, movido pelo medo ou pela cupidez, é propenso para o erro a respeito da influência das potências invisíveis, capazes de dirigir a sua sorte, ao que chamamos superstição, e espontaneamente chegou a suspeitar que poderia decifrar muitas coisas que um gênio ou um demônio revelam com signos velados, desde que fosse capaz de entender aqueles signos e instituir também algum comércio com aqueles espíritos, de onde nasceu tanto a Astrologia como a Magia. No que, porém, se refere aos sentidos, eles estão tão longe de submergir o homem nestes erros que, bem pelo contrário, enquanto fiéis **guias**, antes o afastam continuamente disso e, conduzindo-o pela experiência, certamente o libertam completamente desses erros.¹⁵

Passo ao § nono, na p. 9 –

<923> Aqui, o Excelentíssimo Autor conta também como sendo falácias dos sentidos a multiplicação dos entes sem necessidade e a precipitação que leva a referir a fenômenos em certo modo diferentes outras tantas causas diferentes pelo gênero, de onde proviria o grande número de potências divinas na Teogonia e na Cosmologia dos Gregos. Mas que estas coisas, originariamente, não foram erros vulgares resultantes das ilusões dos sentidos, mas sim antes representações confeccionadas industriosamente pelos Poetas, é o próprio Aristóteles que o testemunha, na sua *Metafísica*, onde, depois de ter dito que «não cai bem à natureza divina ser invejosa», acrescenta: «mas os poetas, como diz o provérbio, mentem muito».¹⁶ Estes, com efeito, não querendo deixar nada que não ponha o espírito em movimento e que possa maravilhá-lo mediante a força unida dos sentidos, infundiram vida em todas as partes da natureza e (enquanto são fenó<924>menos) distribuíram aos diferentes deuses um correspondente número de territórios de domínio. Não foram levados para isso por nada **alheio**, mas são **eles mesmos** os fabricantes do **dolo**.

Não quero, porém, demorar-me com isto. E passo agora ao § 10.

O Autor sustenta aqui de novo que os filósofos, tal como o povoléu, são vítimas dos ludíbrios dos sentidos [*sensuum ludibriis*] e conta entre estes aquela distinção celebrada pelos antigos entre **alma** e ânimo. Mas se esta distinção é um erro, tal não pode ser imputado a uma comum falácia dos sentidos; mas antes, ela foi aceite ponderadamente, não porque aparecesse assim, mas porque parecia ser uma hipótese necessária para explicar os fenômenos da natureza humana. E duvido se os psicólogos, que a respeito desta incerta questão tomam decisão de modo leviano e audaz, merecem ser chamados sóbrios e judiciosos, como parece ao Autor, ou antes inebriados e intoxicados pelo vinho da filautia. Certamente, na nossa época, o celeberrimo Unzer, no livro *Fisiologia* <926> *da natureza animal e dos corpos animais*¹⁷ e, muito recentemente, o doutíssimo inglês Morgan, no livro *Sobre a natureza dos nervos*, que dentro de pouco aparecerá em

versão alemã¹⁸, recorreram à explicação da dupla vida como a uma «âncora de salvação». Tu vês, portanto, que aqui emerge não uma vulgar <927> falácia dos sentidos, mas uma hipótese, que, mesmo sendo errônea, não é indigna de um filósofo. Mas passo ao § 15, p. 15.

E aqui considero que o Autor crê ter encontrado na história da poesia – no amor de Petrarca por Laura, concebido no meio de um acto de adoração¹⁹ –, um notável fenómeno ou mesmo um enigma digno de Édipo. Parece-me, todavia, que se afadiga inutilmente para explicar, a partir do seu princípio, <928> a castidade, a intensidade e a constância desse amor. Neste caso, só precisamos de um **Davos** e não de um Édipo.²⁰ Com efeito, facilmente se pode reconhecer a diferença entre o amor **físico** e o **poético**. O amor físico é a **concupiscência** pela pessoa amada; do **poeta**, porém, diz Horácio que ama os **versos**, e só disso se preocupa.²¹ O poeta tende a uma **descrição** bela **do amor**, que consegue tanto melhor quanto mais longe está do convívio com o objecto amado. Assim, Petrarca, ao ver Laura pela primeira vez, não ficou preso e encantado pela beleza dela; <929> pelo contrário, foi quando se apresentou ao seu ânimo, já comovido pela solenidade festiva, uma bela figura que murmurava sons piedosos, preces e prantos em religiosa adoração, foi então que subitamente nasceu nele a ideia de que isso **poderia ser matéria apropriada para os seus versos**. **Tomado**, por assim dizer, por este pensamento, ele nunca fez nenhuma tentativa para possuir Laura enquanto tal, mas antes, para poder prolongar os lamentos e suspiros, fugiu dos seus abraços, submergindo apenas na sua dor poética, isto é, ficcionada e criada à sua imagem. A partir daí podem ser abundantemente e facilmente compreendidas tanto a castidade e a santidade, louvadas pelo Autor, quanto um certo ar etéreo do amor, <930> que emanam dos seus versos, sem necessidade de recorrer a qualquer hipótese tirada das falácias dos sentidos. Tendo abraçado a nuvem por Juno, ele embelezou a seu modo, isto é, entusiasticamente, o simulacro que tinha uma vez concebido na mente, cuidando, de resto, não de Laura, mas da elegância e do ardor dos seus versos e da celebridade do seu nome.

Conhecerás por certo a conversa de Petrarca com o Papa. Quando este uma vez lhe disse que lamentava o seu destino e que estaria disposto a fazer o possível para que ele desposasse a sua Laura, a princípio, o poeta hesitou, mas depois recusou claramente, dizendo temer que, se a desposasse, os seus versos viessem a perder todo o seu ardor e a sua elegância.

<931> No matrimónio, com efeito, acontece o que diz Lucrécio a respeito da morte: «então, as vozes verdadeiras fazem-se ouvir, cai a máscara, fica a realidade»²².

Apresso-me a concluir. Se, em muitos dos outros assuntos mais duros em que toquei [pelo menos enquanto são filosóficos], a província em disputa estava situada fora do alcance dos dardos, concentro-me agora no ponto da dissertação que pode repugnar ao estômago tanto do **Lógico** como do **Filósofo**. O excelente Autor, depois de ter abundantemente discutido a respeito daquele engano dos sentidos mediante o qual nós transferimos erroneamente a força e a capacidade dos **designados** para os **signos**, no final do § 18 assim prossegue: <Com um engano muito similar, uma certa posição dos termos silogísticos fascinou até os lógicos escolásticos de uma época ainda recente – Barbara celarent, etc. –, a tal ponto que, desatendido o nexo interno das proposições, eles acreditavam que, naqueles, por assim dizer tormentos do engenho, existisse uma força grande e oculta, para distorcer todo o tipo de verdade.>²³

<932> Mas com tal acusação não deve o Autor temer a ira das vespas que irritou?²⁴ O povo dos lógicos de facto é tão belicoso que não é impunemente que alguém o provoca. E, neste caso, certamente, são acusados erroneamente de engano, pois eles não prometem fórmulas **nas quais está ínsita uma força grande e misteriosa para extorquir verdades de todo o tipo**, como aqui lhes é recriminado; pelo contrário, eles submetem a exame somente o mecanismo a respeito da posição dos termos nos silogismos, com vista a tornar visível, no uso geral do intelecto – da mesma forma que o fazem os gramáticos nas línguas –, a fórmula geral **de designar conhecimentos**, sem ter em conta a matéria neles contida. Do que certamente não cabe falar aqui. Ainda que duas pessoas <933> façam a mesma coisa, a coisa não é a mesma. De facto, o lógico pratica com o lógico um certame amigável. Mas se surge um inimigo externo, ambos se precipitam contra ele, em posição de batalha.

Estando já esgotada a matéria, devo pôr fim ao debate. E, em primeiro lugar, congratulo-me com o que foi dito a respeito do assunto. Em segundo lugar, a ti, homem excelentíssimo, que vais embelezar nobremente a Esparta que ganhaste²⁵, desejo-te um começo favorável e felizes sucessos no teu trabalho. Instruído abundantemente nas belas letras, **leitor** e finíssimo **juiz** dos poetas de diversas línguas, tanto nas mais antigas como nas mais recentes, estrénuo cultor dos esplêndidos exemplos literários que nos foram transmitidos sobretudo pelos Gregos, não pode acontecer que não abras à juventude académica o vasto campo do engenho a cultivar, de modo que, esconjurada a barbárie, ela faça uma aliança com as Graças, sem que provoque a inveja de Minerva, protectora das ciências e das artes mais úteis. E, fazendo votos para que as tuas fadigas e os teus méritos <934> sejam recompensados também pela prosperidade doméstica como por uma segunda fortuna e que o nume supremo proteja a tua vida e a tua saúde, confio-me à tua benevolência e à tua amizade.

Por fim, dirijo-me a ti, ilustríssimo Respondente, dotado de virtudes pela natureza, possuidor de ricos conhecimentos tanto nas belas letras como nas úteis; pessoa amável, que, pela elegância dos costumes, reconheço desde há muito entre os meus melhores ouvintes.²⁶ Congratulo-me de coração por este exemplo de engenho e de doutrina, dado de um modo tão digno de louvor. E, sendo chegado já o tempo no qual a fadiga que despendeste laboriosamente para espalhar a semente te seja compensada com uma rica colheita correspondente aos teus méritos, pela esperança que concebeste com justo direito, desejo que tenhas sucessos afortunados e certos. Quanto ao resto, peço ao nume supremo que te proteja e te conserve.

Desejo a ambos saúde e sorte.

NOTAS

1 A expressão *auri sacra fames* é tomada de Virgílio, *Aeneida* III, 57.

2 *Vatis avarus non temere est animus, versus amat, hoc studet unum*. Horácio, *Epistolae* II, 1.119.

3 Possível alusão a um passo de Horácio, *De arte poetica*, 188.

4 Inicialmente, em vez de «Adeo Rerum apparentiae», Kant tinha escrito «Species Rerum itaque».

- 5 Sendo a hera considerada um símbolo de Baco, deus do vinho.
- 6 A frase é tomada de Horácio (*De arte poetica*, 19), no sentido de “isso não era para aqui chamado” ou “não tem aqui cabimento”.
- 7 A frase - *rara nant in gurgite vasto* - é tomada de um verso de Virgílio, *Aeneida*, I, 118.
- 8 Kant usa a expressão grega - *Metabasin eis allo genos* - grafada em caracteres latinos.
- 9 A frase - *publica materies privati iuris erit* - é tomada de Horácio, *De arte poetica* 131.
- 10 Kant refere-se a expressões e exemplos tomados por Kreuzfeld das *Bucólicas* (I, 53) e das *Geórgicas* (IV, 468) de Virgílio.
- 11 Kant evoca a bem conhecida metáfora horaciana que compara a poesia com a pintura – *ut pictura poësis*.
- 12 Transcreve-se em itálico o passo da tese de Kreuzfeld citado e comentado por Kant.
- 13 Kant usa aqui, grafada em caracteres gregos, a expressão $\omega\varsigma\ \epsilon\nu\ \pi\alpha\rho\omicron\delta\omicron$.
- 14 Exercícios de correção ou de afinação da sensação à distância.
- 15 As ideias aqui expostas, em clara oposição às defendidas na tese do candidato, antecipam a refutação kantiana das acusações feitas pelos filósofos e lógicos aos sentidos, que será desenvolvida sob a forma de um explícito processo judicial (no qual Kant assume a função de advogado), como uma «Apologia da sensibilidade», na *Anthropologie*, §§ 8-11.
- 16 Aristóteles, *Metaphysica*, I, 2, 983 a.
- 17 A obra de Johann August Unzer fora publicada em 1771.
- 18 Referência não encontrada com esse nome. Provavelmente Kant cita de memória e engana-se no nome do autor; a alternativa poderá ser: Samuel Musgrave, *Speculations and Conjectures on the qualities of the nerves*, 1776, traduzida nesse mesmo ano ao alemão com o título: *Betrachtungen über die Nerven und Nervenkrankheiten*, anunciada no Catálogo da Michaelis-Messe de 1776, mas ainda não chegada às mãos de Kant; este poderia ter tido acesso apenas a uma recensão da obra, saída entretanto em algum periódico.
- 19 Referência ao episódio do enamoramento do jovem poeta por Laura, durante o ofício litúrgico de uma Sexta-feira Santa, na igreja de Santa Clara em Avignon.
- 20 Evocação de um passo de *Andria* (v. 194) de Terêncio, onde o escravo, que finge não entender as alusões feitas pelo seu senhor, exclama: *Davos sum, non Oedipus*.
- 21 Veja-se acima a nota 2.
- 22 Lucrécio, *De rerum natura*, III, 57-58. A passagem - *et eripitur persona, manet res* -, sempre truncada e tirada do seu contexto, aparece também no § 33 da *Anthropologie* e no *Opus postumum* (AA 21:142), aqui para esclarecer a noção de **pessoa**.
- 23 Transcreve-se em itálico a passagem do texto de Kreuzfeld referida e comentada por Kant.
- 24 A expressão *irritare crabrones* parece evocar um passo de Plauto, *Anfitrião*, 707.
- 25 A passagem – *spartam, quam nactus es* - é de interpretação discutida. Alusão talvez a um passo do *Telefo* de Eurípedes (“Coube-te em sorte Esparta: agora governa-a!”), tomado das *Epistolae ad Atticum* (14,6) de Cícero.
- 26 Christian Jakob Kraus (1753-1807) foi um dos alunos predilectos de Kant e seu amigo, que viria a fazer parte do círculo dos seus comensais. A partir de 1781, seria professor de filosofia prática e de ciências da administração do Estado, na universidade de Königsberg.

MENSCH, J. *KANT'S ORGANICISM: EPIGENESIS AND THE DEVELOPMENT OF CRITICAL PHILOSOPHY*. CHICAGO AND LONDON: THE UNIVERSITY OF CHICAGO PRESS, 2013.

Paulo JESUS

In this remarkable book of theoretical audacity and analytical detail, J. Mensch locates Kant at the heart of modern organicism and investigates the analogy between reason and life, arguing that one can understand reason as life, that is, as a self-organizing and self-developmental process. Moreover, the original hypothesis at stake here compellingly states that, from the standpoint of Kant's organicism, reason grasps itself by identifying with an organic being, a self-generative whole, a system perfectly unified and articulated from within. It hence follows that, contrarily to what might be suggested by its title, this book does not concern Kant's biology but rather Kant's construal of the logos of life, and the ways in which such logos of life becomes for transcendental philosophy the very logos of reason¹. In a word, this research shows how *Critical Philosophy* belongs to the realm of "organic logic", how the critical elucidation of reason presents reason as an organic developmental process, and thereby constitutes a special case of the epigenetic dynamic of life. Unlike common practice in Kantian scholarship, the analogy of life and reason can be elucidated without fully subordinating the first to the third *Critique*.

To begin with, organicism is defined as the philosophical view of nature that recognizes life as revealing the irreducible, inner, spontaneity of nature, and hence refuses the legitimacy of a mechanical explanation of organic processes. For it would reduce life to inert matter, leaving the whole problem of the generation of life forms (including growth with functional, qualitative, differentiation) entirely contingent on the laws of quantitative forces and their communication. In Modern Philosophy, the dispute between matter and life, between efficient causes and final causes, between the mere communication of force and the spontaneous production of force, concerned the very core of reality, substance qua res extensa, and deeply divided the philosophical and scientific community. Cartesian mechanism and Leibnizian panvitalism embody this opposition of the pure geometry of extension against the internal force of first entelechies. Leibniz emphasizes the irreducibility of action and force (vis, nisus,

¹ The equation of life and theoretical reason was brilliantly proposed by Dörflinger (*Das Leben theoretischer Vernunft*, Berlin, Walter de Gruyter, 2000), and was also the thread that guided our own work (Jesus, P. *Poétique de l'ipse: Etude sur le 'Je pense' kantien*, Bern, P. Lang, 2008).

conatus) when he reformulates in neo-Aristotelian terms the notion of individual substance as fundamentally inseparable of a self-active principle, the “soul”². As clearly demonstrated by J. Mensch, Kant inherits this powerful tension, enriched by the extensive and pioneering work of Natural History. However, in Kant, the radical distinction between the laws of nature and the laws of freedom shows a common ground of necessity and purposiveness. Although the author does not explore the Kantian Physics and its paradigmatic change in the conception of matter, from the *Metaphysical Foundations of Natural Science* to the *Nachlass*, it is worth noting that a firmer passage will be opened in the latter to link Physics and Biology because matter is no longer the passive reception of movement but, instead, becomes a spontaneous, “primordially moving matter” that fills all the space (AA 21, 218-219)³.

The book is organized in seven chapters that reconstruct the genesis of the *Critique of pure Reason*, tracing the epigenetic trajectory of the transcendental deduction. The first two chapters provide a careful rendition of the main controversies and advances made by the life sciences during the seventeenth and eighteenth century, thus setting the historical context in which takes place the Kantian appropriation of the “problem of origin”. The analysis of Locke’s species nominalism, intimately related to the empirical uncertainty of the real boundaries between species, and of Leibniz’s metaphysical nature of all-encompassing vitality and continuity constitute the first moment of Mensch’s long argument in favor of life forms as analoga of concepts and truths through which reason creates and develops itself. Kant will dismiss both systems, the former because of its empirical physiology of reason, and the latter due to its too strong preformationist, supernatural, assumptions.

The following crucial moment involves the empire of mechanical Newtonianism in the life sciences, as practiced by Buffon and Maupertuis, which reduces organic generation and development to “growth as a process of mechanical addition and expansion” (p. 43). The most significant contribution by Buffon, however, refers to the genealogical understanding of species, which implies an epistemological and methodological revolution in the realm of modern biology. By attacking Linnaeus’s taxonomical system, Buffon lays the foundation of Natural History, the descriptive and explanatory science of life that focus on generation and origin, unity and affinity. The third chapter exposes Kant’s precritical development whose scientific eclecticism may be interpreted as a variety of research strands, from natural sciences to logics and metaphysics, revolving around the explanatory power of the knowledge of origins which, in the last analysis, must culminate in elucidating the origin of knowledge itself. Chapter four occupies the center stage or the epicycle in the course of the book for it explores the precritical turning-point in which the study of the epigenesis of knowledge requires a new metaphysics, “a science of the limits of human reason” (AA 2, 367-368). The content of the “great light” given by 1769 is here reinvested by the daring hypothesis of its meaning the Kantian solution for the “problem of origin” (p. 81): neither pure mechanics nor divine intervention, but rather

² The Leibnizian texts that inspire this remark are the well-known “Animadversiones in partem generalem Principiorum Cartesianorum” (1692) (GP IV, 354-91), “De primae philosophiae emendatione et de notione substantiae” (1694) (GP IV, 468-70), “De rerum originatione radicali” (1697) (GP VII, 302-08), and “De ipsa natura sive de vi insita actionibusque creaturarum” (1698) (GP IV, 504-16).

³ I. Kant, *Opus Postumum*, tr. E. Forster & M. Rosen, Cambridge, CUP, 1995, p. 68-70.

the mind's generation, the "original acquisition" of concepts, that is, "epigenesis from the use of the natural laws of reason" (AA 17, 492). In this context, the reinterpretation of Kant's well-known letter to Herz (1772) focuses on the "origin of concepts" (AA 10, 131-132) and the idea of a priori mental laws that make representations possible. The chapters five and six supply enriching material to improve the understanding of the specificity of the Kantian model of epigenesis. The author examines its anthropological and psychological foundations, namely the problem of the unity of the human race and that of the unity of apperception or self-consciousness. In both cases, Kant refines a novel idea regarding the process of epigenetic production. His 1770's writings on mankind testify to the integration of Buffon's historical or genealogical unity of species with a teleological and lawful approach to nature. Germs and natural predispositions are not preformed, blind, forces: they encompass the practical and theoretical possibility, or potentiality, which are actualized only if man and mind may generate them spontaneously. Original acquisition or innateness of the mind to the mind mean, above all, free self-generation; hence, the judicious reference to the freedom of practical reason and to the active generation of concepts (i.e., the controversy with Eberhard). As for the epigenesis of the objective validity of concepts and its relationship with apperception, Tetens's empirical psychology leads Kant to unify all representations under the self-active and self-generative power of consciousness and to surpass the domain of an empirical physiology (*quid facti*) by a purely rational physiology of reason (*quid iuris*).

Finally, the seventh chapter is devoted to the inner sanctuary of transcendental philosophy, the transcendental deduction, understood as "a legal deduction, research into genealogical lines" (p. 131). Now, the inquiry into the origin of categories uncovers the unity of transcendental apperception, that is, transcendental affinity that resolves the quest for origin into the organic unity of reason, the very possibility of necessity in experience, and therefore the possibility of truth because it requires necessarily the cohesion of lower and higher cognitive faculties as well as the semantic unity or coherence within the manifold of representations in myself. The rich contrast between Deductions A and B could invite a longer, in-depth analysis.

To sum up, J. Mensch sustains emphatically and consistently that affinity and organic unity of reason are the main architectonic traits of the metaphysical portrait of reason under the guise of epigenesis as "generic preformation" (KU, AA 05, 424). The third Critique is briefly included as the basis for a "cautionary tale" (pp. 140-145), thus avoiding the conversion of organicism into transcendental realism. However, both the second and the third Critiques could deserve a more detailed treatment for they accomplish a deeper and larger unity between the system of freedom and the system of nature, in which the praxis of reason merges together with its poiesis, and auto-poiesis.

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KANT, I. *CRÍTICA DA RAZÃO PURA*. TRADUÇÃO E NOTAS DE FERNANDO COSTA MATTOS. PETRÓPOLIS: VOZES, 2012.

Gualtiero LORINI

O trabalho de tradução e anotação da *Crítica da razão pura* por Fernando Costa Mattos parece ter sido concebido, em primeiro lugar, para ajudar o leitor na grande tarefa que inevitavelmente acompanha a leitura de um texto tão rico e complexo. Como destaca o tradutor na “Nota sobre a tradução”, o trabalho do leitor da *Crítica* “não é nada fácil” (p. 8), e, tendo em conta que esta edição é também dirigida ao leitor lusófono não especializado, muitas das escolhas na obra em geral podem ser consideradas consistentes.

Nesse sentido, a decisão de não fornecer o texto original alemão em paralelo está em harmonia com a indicação, feita ao longo do texto, apenas da paginação da segunda edição (B, 1787), não também da primeira (A, 1781), que é indicada apenas nos trechos omitidos na segunda edição, e que vêm apresentados separadamente. O objetivo evidente, aqui, é dar ao leitor a mais clara e simples ideia possível sobre a expressão mais madura do criticismo kantiano, além das dificuldades pelas quais a maturação dessas ideias tiveram que passar. Isto, porém, não significa obviamente desistir de dar uma ideia da elaboração filosófica profunda que caracteriza a *Crítica*, e, precisamente, a posição em que foram colocados os trechos da primeira edição excluídos da segunda facilita este entendimento. De fato, estes trechos não são colocados em apêndices no final do texto, colocação que tornaria dispersiva sua comparação com os trechos homólogos, nem são colocados em longas notas; bem ao contrário, eles são colocados imediatamente depois dos parágrafos da segunda edição a que se referem. Desta maneira, as diferenças entre as duas edições são tornadas imediatamente evidentes, ao mesmo tempo facilitando a continuidade de uma leitura que em si requer atenção constante.

Isso se aplica, por exemplo, aos parágrafos do “Prefácio” à primeira edição, aos parágrafos da “Analítica transcendental” sobre a “Dedução transcendental” das categorias e aos parágrafos da “Dialética transcendental” sobre os “Paralogismos da razão pura”. Por outro lado, os trechos da “Estética transcendental” nos quais se encontram as maiores diferenças entre a primeira e a segunda edições do texto estão expostos e esclarecidos nas notas, porque sua brevidade permite esse tipo de tratamento.

Essa é uma dinâmica que caracteriza a configuração de todo o trabalho; como veremos, também no que se refere às escolhas de tradução. Ou seja: a identificação de uma regra metodológica geral, que, contudo, não é vinculativa, e, por essa razão, pode não ser respeitada, justamente quando uma exceção a ela contribua para u’a maior clareza.

Abordando agora as questões mais relacionadas à tradução, é preciso, em primeiro lugar, registrar a ampla visão obtida pelo tradutor no panorama das traduções existentes, e não só em português. De fato, Costa Mattos considera as principais traduções espanholas, italianas, francesas, inglesas e holandesas, e indica, para cada uma delas, a mais importante para o seu trabalho. Sem dúvida o quadro é exaustivo. O que poderia talvez observar-se é a ausência, por vários aspectos compreensível, da tradução de Pietro Chiodi entre as traduções italianas. As constantes referências às diferentes escolhas dos que emprenderam tais traduções, suas mútuas comparações e a explicação pelo tradutor do motivo que o levou, em cada caso, a seguir um em vez de outro, constituem a essência da anotação ao texto. Essa anotação é extremamente leve, mas muito precisa, e quase poderia ser considerada um pequeno comentário interno, de que agora consideraremos alguns exemplos.

A regra de base seguida pelo tradutor consiste na literalidade da tradução, e, nesse sentido, ele prefere verter *Naturwissenschaft* por “ciência da natureza”, e não por “física”, tendo em conta que Kant utiliza também o termo *Physik* de modo independente [B XII, p. 27]. Um caso semelhante refere-se à tradução do termo *Verbindung*, que é vertido por “ligação” no “peculiar contexto da dedução transcendental das categorias” [p. 128, B 130]. Por sua clareza imediata, essa opção é preferível a “conexão”, “composição” e “síntese”, que são opções susceptíveis de ter implicações teóricas parcialmente enganosas. Sobre esse ponto, “os únicos que tiveram trabalho facilitado – diz o tradutor – foram os holandeses [...] que, dispondo de uma palavra de origem tedesca, puseram [*sic*] adotar ‘*verbindung*’” [p. 128].

Uma questão na qual Costa Mattos fez, em nossa opinião, uma escolha inteligente, refere-se à dicotomia entre *Gegenstand* e *Object* para designar o “objeto”. Ele optou por traduzir sempre por “objeto” e fornecer entre parênteses o correspondente alemão, mas só em casos em que os dois termos diferentes incorrem no mesmo contexto [p. 30]. Isso expressa muito bem o foco principal do tradutor em facilitar a leitura, sem se esquecer de salientar a riqueza de uma língua com um vasto poder semântico como é o alemão.

Essa profunda atenção é reconhecível mediante duas dinâmicas específicas, em parte já mencionadas. A primeira visa destacar os casos em que o próprio Kant sente a necessidade de integrar um termo técnico alemão por meio do termo original latino ou grego [um exemplo é a relação entre *Totalität* e *Allheit*, B 111, p. 117; A 322/B 379, p. 291, traduzidos por “totalidade”]. Um outro exemplo disso é representado pela utilização em A 215/B 261 [p. 223] do termo “Commercium” não em itálico, como se Kant houvesse querido utilizar uma versão germanizada do termo latino, expressão que o tradutor opta aqui por traduzir para o português “comércio”.

Uma segunda dinâmica, mais ampla, diz respeito ao tratamento da sinonímia e das distinções entre os termos, discussão cujo propósito é tornar o mais consistente possível a exposição kantiana, ainda que por vezes só mesmo em termos de legibilidade. É o caso, por exemplo, de *Vermögen*, geralmente traduzida como “faculdade”, mas vertido em B 7 [p. 49] por “capacidade”, por oposição a *Unvermögen* ou *Selbsttätigkeit*, que o tradutor prefere verter literalmente por “autoatividade”, a fim de evitar confusão com o termo *Spontaneität*, mas que, num caso, quando utilizado adverbialmente, como *selbsttätig* [B 68, p. 92], tem

de ser necessariamente traduzido por “espontaneamente”. O termo *Grundsatz* é geralmente traduzido como “princípio”, mas em B 138 [p. 133] a literalidade de “proposição fundamental” foi preferida para marcar a distinção com *Prinzip*, que está imediatamente após. Um último exemplo desse tipo de dinâmica é representado por *Verstandesbegriff*, que é normalmente traduzido por “conceito do entendimento”, mas que em B 257 [p. 221] o tradutor preferiu verter por “conceito intelectual”, a fim de evitar a ambiguidade que resultaria da expressão “conceito do entendimento da seqüência”.

Há também casos em que esse tipo de escolha de tradução tem consequências teóricas ainda mais profundas, afetando os próprios fundamentos da Crítica e, mais em geral, do criticismo kantiano. Nesse sentido, podemos considerar a sinonímia entre *Erscheinung* e *phaenomen* [p. 31], de que algumas vezes Kant propõe formas germanizadas (*Phänomen*: A XI; A 407/B 433; A 546/B 574; A 563/B 591; *Phänomene*: A 206/B 251; A 264/B 320; A 774/B 802). Na sua anotação a propósito, Costa Mattos salienta a diversidade entre o sentido de *aparição/aparência* enquanto “fenômeno” [oposto a *Noumenon*, “númeno”], e a *aparição/aparência* como algo que pode enganar. Para esclarecer e diferenciá-la em relação a esse segundo significado, o tradutor decidiu verter *Schein* por “ilusão” [p. 93].

A tradução de *Mannigfaltige* por “diverso” e não por “múltiplo” (B 34, p. 71) é motivada pela vontade do tradutor em enfatizar o aspecto qualitativo da variedade na intuição sensível, em vez da simples conotação quantitativa representada pela multiplicidade. Por essa especificação, a escolha é compreensível. Costa Mattos mantém também uma importante distinção entre “figura” e “forma”, escolhendo o primeiro termo para traduzir *Gestalt* e evitando a sobreposição com o alemão *Form* [B 35, p. 72], que é também muito rico de outros significados no pensamento kantiano. É também significativa a escolha de traduzir *Beziehung* como “relação” e não como “referência”, seguindo em particular, nesse caso, Guyer e Wood, que marcam a distinção entre a relação da sensibilidade com os objetos em geral e a relação dos objetos entre si [A 45/B 62, p. 88]. No contexto de tão profunda atenção a questões linguísticas refinadas, porém, seria natural esperar uma tematização da complexa distinção entre os conceitos de “transcendente” e “transcendental”, que não parece resolvida na Crítica, e que nem sequer é considerada no glossário final, ainda que este seja bem organizado.

Em geral, esse trabalho permite um acesso documentado, preciso, e ao mesmo tempo o mais fácil possível, para um texto de complexidade inquestionável. Nesse sentido, o único elemento que poderia ser adicionado é um sumário mais detalhado, que explicitasse todos os parágrafos do texto. Em todo o caso, podemos apreciar a concisa precisão com que os principais aspectos da tradução são imediatamente colocados em evidência, e a capacidade de permitir ao próprio texto “falar”, aliviando-o, quando possível, de todos os elementos que não sejam úteis para a sua compreensão. Nesse sentido, podemos lembrar a escolha da opção proposta por Esposito sobre a emendação do que, com toda a probabilidade, foi um erro material na redação original do texto, ou seja, a inversão entre *dieses* e *jenes* (“esta”/“aquela”) e entre *in dem anderen* e *diesem* (“aquela”/“nesta última”) (B 258), de modo que, efetivamente, “a passagem da *relação de influência* para a *relação de reciprocidade*” faça sentido [p. 221]. Ou até mesmo quando se elimina a metáfora adotada por Kant para indicar a sutileza da argumentação especulativa

destinada a reconhecer “uma vida futura segundo princípios do uso prático da razão” (B 424, p. 315), e em seu lugar se usa uma perífrase mais clara em Português.

A partir dessas escolhas, emerge uma meditação cuidadosa sobre a real eficácia do trabalho de tradução e a utilidade de tal empreendimento em relação às diferentes necessidades da comunidade científica como do grande público. Tal é o resultado de um trabalho levado a cabo por um grupo de pesquisa, recordado pelo tradutor em suas observações introdutórias, no qual trabalho a comparação entre diferentes sensibilidades produziu um significativo resultado.