

**THE ROLE OF COMPARATIVE/HISTORICAL LINGUISTICS IN RECONSTRUCTING THE PAST:
WHAT BORROWED AND INHERITED WORDS TELL US ABOUT THE EARLY HISTORY OF HAUSA***

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1. INTRODUCTION

Hausa, with perhaps as many as 40 million first-language speakers (within the Afroasiatic/Afrasian phylum only Arabic has more), is by far the largest of the 130 or more languages which constitute the Chadic family. Hausa covers most of the northern and western extent of the family, across northern Nigeria and into southern Niger. Chadic languages also extend into northern Cameroon and western and south-central parts of the Chad Republic, and hitherto unknown languages are still occasionally discovered. This area is one of the most linguistically complex in Africa, and is the location of languages belonging to three of the four great phyla as postulated by Greenberg (1963)—Afroasiatic (e.g., Hausa), Niger-Kordofanian (e.g., Fula(ni)), and Nilo-Saharan (e.g., Kanuri).

The two major subclassifications of the Chadic family are Newman (1977, 1990) (both refinements of Newman and Ma 1966), and Jungraithmayr and Ibrizimow (1994), and between them they classify Chadic into four branches: **West Chadic-A** (including Hausa, Bole/Bolanci), **West Chadic-B** (Bade, Ngizim, etc.), **Biu-Mandara = Central Chadic** (languages in northeastern Nigeria, e.g., Tera, Margi, and northern Cameroon), **East Chadic** (western Chad Republic, e.g., Kera), and the closely related **Masa** group (western/central Chad Republic and northeastern Cameroon). See map 1.

MAP 1 (see end of file below) about here ---->

Unlike the well-known and well-researched Indo-European language family with its long literary history, and for which we have a specified and extensive corpus of informative lexical evidence, there is a relative paucity of (reliable) historical/linguistic documentation for the languages of sub-Saharan Africa—most are either undescribed or underdescribed. Because we cannot directly evaluate inferences, therefore, our understanding of the history and phylogenetic affiliation of the languages is limited, as is our knowledge of natural language phenomena such as semantic shift, phonological change (in pronunciation), morphological additions, and regular sound correspondences across languages.¹ Sounds and meanings erode over time, and lexical items are replaced, making the task of reconstructing linguistic history still more problematical (this is even the case for Indo-European, see Ringe et al. 2002). These same constraints also apply to Hausa, despite the fact that: (a) it is the best-researched sub-Saharan language, with three recent substantial reference grammars (Wolff 1993, Newman 2000a, Jaggar 2001; see also Newman 1991); and (b) Hausaists have at their disposal lexical and grammatical resources extending back over 150 years (the first published combined Hausa grammar/vocabulary was produced by Schön in 1843), in addition to some

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¹ Despite our limited understanding, African languages have played a major part in the formulation of models of language change, as well as providing insights into linguistic behaviour—a number of recent theoretical approaches, for example, have been proposed by phonologists researching African languages (see the various chapters in Heine and Nurse 2000).

historical linguistic information available from Hausa documents in Arabic script (*ajami*).² Because of these restrictions, much of what we can confidently reconstruct for Hausa linguistic history is deducible from the comparative study of Hausa and related Chadic languages as they are spoken now, then projecting backwards to the probable ancestral patterns.³

Gregersen (1977:144) writes: "Although little is known of the history of African languages, they in turn have proved to be of considerable importance in reconstructing African cultural history." Although this observation might seem to be little more than a statement of the obvious, the reality is that the potential contribution of comparative-historical linguistics to the scholarly debate is often ignored—it was conspicuously absent, for example, along with archaeology, in the title of the initial meeting which has produced the papers in this collection, i.e., "The Emergence of Hausa Identity: History and Religion"! (Ironically, linguistics has possibly played a greater than normal role in our understanding of prehistory in the area because the archaeological evidence is patchy.)

Why is linguistic history important? Because positing genetically related languages requires us to infer that they must all derive from a single ancestral source—a presumed protolanguage spoken by a particular speech community in a specific place at a specific time. When the community geographically separates, the nuclear language changes over time in each of the new communities until speakers of the new varieties can no longer understand each other and new languages are formed. Communities spread beyond their geographical homeland perhaps because of external pressure (e.g., conflict with other groups, conquest), natural disasters, climate change, in search of land/food, or because of population saturation and a simple need to expand. Hypothesizing genetic unity on the basis of shared ancestral vocabulary and morphological paradigms sheds light on the culture and history of the

²See, for example Prietze (1907), whose Hausa-speaking assistant, Alhaji Musa, marked the contrast between the native retroflex flap /r/ (using Arabic □āḍ), e.g., **raanaa** 'sun, day', **sarkii** 'emir', and the historically more recent tap/trill /r̄/ (= Arabic **rā**). The /r̄/ phoneme entered the language through Arabic, Kanuri and English (in addition to language-internal processes), e.g., (Arabic) **rīdda** 'apostasy', **hāra□m** 'unlawful', (Kanuri) **r̄bùutuu** 'writing', (English) **sakandāṛēe** 'secondary school' (see Newman 1980b for details). Transcription: **aa** = long vowel, **a** = short, **à(a)** = low tone, high tone unmarked; **r̄** = tap/trill, **r** = (native) flap, □ , □ , □ = glottalized.

³As regards the etymology of the term **Hausa** /**hausa**/ itself, several proposals have been floating around for a number of years and surface now and again, with varying degrees of plausibility. Skinner (1968) suggests it derives from Songhai **hausa** (no tones/vowel length provided) meaning 'east', but Heath (2005) gives the meaning as 'north (bank of the Niger River)' (Lameen Souag, p.c.), and transcribes it /**hausa**/, i.e., identical in all respects to the Hausa term, making it a possible candidate. Far less convincing is Abraham's (1962: iv) fanciful claim that **hausa** "derives from Arabic **al-lisa□□n**, Hebrew **halla□sho□n**" meaning 'tongue'. The language name has nothing to do with these two Semitic words, but the corresponding Hausa word **harshèe** 'tongue' *does* of course—it is fully cognate with the Semitic terms and is a reflex of Proto-Chadic ***alsi** which in turn (like Semitic) goes back to Proto-Afroasiatic ***lš** or ***ls**. Another suggestion is that the source of the name is the Hausa word for 'Ethiopia'—**Habashà**. Whatever its historical merits, however, this proposed etymon runs into major linguistic problems, e.g., *inter alia*, (a) there is no motivation for the /**sh**/ segment to change (depalatalize) to /**s**/, (b) the tone on the final /**a**/ is different, (c) there is no reason why the /**b**/ in **Habashà** should weaken to /**u**/ in **hausa**. In short, we know what its derivational history is NOT, but we are still not sure what it IS.

speakers of related languages (with the obvious proviso that traces of cognacy gradually disappear with the increasing separation of languages over time). Sound changes, for example, can sometimes help us establish the period when certain words were first borrowed into a language by establishing relative chronologies for historical developments. An account of Hausa identity which did not include consideration of the origin, classification and evolution of the language itself would therefore be as incomplete as a characterization which failed to include religion as a salient factor.

There are other components in a comprehensive approach to the problem. In order to form a coherent picture of the remote past (migration, technology, contact, trade, religion, etc.), and shed light on phylic dispersal, ideally a synthesis of archaeology, ethnography, and linguistics is needed (Blench 2006:3ff.). Human genetics will surely also make an increasingly important scientific contribution to the debate once we have a sufficient body of samples of mitochondrial and nuclear DNA sequences permitting phylogeographic analysis across a range of ethnolinguistic groups.

The present paper reinforces the importance of linguistic input from comparative reconstruction, and is aimed principally at non-linguists whose knowledge and understanding of the methodologies used, of family tree models and the genetic classification of Hausa, vary considerably (at times alarmingly) in my experience. (In fairness I recall being largely unconcerned myself about such questions in my former life as an anthropologist!)⁴ The paper is also mainly derivative, drawing especially on the influential works of leading Chadicists such as Paul Newman and Russell Schuh—empirically-driven specialists in the languages and cultures of the area who have an extensive knowledge of the linguistic principles and rigorous methodologies required (see especially Newman 1977, 1990, 2000b:259ff., and Schuh 1981, 1982). It does *not* therefore claim to offer any further insights into the origins of Hausa, beyond what linguists already know. As an Africanist linguist primarily interested in the description and analysis of synchronic language data (rather than historical/genetic phenomena), I simply provide a balanced synthesis of the types of data and tools utilized by responsible linguists when reconstructing and evaluating the historical backdrop to Hausa and related Chadic languages (or any language(s) for that matter). Such reconstructions are of course probabilistic and entail a degree of error, but the methodological procedures at least are sound, and they allow extraction of salient linguistic history.

Inferences about the (largely) undocumented history of a given language proceed from careful evaluation of: (1) its genetic classification and distribution (linguistic geography); (2) its lexicon (word etymologies) and morphology (function items) (I avoid syntax since it is notoriously difficult to reconstruct). Section 5 focusses on Hausa loanwords, especially borrowings from Berber, and illustrates how historical events can be revealed by careful scrutiny and comparison, by professional linguists, of a range of relevant vocabulary-based data. This is in contrast to the selective and dubious data sometimes cited, together with oral traditions, as putative linguistic support for a claim which in reality is little more than a "never let the facts get in the way of a good story" type of approach. We begin with some of the more potent evidence demonstrating the genetic Hausa < Chadic < Afroasiatic connection.

2. THE GENETIC AFFILIATION OF HAUSA < CHADIC < AFROASIATIC AND ITS GEOGRAPHICAL DISTRIBUTION

⁴ Even Africanist linguists are sometimes guilty of woefully ignorant and misleading statements. One of the most egregious examples is to be found in Webb and Kembo-Sure (2000:31) who write that: "The 300 languages of this family [Chadic] are spoken by 250 million speakers, and were introduced into Africa in the seventh century, after the Islamic invasions"! Not one of these claims is correct.

The classification of Afroasiatic (formerly known erroneously as “Hamito-Semitic”) and the other three great African language phyla, i.e., Khoisan, Niger-Kordofanian, and Nilo-Saharan, is based mainly on Greenberg (1963), whose comprehensive (re)classification of African languages remains the universally accepted model.⁵ Greenberg set up five fully coordinate families for Afroasiatic—†Ancient Egyptian, Berber, Chadic, Cushitic, and Semitic (the outlying group located in southwest Asia). A sixth family, Omotic, was added later, by separating it from Cushitic, though this genetic assignment to Afroasiatic has still to be universally accepted, largely because of the structural diversity of the languages whose genealogical relationship is far from clear. (For purposes of this paper, however, I will follow the consensus and include Omotic.)

Turning to the Hausa/Chadic/Afroasiatic unity, following on Lukas' (1936) seminal work, Greenberg used the most powerful and mutually supportive indicators of relationships—sound-meaning correspondences in lexical elements and functional morphemes—to demonstrate two related hypotheses: (1) the genetic unity of the Chadic languages, including Hausa, and (2) the affiliation of Chadic (including Hausa) to the rest of the Afroasiatic phylum.

2.1. Shared morphology

There are a number of specific and systematic correspondences in grammatical morphemes inherited from Proto-Afroasiatic which occur in language after language and which represent a deep-level but unambiguous genetic link between Chadic languages and between Chadic and Afroasiatic (see Newman 1980a, Greenberg 1960b, and Schuh 2003b for details).

One of the more resilient features diagnostic of this prehistoric link is overtly marked grammatical gender, a structural feature (“historical marker”) which Nichols (2003) considers to be persistent within language families, i.e., as representing an important, time-stable genetic signal.⁶ Hausa and Chadic have inherited an Afroasiatic gender/number-marking pattern which distinguishes masculine **n*, feminine **t*, and plural **n* in a range of environments (where *** = reconstructed). Table 1 profiles canonical feminine **T* correspondences in languages from all six branches.

ANCIENT EGYPTIAN	-t
SEMITIC	
Syriac	-(a)t
Hebrew	-at- (construct)
Akkadian (Old Babylonian)	-(a)t(a)
Classical Arabic	-ati (non-nominative)
Egyptian Arabic	-(i)t (construct)
Tigre	-t

⁵There are also physically distinct Pygmy groups in the rainforests of central Africa. They now speak a variety of different languages, including Bantu and Nilo-Saharan, which have presumably replaced the ancestral languages.

⁶Hausa, like most Chadic languages, has grammatical gender in the singular only (an inherited Afroasiatic feature). Grammatical gender per se is a typological feature, however, totally irrelevant to establishing relatedness, but has been erroneously used by some as a diagnostic of common heritage. Meinhof (1912), for example, classified his now discredited “Hamitic” family—the myth that Greenberg demolished—largely on the basis of the presence of gender, as well as fallacious non-linguistic racial and cultural criteria. “Bad science” in modern parlance! See Jaggar (2004) for the historical background to the classification of Afroasiatic (and other language phyla in Africa).

BERBER	
Ghadamsi	-t (all environments)
CUSHITIC	
Beja	-t
CHADIC	
Hausa (West)	ta
Musey (Masa)	-ta (citation)
Lele (East)	t
OMOTIC	
Aari	t

Table 1. Afroasiatic feminine gender markers on nouns (mainly possessive) (all < *T). Source: Bennett (1998) with some minor adjustments.

Note too the common plural marker *-N in the second person plural pronouns in the following (2nd person msg/fsg/pl) paradigms (Egyptian c□ = English 'ch', Berber ă = low central vowel):

Ancient Egyptian c□w/c□wm/c□n, Hausa **kaa/kin/kun**, Akkadian (Semitic) **ka/ki/kunu**, Tuareg (Berber) **kăy/kăm/wun**, Beja (Cushitic) **ka/ki/kna**.

Also noteworthy is the common **k-** element present in all these 2nd person pronouns, and the 2nd feminine singular forms **c□wm** (Ancient Egyptian), **kin** (Hausa), and **kăm** (Tuareg) all ending in a nasal, usually **-m**. If we did not assume a genetic relationship for these pronouns, the detailed and systematic resemblances would simply be impossible to account for in any rational and credible way. Using data from a number of languages reduces the possibility of chance resemblance and strongly favours a probabalistic explanation based on cognacy.

2.2. Lexicon

The lexical evidence for common inheritance from a shared ancestor is also very informative, and includes a number of basic vocabulary items we can confidently reconstruct for Proto-Afroasiatic, where the systematic sound-meaning pairings remain demonstrable despite the intervening millennia. They include, *inter alia*:

***m-** 'what?', ***m-t-** 'to die', ***s-m** 'name', ***sa** 'to drink', ***ti** 'to eat', ***f-d** 'four', ***am** 'water' (- = unknown vowel)

Some cross-family cognate lexemes, all reflexes (present day forms) of the Proto-Afroasiatic root ***m-t-** 'to die' are:

Ancient Egyptian **mt**; (Semitic) Mehri **mōt**, Ugaritic **mt**, Hebrew **māt**, Aramaic **myt**, Arabic (Standard) **māt**, Amharic and Tigrinya **motä**; (Berber) Tuareg **ye-mmut**; (Chadic) Hausa **mutu**, Bole **motu**; (Cushitic) Rendille **mut**.

Again, a cross-language trawl produces a strong genetic signal and substantially reduces (effectively eliminates) the probability of chance resemblance.

3. PROTO-AFROASIATIC AND PROTO-CHADIC CHRONOLOGIES: WHEN AND WHERE?

Exactly where the origins of Afroasiatic should be placed geographically and chronologically has been a contentious issue. We have written evidence for Semitic (Akkadian) going back

more than 4,000 years (at least 6,000 years BP ("before present") for Ancient Egyptian), thus allowing empirical investigation and comparison. The Semitic family, moreover, is internally homogeneous compared with modern Chadic and Cushitic languages, and the difference between modern Semitic and "old" Semitic is nowhere near as great as the difference between modern Semitic and, for example, a Chadic or Omotic language. Closeness is generally viewed by linguists as a reliable indication of rapid recent expansion, and the area of maximum genealogical complexity represents the original homeland (Sapir 1921). Semitic is therefore a shallow time-depth family compared with Omotic, for example, which is the most divergent and internally diverse family, and was probably the earliest split within prehistoric Afroasiatic (though an accurate phylogenetic tree-structure with (sub)groupings still has to be modelled for the phylum). Even if estimates can only be relative and approximate, these facts, together with the great diversity of Afroasiatic, indicate considerable antiquity for the proto-language, probably in the region of **10,000-15,000 BP**.

Assuming Greenberg is correct in postulating five fully independent, coordinate families for Afroasiatic (with Omotic added later), then they must have originated and diversified in continental Africa itself. **The most likely ancestral homeland for Proto-Afroasiatic and its speakers is the (south)eastern Sahara/northern Ethiopia or the contiguous Horn of Africa**—this is the centre of diversity where we encounter the most dense concentration of divergent but related AA languages, i.e., Omotic and Cushitic (see Map 2 scatterdots). Berber languages were also historically more widespread, and there is evidence that Berber was originally spoken in roughly the same area, close to Nile confluence (Blench 2006: 155). Serious linguists believe that this "out of Africa" scenario is the only one which is consistent with the facts of the current phylic dispersal (as shown by Ehret et al. 2004), and some of the archaeological data basically corroborates this "highest likelihood" hypothesis (Ehret 2000:291; 2002:chap. 14).

Map 2 about here please--->

3.1. Semitic must also have originated in Africa

One significant implication of this hypothesis of course is that **Proto-Semitic must also have originated in (northeast) Africa before its speakers migrated into the Near East (southwest Asia)**. Semitic Ethiopian/Eritrean languages such as Amharic and Tigrinya, moreover, result from a *back*-migration of South Arabian speakers from the Yemen around 2,500 BP, via the Red Sea, and Arabic of course spread into North Africa following the rise of Islam. The "out of Africa" hypothesis has the overwhelming advantage of requiring the fewest changes and population movements to generate and explain the observed diversity and geographic diffusion—a variant of the so-called "maximum parsimony" approach (Dunn et al. 2008). What we have, therefore, is a single move for (speakers of) Proto-Semitic out of Africa, as opposed to a Near Eastern/southwest Asia origin which would entail a massively complicated scenario involving population dispersal into Africa and a counter-intuitive diversification into five families, three of them internally divergent.⁷

Despite this consensus, one still encounters occasional "flat earthers", e.g., Militarev (2002), who ignore established principles of linguistic geography and cling to what Ehret et al. (2004:1680) term the "generally abandoned view" of an original "out of the Near East" movement for Afroasiatic. Militarev relates Proto-Afroasiatic to the Natufian agriculture of

⁷ Applying the same argument to Fulani, its original homeland must have been in the core area (Senegal) where its closest relatives, e.g., Serer and Wolof, cluster together. Fulani subsequently diverged and spread to the rest of West Africa (see also Gregersen 1977: chap. 14).

the Levant, but his hypothesis cannot explain why there is considerably less diversity here than in the south of the phylum's extent, i.e., in Africa itself. On linguistic grounds, therefore, this scenario is at best highly unlikely (and almost certainly wrong).

It has also been claimed that Hausa is somehow *descended* from Semitic (or a Semitic language), an error which is probably attributable in part to the historical prominence of the peoples and cultures of the Near and Middle East (see Schuh 1997 for a critique of similar spurious claims regarding Hausa and Ancient Egyptian). Hausa, however, like its Chadic cousins, does not derive from Semitic—*Chadic and Semitic are coordinate families which both descend from the same ancestral source*. Although the prestigious cultural accomplishments of speakers of Arabic, Hebrew, Aramaic, etc. are well-established—the emergence of major world religions, sacred texts, ancient scripts, sophisticated civilizations, and a long tradition of scholarship, etc.—these phenomena are all non-linguistic, of no relevance to genetic classification.⁸ Semitic, like Chadic, is merely one of six independent families within Afroasiatic, and Arabic and Hebrew are no more salient with respect to our scientific understanding of Afroasiatic than is a small Chadic language spoken by a few hundred people living on top of a hill in northeastern Nigeria.

3.2. Proto-Chadic and the present-day distribution of Hausa and related Chadic languages

Based on the rough-and-ready correlation "diversity = antiquity", Schuh (1982:22) claims that *just one* subgroup of West Chadic-A is at least as diverse and old as the entire Romance family (which we know of course derives ultimately from Latin spoken around 2,000 BP). And at a deeper level, the Chadic family as a whole is as internally complex as the Indo-European phylum, and Indo-European is about 5/6,000 years old, so Chadic must be *at least* as old. These comparisons are, of course, impressionistic and are based on the assumption that languages do not change at vastly different rates.⁹ (See also Diakonoff 1988:25, and Ehret 2000.)

Regarding the evolution of the Chadic family itself, one generally accepted scenario is that after Proto-Afroasiatic split up, the ancestral core of Chadic subsequently spread westwards across the Sahara into the Lake Chad basin (5/6,000 years ago the "Green Sahara" had vegetation, lakes and wetlands, gradually transforming into an arid desert from about 3,000 BP). Historically Chadic languages were probably spoken from northwest Nigeria to their present extent in the Chad Republic, i.e., to the west and south of Lake Chad, and over time some were replaced by Hausa in the west, and by Kanembu and Chadian Arabic to the east. Schuh (2001), for example, documents several now extinct West Chadic-B languages formerly spoken to the east of Hausa—Shira, Teshena, and Auyo. The linguistic geography of the family also looks invasive—Chadic languages are contiguous with Plateau and Adamawa

⁸ In contemporary terms, adopting such a position would be roughly analogous to identifying America as the historical homeland of English on the basis of its stellar contribution to science and technology.

⁹ Known as "glottochronology", this is a controversial technique for estimating when two languages first diverged by inspecting the amount of basic vocabulary they share and calculating the rate of word substitution over time. Roughly speaking, a separation of 1,000 years can lead to a 20 percent loss of cognates through lexical replacements, rendering a language largely incomprehensible to the earlier speakers. The main fault line in the method is that it assumes languages mutate at the same rate, so it is no more than an approximation to be used with care. The comparative method also runs into problems with (presumed) ancient families such as Khoisan, where so much lexical data has been eroded over the millennia that positing anything near a "clean" family tree is clearly impossible.

languages, so communities of Chadic speakers presumably expanded south historically and displaced or interspersed with resident Niger-Kordofanian languages.

The distribution and vast geographical extent of Hausa together indicate recent rapid expansion out of its homeland, and the dialectal differences are relatively minor, unlike many other Chadic languages in the area. The varieties with the greatest diversity are in the northwest of the Hausa-speaking region (roughly speaking, Sokoto, Zamfara, Katsina, Gobir, Tahoua, etc.), fanning out eastwards and covering Kano (= Standard Hausa), Daura, and south(east) to Zaria, Bauchi, etc. Hausa alone forms a sub-group of West Chadic, and it has no close relatives, apart from Gwandara which is a creolized offshoot of Hausa. This contemporary situation is attributable to the historical replacement/assimilation of pre-existing languages in the area, including both related Chadic and genetically unrelated Niger-Kordofanian languages. All these features point to one conclusion: Hausa must have expanded fast and recently (probably over no more than several centuries), an intrusive dispersal facilitated by increased regional mobility in the colonial era.

There are two basic (conflicting) theories regarding the source and direction of this Hausa expansion. Sutton (1979) has proposed an east-to-west move, roughly from the southeastern corner of its present-day spread, i.e., the area nearest to Hausa's closest related West Chadic-A languages such as the Angas, Bole-Tangale, and Ron groups. Schuh (1982:22ff.), however, suggests the expansion was in the opposite direction, i.e., from the (north)west, the area of greatest dialectal diversity, to the (south)east. This conflict is resolvable, however, if we assume that both hypotheses are in fact valid, but that the two expansions *took place at different periods* (see Lavers, p.c. to Schuh 1982:23). On this scenario, the two movements were as follows: (1) old Hausa initially expands at an early date from its core area of dispersal containing its close West Chadic-A relatives (Bole-Tangale, Angas, Ron), i.e., from east to (north)west; (2) then more recently Hausa spreads back rapidly from the northwest to the (south) east. This appears to be the highest likelihood scenario explaining the present-day geographical distribution of Hausa.

4. THE POWER OF LINGUISTIC EVIDENCE: DETECTABLE LEXICAL BORROWING

Although by no means an infallible technique, interpretation of language evidence (e.g., the etymological source of words) can provide reliable clues to the reconstruction of the culture of a people, the history of their language, and interaction with other groups and languages.

4.1. Some basic methodologies

It is important to distinguish (whenever possible) between contact-induced loanwords, chance look-alikes, and true cognates. Parsons (1960:127), for example, incorrectly claimed that Hausa **mee/mii** 'what?' was a loanword from Arabic **ma**. What Parsons did not know was that similar form-meaning correspondences are also present in other Chadic languages which, unlike Hausa, have had no contact with Arabic historically, e.g., from all four branches of Chadic (Newman 1977:34), Ron **mi**, Marghi **mi**, and Nancere **me**, Zime **mi**. All are cognates, related to Arabic **ma** and Hausa **mee/mii**, and ultimately descended from a single ancestral Proto-Afroasiatic form ***m-** which is widespread throughout the phylum (notice how the changes have been minimal despite the vast time-depth involved). Turning to chance look-alikes, the data below, though simplistic, illustrate the importance of differentiating statuses when confronted with such forms:

Hausa **ha**□**a** 'dig' and English 'hack, dig' = chance resemblance of no significance
 Hausa **mangwaro** = English 'mango' = both borrowed (from Tamil via Portuguese)
 Hausa **mee** 'what?' and Arabic **ma** 'what?' = cognates (< same source)

When dealing with loanwords, one other dimension which has to be addressed concerns the direction of transmission. The word for 'stomach' (or 'pot belly') in Nupe, for example, is **tùmbi**, in Kanuri **tùmbi**, and in Hausa it is **tùmbii** (data from Gregersen 1977:151, see also Newman 2000b:269). These are borrowed words but which language is the donor? A comparative look at languages related to Nupe and Kanuri reveals no similar words, whereas they do exist in other Chadic languages—so Hausa is almost certainly the source. Segregating look-alikes due to genetic inheritance and those resulting from contact-induced borrowing is not always easy (see Sapir 1921), but it is an essential task in responsible comparative linguistics.

5. LOANWORDS IN HAUSA

The impact on the Hausa lexicon of loanwords (mainly nouns) has been substantial. The borrowings derive from a large range of African languages, e.g., *inter alia*, Berber (Afroasiatic), Fula(ni), Mande, Yoruba (all Niger-Kordofanian), and Kanuri (Nilo-Saharan), thereby setting Hausa apart from other Chadic languages. (Cf. the linguistic upheavals in Britain over the last 2/3 millennia and their influence on the lexicon.)

Note that due to space restrictions and in order to cover some of the lesser-known donor languages, I am excluding well-known borrowings from Arabic (Greenberg 1947), in semantic fields such as religion, commerce, law, government, horsemanship, scholarship, literature, etc., and, more recently, English loans. Newman (2000a:313) reports that Arabic and English account for over 90% of the loanwords in the 9,000 word modern corpus he examined (see also Skinner 1996).

5.1. BERBER (Afroasiatic) > HAUSA

I begin with the Berber evidence as presented in detail by Kossmann (2005), who bases much of his monograph on Gouffé's (1971/72, 1974) seminal work on Tuareg-Hausa contact and borrowing (see also Baldi 1985). Kossmann's reference work of more than 200 pages is devotedly exclusively to a careful and comprehensive examination of Berber loanwords in Hausa, most of them from Tuareg—and so is given priority here.

Hausa **ràa**□**umii** 'camel' (introduced into Africa around 2,500 BP at the earliest)

Hausa **ràa**□**umii** 'camel' is generally considered to be an ancient loan from Berber (**a**-**l**□**əm**) which goes back to Proto-Berber ***(aa)-l(v)qum** (most early loans are from non-Tuareg varieties of Berber). It has been subsequently transferred from Hausa into other Chadic languages, especially within the Warji group of the West Chadic-B sub-branch, the so-called "North Bauchi" cluster (see (1a) below). We can get an approximate fix on the relative age of this particular loanword from a variety of linguistic signals. Taken together, these signals strongly suggest that **ràa**□**umii** must be a very old borrowing.

If we compare the source Berber word **a-l**□**əm** with the descendant Hausa form **ràa**□**umii**, several changes have to be accounted for: (a) the initial /**r**/ in **ràa**□**umii** (= /**l**/ in the source **a-l**□**əm**); (b) the /□/ → /□/ change in **a-l**□**əm** → **ràa**□**umii**; (c) the absence of the **a(a)**- prefix in **ràa**□**umii**.

1. The initial /**r**/ is "wrong"

Probably the most unexpected phonological feature of Hausa /**ràa**□**umii**/ is the word-initial flap /**r**/. Hausa has two rhotics or "R-sounds" (not marked in the orthography): (a) the historically original native flap /**r**/, e.g., **yaar**□**ò** 'boy'; and (b) the more recent tap/trill /**ř**/ which is present in external borrowings, e.g., (Arabic) **suu**□**řàa** 'chapter of Qur'an', (English) **řeezàa** 'razor'. Hausa **ràa**□**umii** is aberrant, therefore, in not having the /**ř**/ we would expect

in an external borrowing. The most likely answer to this anomaly is that the word was initially borrowed with the original /l/ but Hausa subsequently underwent a pandialectal *l > r sound change (Newman 1970; 1977:14). Here are the details of one plausible diachronic scenario which explicitly demonstrates the types of forensic methods used by responsible comparative/historical linguists (Kossmann 2005:27ff.):

- a. The initial /l/ in the Berber root **l□əm** is preserved in Hausa (minus the prefix, see (3) below), yielding an intermediate form ***l̥aa□umii** (see (2) for the /□/ → /□/ adjustment). This variant (or something like it) was then borrowed from Hausa by other contiguous West Chadic languages, e.g., Warji **la□umai**, Miya **la□ùmii**, Diri **l̥a□umi**, i.e., where the initial etymological /l/ is still preserved. The modern North Bauchi lexemes, therefore, reflect the earlier Hausa pronunciation.
- b. Hausa then underwent the lateral *l > r rhotacization, producing the attested **r̥aa□umii**. Other examples of the same rule are (tones/length omitted): Hausa **yaro** 'boy' < Proto-Chadic ***wulo**, Hausa **cire** 'take away' = Kanakuru **tole**, Hausa **harshe** 'tongue' = Kulere **alush** (cf. Proto-Chadic ***alsi** < Proto-Afroasiatic ***l̥s** or ***ls**).

Note that the rule does *not* apply to Arabic loans containing /l/ (nor to subsequent loans from Berber), so the rule must have run its course by the time the first borrowings from Arabic entered the language. Note also that the historical *l > r sound change was pandialectal, thus indicating a sound shift of some time-depth, prior to Hausa diverging into different dialects. Cf. too **ragàmaa** 'halter' < Berber **(a(a)-l(a)gam** (< Latin **ligamen** 'string'), where the same *l > r process has applied, and the same phonological arguments hold (Roman influence dates from around 2000 BP).

2. The uvular fricative /□/ → ejective /□/ adjustment in **(a)l□əm → r̥aa□umii**
The Berber uvular fricative /□/ normally corresponds to plain /k/ (or /g/) in Hausa. Kossmann (p. 42) suggests two possible explanations for the presence of the glottalized ejective □ in Hausa (attested in only one other loan—**da□àshii** < **ii-daghas** 'colostrum' (early milk)):

- a. Proto-Berber /q/ in ***(aa)-l(v)qum** shifted to /□/ (cf. the parallel readjustment in the Arabic emphatic uvular /q/ > Hausa /□/ derivation). When the word was borrowed, Berber *q might in fact have been pronounced as an ejective.

3. The absence of the **a(a)-** prefix in Hausa **r̥aa□umii**

Around 1,000 BP, an innovative nominal prefix **a(a)-** (masc.), **ta(a)-** (fem.) started to appear in written Berber (originally long **aa-** but **a-** in modern varieties of Berber). There is no prefix in the Hausa loan **r̥aa□umii**, so the word must have entered Hausa *prior to* the new prefixal rule (Gouffé 1974). Below are some commonly occurring loans from Berber (Tuareg) in various semantic domains, including some with the frozen **a-** prefix (Kossmann 2005:86ff; **ã** = low central, **□** = pharyngealized, **é** = mid vowel):

akàalà 'lead-rope for camel', cf. (several varieties of) Tuareg **ākala**
amaawàlii 'part of turban covering mouth', cf. Tuareg (Niger, Ayr) **āmawal**
azùmii 'fasting', cf. (several varieties of) Berber **a□um** (< Arabic **□awm**)
takàr̥daa 'paper', cf. Tuareg (Niger, Ayr) **tākara□é** (< Latin **carta**)
takòobii 'sword', cf. (several varieties of) Tuareg **tākoba**
talàkà 'commoner', cf. Tuareg (Ahaggar) **taləqqé** 'poor person'

tàntabàraa ‘pigeon’, cf. Tuareg (Burkina Faso) **tédābért**

Some Berber etymons have entered Hausa via Kanuri, e.g.,

dabiinò ‘date(s)’ < Kanuri **difunò**, cf. Berber (Ghadames) **abena**

kařàntaa ‘to read’ probably < Kanuri **k̄rātō** ‘reading’ (with the Hausa **–antaa** verbalizer added), ?< Berber **□□r** ‘read, call’

řubùutaa ‘to write’ < Kanuri **řùwòtō** ‘writing’ (verbal noun) = ancient loan < Berber (Libyan), cf. Proto-Berber form ***v(□)rvb**

5.2. FULA(NI) (Niger-Kordofanian) > HAUSA

Fulani loans in Hausa are few in number, and a number are kin-terms and cattle terminology, e.g.,

dattijò ‘gentleman’, **gwaggo** ‘paternal aunt’, **haa□è** ‘Hausa (non-Fulani)’, **hubbaarè** ‘tomb of religious leader’, **kaawù** ‘maternal uncle’, **naggè** ‘cow’.

The loan **hubbaarè** is especially instructive. Three diagnostic features point to loanword status:

- The geminate **/bb/** is unusual in that non-derived geminate obstruents are lexically rare in native Hausa words (geminate [double consonants] are mainly nasals, or liquids, especially **/ll/**).
- Intervocalic trilled **/řr/** probably did not exist as an independent phoneme in Hausa, and is usually diagnostic of loanword status (historically it developed in part under the impact of Arabic words with intervocalic **/řr/**).
- The short final **/è/** is non-canonical, since most native Hausa nouns (synchronically at least) have long final vowels. Cf. **goorò** ‘kolanut’ < ?Mande (Skinner 1996:89).

5.3. KANURI (Nilo-Saharan) > HAUSA

Kanuri-speakers have represented the dominant political and cultural group in northeastern Nigeria and neighbouring areas (under the Bornu empire) over the last millennium, and Kanuri has had an impact on many Chadic languages, e.g., Buduma (spoken north of Lake Chad, see Awagana 2001), and Ngizim and Bole (south of the Yerwa area, see Schuh 2003a). Its influence on Hausa has (like Fulani) been relatively slight, but is especially noticeable in the domains of politics (titles) and (Islamic) scholarship/literacy (Greenberg 1960a). The situation is being reversed, however, as Hausa now makes inroads into traditional Kanuri-speaking areas (Bross 2002). Examples of commonly-occurring Kanuri loans in Hausa are:

Ciřòomà ‘title’, **dandalii** ‘open space’, **ingarmàa** ‘stallion’, **kwàskwàřiiimàa** ‘improvement, refurbishment’, **řubùutaa** ‘to write’, **ùngoozòomà** ‘midwife’, **Yàřiiimà** ‘Prince’

Hausa **birnii** ‘city’ is usually cited as a loan from Kanuri, but the source language might have been Hausa. Two facts are relevant here. Firstly, the **/řr/** trill which is usually diagnostic of an external source could in fact be conditioned locally by the presence of the following **/n/** (and is analogically copied in the plural **biràanee**). Secondly, in contrast to in Hausa, the word has a highly restricted distribution in Kanuri, occurring as the head element only in the names of a few prestigious walled cities of historical significance, e.g., Birni Gazargamo, Birni Kafela (both in Nigeria), and Birni Njimi in the Chad Republic (Abba

Tijani, p.c.).

The derivational history of Hausa **kàasuwaa** ‘market’ is also instructive. It is ultimately a borrowing from Arabic **sūq** through Kanuri **kasugu**, via the following complex pathway (tones omitted):

- a. Arabic **sūq** is borrowed into Kanuri, which adds a nominal prefix **ka-**, replaces /q/ with /g/, and adds a final vowel /u/, yielding **kasugu**, then...
- b. This intermediate form passes into Hausa with the following adjustments: Kanuri /g/ weakens to /w/ between certain vowels (or is completely lost). It is probably heard by Hausa-speakers as something like **kaasuu**, then a feminine suffix (**w**)-**aa** is added, producing the attested **kaasuwaa**. The long /aa/ in the first syllable **kaa.su.waa** could be the result of the Hausa (Chadic) propensity for contiguous syllables with opposite/polar values for weight, i.e., **kaa** = heavy syllable/long vowel followed by **su** = light syllable/short vowel.

This particular derivation is a beautiful illustration of how the complexities of diachronic change (phonological deformation) can mask etymological links. Historical/comparative linguistics provides us with key information on: (1) the replacements which have taken place; (2) the required sound changes; and (3) the added morphology (prefixes, suffixes). We simply have to undo these processes and strip away the added morphology to recover the source. Without this linguistic testimony, we would not (necessarily) relate the original Arabic etymon **sūq** to the modern Hausa term **kaasuwaa**.

5.4. Hausa replacements

Hausa has lost some basic Chadic roots over time, some of them replaced by loanwords from neighbouring unidentified Niger-Kordofanian (Benue-Congo/Plateau) languages (Hoffmann 1970). For example, Proto-Chadic ‘two’ ***sər-** and ‘fire’ ***aku**, have both been replaced in West Chadic-A languages—cf. Hausa **biyu** ‘two’, **wutaa** ‘fire’, and Bole **bulu** ‘two’, **wuti** ‘fire’ (Schuh 1982:21). These shared contact-induced replacements must be ancient—long-term borrowings due to the propinquity and close interaction of the languages concerned and predating the break up of West Chadic-A into its different languages. Hausa (and Angas) has also borrowed the word for ‘meat’ **naamàa** from Niger-Kordofanian (cf. the Proto-Chadic root ***ṁəw-**). Schuh (1982:21) also suggests that even some apparent cognates could in fact be loanwords (from unspecified languages) of great time-depth, a level of antiquity we can know nothing about. The lateral transfer of such core items of vocabulary indicates a deep-time Hausa/Niger-Kordofanian symbiosis, and such innovations (replacements) shared across languages also constitute reliable phylogenetic signals of common ancestry/subgrouping.

Hausa also lacks reflexes for the core nouns ‘water’, ‘sun’, and ‘moon’ (lost or simply unidentified as yet), but has, however, retained words (basic nouns) which are identifiable reflexes of roots confidently reconstructable for Proto-West Chadic, e.g., (tones omitted), **garii** ‘town’ (< ***gar-**), **turmii** ‘mortar’ (< ***tə(r)m-**), **awaakii** ‘goats’ (< ***a(w)ku**), **tumaakii** ‘sheep (pl.)’ (< ***təmki**, also reconstructs for Proto-Chadic), **suu** ‘fishing’ (< ***s-y/w-**), **irii** ‘seed’ (< ***-r-**) (Schuh 1982:11). Such deep-time reconstructions reflect and illuminate the salient ancestral activities, e.g., crop cultivation, livestock domestication, ecology, habitat, etc., of the speakers of the source language.¹⁰

Legitimate cognates are sometimes not recognizable because of semantic shift over

¹⁰ Words reconstructable for Proto-West Chadic include ‘crocodile’, ‘Nile monitor’, ‘baobab’, and ‘ostrich’, items which tell us that speakers must have lived in semi-dry savannah regions near bodies of water (probably Lake Chad) (see Schuh 1982:11).

time. The word for 'arrow' in modern Hausa, for example, is (tones omitted) **kibiyaa** and in Bole is **posso**, and these items are clearly not cognates. The real Hausa cognate—**faasaa**—is tucked away in Bargery's (1934:309) monumental dictionary, with the more specialized meaning 'broad arrow with long barbs' (Schuh 1982:9).

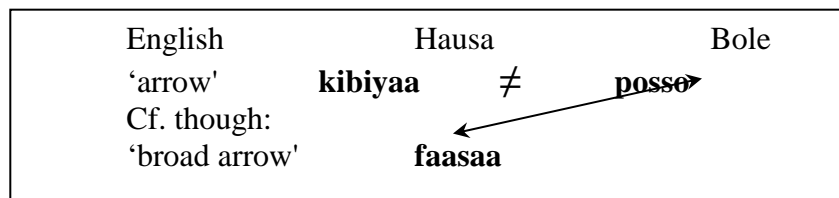


Figure 1. Diachronic semantic drift: 'arrow' in Hausa and Bole

6. SUMMARY

This paper has demonstrated how the developmental history of Hausa culture and contact is mirrored in individual words which carry an important historical signal. Identifying clusters of features in the shape of lexical and morphological evidence derived from the traditional methods of historical/comparative linguistics can produce plausible generalizations and help us get a relative fix on when and from where words first entered the language. Contemporary linguistic patterns are shaped by geographic factors and complex historical events. Careful etymological documentation is an important component in any comprehensive model which seeks to eventually correlate linguistics with history, archaeology and the phylogeographical distribution of genetic signals, thereby distinguishing common ancestry from ancient contact.

I conclude with an apt observation from Abdullahi Smith (1970:339), an eminent historian of the region who clearly understood the heuristic importance of using solid and reliable linguistic evidence when considering demographic and ethnolinguistic dispersals: "If we are looking for the origins of the Hausawa as a distinct group we must seek them in the origins of the Hausa language."

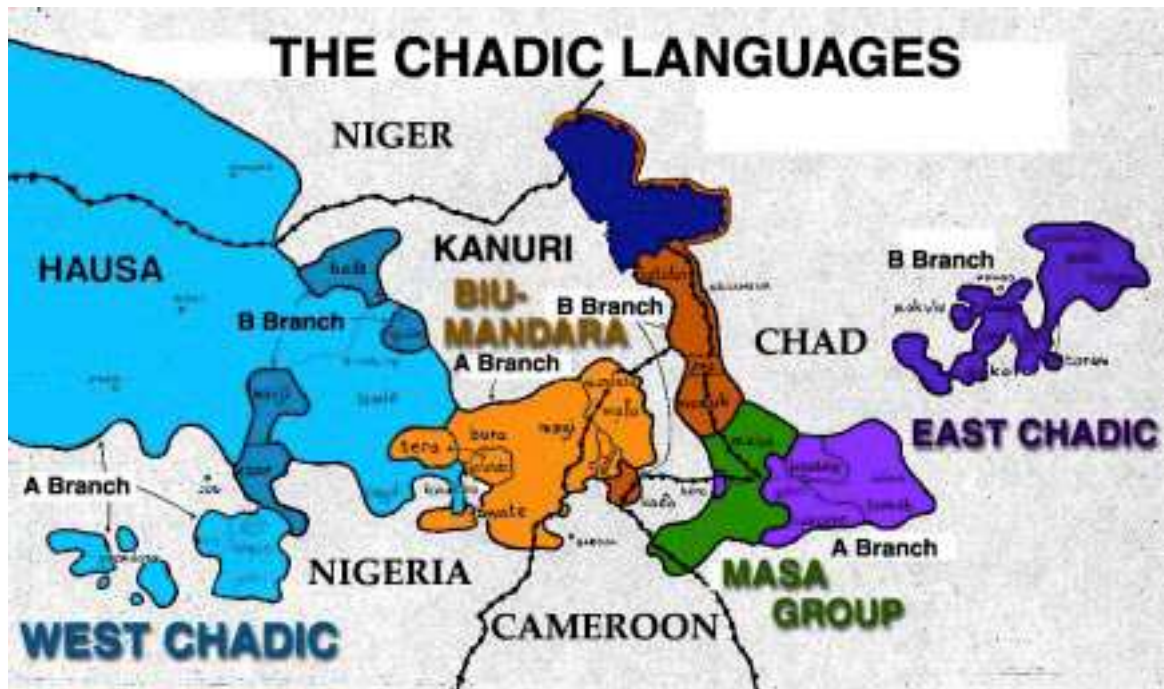
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Map 1: the Chadic languages (Schuh 2002)



Map 2: the area of greatest linguistic diversity in Afroasiatic: the Cushitic and Omotic families (*Ethnologue*).