

7. CHADIC OVERVIEW

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1. Background

The Chadic Language family comprises about 150 languages that lie in a band south of the Sahara desert, stretching across southern Niger, northern Nigeria, northern Cameroon, and south-central Chad Republic. A single Chadic language, Hausa, constitutes the entire western end of the Chadic area. Hausa is the overwhelmingly largest Chadic language with well over 20 million native speakers, whereas most other Chadic languages have fewer than 100,000 speakers. The Hausa native-speaking area covers most of the northwest quadrant of Nigeria and most of southern Niger. It is the lingua franca for all of northern Nigeria and most of Niger. Chadic languages at one time probably formed a block from near the Niger River in the west to their current eastern extent in Chad Republic. Hausa has absorbed many of its cousins in the west, Kanuri has replaced Chadic languages west and southwest of Lake Chad, and Kanembu and Chadian Arabic have cut through the original Chadic area of Chad Republic.



In the 1930's, Johannes Lukas presented the first comprehensive classification of languages of the Lake Chad basin, proposing a "Chado-Hamitic" group and a "Mandara" or "Chadic" group (Lukas 1936). A principal criterion for this categorization was the presence or absence of grammatical gender. Greenberg (1950) set the stage for the modern classification of Chadic. On the basis of lexical resemblances and shared patterns in morphology, Greenberg proposed a unitary group of "Chad" languages with nine subgroups, which included all Lukas's "Chado-Hamitic" and "Chadic" languages and was itself a branch of the larger Afrasian (= Afroasiatic) family.

In the first true comparative Chadic publication, Newman and Ma (1966) proposed a subgrouping that unified Greenberg's two largest groups of Chadic—group 1 at the western end and group 9 at the eastern end—into a "Plateau-Sahel" branch, with the remainder of Greenberg's groups united in a "Biu-Mandara" branch. They identified a number of sound changes that united or differentiated the various subgroups and reconstructed a list of 150 items for a proto-Chadic lexicon.

Newman and Ma's Plateau-Sahel group soon became untenable. Newman (1978) himself noted that counts of lexical similarities did not justify a special linkage between the western branch (Greenberg's group 1) and the eastern branch (Greenberg's group 9). Moreover, a major criterion for Newman and Ma's classification was a putative correspondence of Plateau-Sahel *s to Biu-Mandara *ɬ. Research in the late 1960's revealed that many of the Plateau-Sahel languages of Nigeria also have lateral fricatives, thus ruling this out as a criterion for subgrouping.

Drawing on a large amount of Chadic research and publication in the 1960's and 1970's, two reclassifications of the Chadic languages emerged about the same time in the late 1970's. Newman (1977) updated what was known about sound changes among the Chadic languages and presented

a new list of 150 proto-Chadic reconstructions. Newman proposed a four-way division of the Chadic languages into **West** (= Greenberg's group 1, all spoken in northern Nigeria and including Hausa), **Biu-Mandara** (= Greenberg's groups 2-7, spoken in northeastern Nigeria and northern Cameroon), **Masa** (= Greenberg's group 8, spoken mainly in western Chad, extending into eastern Cameroon), and **East** (= Greenberg's group 9, all spoken in Chad Republic). The map above reflects this classification, lighter to darker shades of gray distinguishing the groups from west to east.

The second reclassification is that of Jungraithmayr and Shimizu (1981), repeated in Jungraithmayr and Ibrizimow (1994). This classification has **West** and **East** branches identical to those of Newman (1977). Both reclassifications also recognize "Masa" as a unitary group. However, unlike Newman's distinct high-level groups of Biu-Mandara and Masa, the Jungraithmayr et al. classification has a single **Central Chadic** branch. This branch, in turn, has three subbranches, with the languages of Newman's Masa branch included within one of those subbranches. It may well be that Masa is linked to the other "Biu-Mandara"/"Central Chadic" languages, but a low-level classification of Masa *within* Central Chadic is questionable. Shryock (1989), using a variety of criteria from sound change, lexical change, and morphological change, was unable to find evidence for a link between the Masa languages and the Biu-Mandara/Central Chadic languages as opposed to any other branch of Chadic. The conservative Newman (1977) classification, with four-high level branches, thus seems to be the most plausible among current proposals. Branch affiliations of languages cited below will be indicated by [W], [B-M], [M], and [E] following the language name.

2. Phonology

Consonants: Certain details in the reconstruction of a proto-Chadic consonant system remain unresolved, e.g. the status of prenasalized consonants and velar fricatives (see Newman (1977) and Jungraithmayr and Ibrizimow (1994) for proposed reconstructions and sound changes that characterize particular languages and groups). All Chadicists agree that the proto-Chadic consonant inventory included two noteworthy categories of consonants: a set of glottalized sounds and at least one lateral fricative. All Chadic languages have both **ɓ** and **ɗ**, and there are reconstructable proto-Chadic roots containing these sounds, e.g. ***ɓər-** 'cut, break' (Hausa [W] **ɓàrà**, Bade [W] **ɓèru** 'split into sections', Bura [B-M] **ɓàlà** 'break (a stick)'), ***fɗu** 'four' (Bade [W] **fɗu**, Gude [B-M] **ɳfwad**, Musey [M] **fɗi**, Mokilko [E] **pidɛ**). Most Chadic languages have at least one glottalized sound in addition to these two, e.g. 'y, ts', **k̠**, **ɟ̠**, but convincing cognates providing evidence for the existence of, much less phonetic details of a third glottalized consonant are harder to come by than those for **ɓ** and **ɗ**.

There are languages with lateral fricatives in all the major branches except East Chadic, and lateral fricatives appear in several reconstructable lexical items, e.g. ***ɬw-** 'meat' (Newman 1977) as seen in Ngizim [W] **ɬuwai**, Mofu [B-M] **ɬàw**, Musey [M] **ɬiw-na**. The reconstructability of lateral fricatives for proto-Chadic was not recognized until the 1970's, in part because of inadequate phonetic transcription in earlier documentation, in part because ***ɬ** has shifted independently in a number of languages to other sounds, usually sonorant [l] or a coronal fricative, e.g. the root for 'meat' has become Bole [W] **lo**, Gude [B-M] **lùwa**, Kotoko [B-M] **šu**, Mokilko [E] **séy**.

Vowels: A widespread Chadic vowel system is **i (ī) ə [i] u (ū)**
a, ā

A macron over a vowel indicates a long vowel. We can reconstruct an ***a** vs. ***ā** contrast, a distinction that we find in languages in every branch of Chadic, as in Bade [W] **kàdu** 'snap in two' vs. **kādu** 'bite'. Many languages also distinguish [i] from [ī] and [u] from [ū]. Although the phonologies of some languages now treat these pairings as a vowel-length distinction parallel to /a/ vs. /ā/, the origin of the phonetic long high vowels is probably ***V+** **homorganic glide**, an origin still evident in morphological processes of many languages, such as Ngizim [W] **zàyat**

‘slaughtering’ < [zìdu] ‘to slaughter’, Hausa [W] **duwàtsū** ‘stones’ < [dùtsè] ‘stone’. Though many Chadic languages have mid vowels, these probably come historically from loanwords, coalescence of diphthongs, or other processes that are active in modern languages. It is worth pointing out that this rather sparse vowel system with a length distinction in the low vowel, which is typologically similar to the vowel systems of Semitic and Berber, is widespread in Chadic despite millennia of contact with Niger-Congo languages, which typically have five, seven, and even nine vowel systems and no distinction in vocalic length.

Tone: All Chadic languages are tone languages. The family-wide presence of tone distinguishes Chadic from other Afrasian families aside from Omotic, whose Afrasian affiliation is questionable in this writer’s view. Since proto-Afrasian was probably not tonal, the most likely source of tone in Chadic is early and continued contact with non-Afrasian tone languages.

By far the most common Chadic tone system has high (H) and low (L) level tones and a downdrift intonation pattern, in which H following L does not rise to the pitch register of preceding H. Compare the tone levels on Hausa [W] **farī** [ˀˀ] HH ‘white’, **farì** [ˀ ˀ] HL ‘drought’, **fārī** [ˀ ˀ] LH ‘rolling the eyes’. Some Chadic languages have three tone levels, e.g. Lele [E] **kìrè** LL ‘road’, **kire** MM ‘ruins’, **kírwé** HH ‘leopard’. Finally, some languages have “terrace level” systems in which one may descend from H to L or from H to “downstepped H” (!H), but from L one may only ascend to H (or, more accurately, to !H). !H sets the new register level for H, which itself may descend to yet another !H or to L. For example, in Miya [W] **átsátsaliy** [ˀ – – ˀ] H!HHL ‘cowry’, the second syllable has !H, which establishes the new H register, maintained by the third syllable, and the fourth syllable is L.

3. Morphology

A number of features of morphology show both a connection among the Chadic languages and a connection of Chadic to Afrasian. From proto-Afrasian, Chadic inherited a system which distinguishes MASCULINE and FEMININE grammatical gender in the singular but has only a single PLURAL category undifferentiated for gender (differentiation for gender in the plural in Semitic and Berber is clearly a shared or convergent innovation). For example, Miya [W] has demonstratives **ná-ka** ‘that one (m)’, **tá-ka** ‘that one (f)’, **níy-ka** ‘those (common gender)’. These Miya demonstratives illustrate a second aspect of Afrasian inheritance, viz. a pattern correlating ***n-** masculine, ***t-** feminine, ***n-** plural (Greenberg 1960). This pattern emerges in languages of all Chadic branches except East. For example, Musey [M] nouns in citation form have gender/number marking suffixes /-na/ masculine and plural, /-ta/ feminine, e.g. **fiù-nà** (m) ‘billy-goat’, **fiù-rà** (f) < ***fiù-ta** ‘nanny-goat’, **fiùní-na** ‘goats (any sex)’.

Rather than the **n/t/n** pattern, languages of the East branch have a **k/t/k** pattern, e.g. Lele [E] **bayndí k-oloŋ** ‘that man’, **tamá t-oloŋ** ‘that woman’, **kara k-oloŋgé** ‘those people’. The ***k** is likewise of Afrasian origin, seen for example, in Cushitic. In Chadic outside the East branch, this ***k** is a gender/number-neutral determiner base (cf. the Miya demonstrative forms above), suggesting that its specific function as “non-feminine” may be an innovation within the East branch of Chadic.

Another element of Afrasian morphology shared across Chadic is the pronominal system. I limit discussion just to the striking pattern of second-person pronouns. The table here shows *cognate* forms—languages have shifted the functions of these forms in various ways. “G” in the Mokilko masculine form = “gemination of the next consonant”.

| | Egyptian | Tuareg (Berber) | Ngizim [W] | Hausa [W] | Kotoko [B-M] | Mokilko [E] |
|------------|----------|--------------------|---------------|--------------|-----------------|----------------|
| ‘you’ (ms) | čw | kăy | čì | kā | -ku | -kìG- |
| ‘you’ (fs) | čm | kām | kəm | kin | -kəm | -kìn- |
| ‘you’ (pl) | čn | kăwănăy | kùn | kun | -kun | -ùnn- |

The striking pattern of specific correspondences in this small array of forms alone is enough to demonstrate the genetic unity of Afrasian and the inclusion of Chadic within that unity: (1) ***k-** as the base of all second-person pronouns; (2) a tripartite MASCULINE/FEMININE/PLURAL system

parallel to that for the nominal system; (3) *-n as a plural marker; (4) most striking, *-m as part of the feminine pronoun, distinguishing it from the simple CV shape of all other singular pronouns and from all other feminine gender-marked forms, where *t is the canonical sign of gender (see Newman (1980) for a fuller discussion of Chadic and Afrasian pronouns).

4. Basic Sentence Structure and Function Marking

Basic sentence structure: No Chadic language uses nominal case marking. All Chadic languages rely on word order and/or prepositions to show syntactic function. Bole [W] is typical. Subjects are immediately preverbal, direct objects are immediately postverbal, and prepositions mark other functions.

Bamoi kàppū mòrdó m̄ bō-nì ḡà jàd̄à ‘Bamoi planted millet for his father with a hoe’
Bamoi planted millet for father-his with hoe

A widespread Chadic feature is to place NOMINAL indirect objects in prepositional phrases (as above) but to realize PRONOMINAL indirect objects as verbal clitics preceding direct objects, including pronominal direct objects, as in Bole

ita à d̄òppà-no ishì ‘she will follow him for me’ *not* ‘she will follow me for him’
she imperf. follow-me(IO) him

The vast majority of Chadic languages have SVO as basic main clause order. The Bole sentences above illustrate SVO order in a West Chadic language. Below are examples from other branches:

Bura [B-M]: **Anjukwi k̄a tl̄aka yarì** ‘Anjukwi planted millet’
anjukwi perf. plant millet

Zime [M]: **Ekwa ḡè zìw ló sínarà** ‘Ekwa threw a line into the river’
Ekwa threw rope in river

Mokilko [E]: **gùdre yilòmme p̄ñi** ‘the crocodile was hunting fish’
crocodile hunt fish

Along the Nigeria-Cameroon border are a number of languages with VSO order, e.g.

Gude [B-M]: **k̄a ’ush Rābi d̄āfna** ‘Rabi cooked mush’
perf. cook Rabi mush

All the Chadic VSO languages lie in a contiguous geographical area and all are members of the “A” subgroup of Biu-Mandara (though most Biu-Mandara “A” have languages SVO typology). This suggests that development of VSO order may be a local innovation in Biu-Mandara “A”. On the other hand, there are arguments for considering this to be a remnant area preserving an earlier, more widespread, if not proto-Chadic order. A shift of VSO to SVO is common in languages of the world, whereas the opposite shift is rare. Moreover, the most ancient non-Chadic contacts would have been with SVO languages, creating an environment for shifting AWAY from VSO order. Finally, within Afrasian, VSO is the prevalent order in Berber and older Semitic languages, making inheritance of this order from an ancestral language into Chadic plausible.

Questions: In forming questions containing question words, some languages place all question words in sentence initial position. This is true of a minority of SVO languages, e.g. Hausa [W] and Bura [B-M], and most VSO languages (compare the Gude example above with the corresponding questions, **wù ’ùshi d̄āf̄n̄ ā?** ‘who (**wù**) cooked this mush?’, **mì ’ush Rābi ā?** ‘what (**mì**) did Rabi cook?’). However, a large majority of SVO Chadic languages and some VSO

languages have *in situ* ordering for question words, i.e. the question word occupies the same sentence position as a functionally corresponding noun.

| | | |
|-------------|---|--|
| Kirfi [W]: | ḥkāli jē-shì? kà jēwu màmi? | ‘who (ḥkāli) put it down?’ ‘what (màmi) did you put down?’ |
| Tera [B-M]: | ki á zurtə ɣua na? Ali masa nəm a? | ‘who (ki) is frying the meat?’ (na, a are question particles) ‘what (nəm) did Ali buy?’ |
| Zime [M]: | sáa gí kír sú? tí kír mi sú? | ‘who (sáa) stole (it)?’ (sú is a question particle) ‘what (mi) did she steal?’ |
| Kera [E]: | mintí lótáj nəwri mó? Agèlèm lótáj mintí mó? | ‘who (mintí) hit your sister? (mó is a question particle) ‘who (mintí) did Agelem hit?’ |

Questioned subjects deserve special mention. Some SVO Chadic languages that use *in situ* ordering for NON-subjects have the unusual feature of placing questioned subjects in postverbal position. Compare the Bole questions below with the first example in this section:

| | | |
|-----------|---|--|
| Bole [W]: | kàppū mòrdfo lè? Bamoi kàppū lè? | ‘who (lè) planted millet?’ ‘what (lè) did Bamoi plant?’ |
|-----------|---|--|

The languages that question subjects in this way are all West Chadic and all lie along the edge of the West Chadic area, extending from Bade in the north to Kanakuru in the south. This syntactic property is surely not an accidental parallel innovation in these languages, and it seems unlikely to be a result of areal drift—these languages fall into a long, narrow north-south strip with Chadic and non-Chadic neighbors to the east and west having preverbal subjects only. Postposing questioned subjects must therefore have its source in inheritance. A scenario that brings in the VSO languages would be as follows: the ancestral language had VSO order, with SVO as an alternative order in at least some constructions, a typical feature of VSO languages around the world. Through parallel internal developments and/or through areal drift, languages began to move toward SVO as their basic order, ultimately leaving just the remnant VSO area that exists today. As languages drifted toward SVO as the basic sentence structure, the postverbal position for subjects came to be a “marked” position in at least part of the West Chadic area (note that the languages that postpose questioned subjects also postpose focused subjects, as in Bole [W] **kàppuwò Bamoi** ‘BAMOI planted (it)’). Most languages have abandoned postverbal placement of subjects in any function, leaving just a strip of West Chadic languages that postpose subjects for questioning and focus and a strip of Biu-Mandara languages that retain basic VSO sentence structure.

5. Lexicon

As in morphology, some of the strongest lexical indicators of the genetic unity of Chadic are also indicators of the affiliation of Chadic with the rest of Afrasian, e.g. ***m-t-** ‘die’ (Bole [W] **motu**, Musey [M] **mít**—cf. Egyptian **mt**, Arabic **māt**), ***s-n-** ‘know’ (Miya [W] **sən**, Mokilko [E] **sūne**—cf. Egyptian **swn**, Tuareg **əssən**), ***b-n-** ‘build; house’ (Bole [W] **bònò** ‘house’, Mokilko [E] **bīno** ‘grass hut’—cf. Arabic **banā**), and ***fədu** ‘four’ (cf. Egyptian **fdw**) and ***ləw-** ‘meat’ (cf. Tuareg **isan**) mentioned in §2.

Of interest both for demonstrating the unity of Chadic as a distinct subfamily of Afrasian and for saying something about the homeland of the speakers of proto-Chadic are a number reconstructable words referring to flora and fauna. These items suggest a savannah homeland near water, probably the great inland sea that Lake Chad once was. (Question marks indicate absence of a meaning equivalent or cognate in available materials, hyphens indicate that the meaning equivalent is not cognate.)

| | Hausa [W] | Bade [W] | Bura [B-M] | Musey [M] | Kera [E] |
|----------------------------|-----------|------------|-------------|-----------|----------|
| 'baobab' | kūkà | kukwáú | kwàgu | koŋgó-na | koŋkoŋ |
| ' <i>Acacia nilotica</i> ' | gàbàr-uwâ | ègvâl-àkau | ? | ? | ? |
| 'fish' | kīfi | --- | kàlfà | kulùf-nà | --- |
| 'crocodile' | kadà | ègdəm | ngèlèm | hurùm-mà | kim |
| 'Nile monitor' | guzà | ègzàn | gàdzà-gàdzà | ? | --- |

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