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The linguistic prehistory of Nubia

Gerrit J. Dimmendaal

Abstract

Evidence from historical linguistics, philology, archaeology, and, more recently, genetics enables us to reconstruct part of the complex history of the area in southern Egypt and northern Sudan which has come to be known as Nubia. Whereas today Nubian languages and Arabic are dominant in these areas, interdisciplinary research points towards the presence of several other languages in the past, spoken by communities who interacted to different extents with each other over the past millennia, depending on such factors as climate change, technological developments, but also on ever-changing socio-political constellations.

1. *Introduction*

The name “Nubia” refers to two areas: Lower Nubia, the zone between present-day Aswan and Wadi Halfa, and Upper Nubia, the Nile Valley north of Dongola in Sudan, and extending as far south as Khartoum. These days, Nubian (i.e. Nilo-Saharan) languages like Dongolawi, Kenuzi, and Nobiin, the Semitic (i.e. Afroasiatic) language Arabic as well as the Northern Cushitic (i.e. Afroasiatic) language Beja are spoken in this border area between Egypt and Sudan. However, archaeological artifacts, ancient documents, evidence from historical-comparative studies, and toponymy point towards the presence of other languages in the past (Cooper 2020a, 2020b). Below, these contributions from various disciplines, in particular from historical linguistics, are discussed in order to reconstruct at least part of this dynamic past.

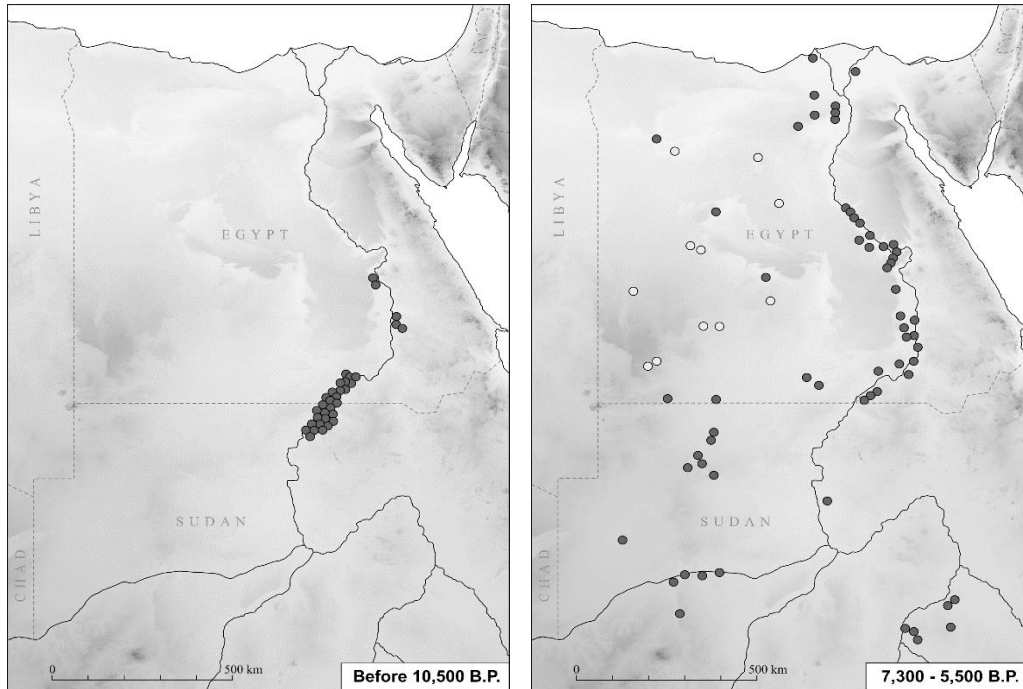
The term “Nubian” is used here in a linguistic rather than an areal sense, for languages belonging to the Nubian family, which are part of the Nilo-Saharan phylum (on whose definition see further below). Nubian languages are spoken, not only in the vicinity of the Nile, but also west and southwest of the Nile valley, more specifically in western Sudan and the Nuba Mountains in Sudan. Trying to understand the origins of the linguistic situation in Nubia as it manifests itself to us today is not possible by way of an approach restricted to the confines of this area. Instead a diachronic approach is called for, which aims at a synthesis of knowledge emerging from different disciplines, whose methods sometimes have to take into account more global developments over a period of several millennia, as discussed below.

2. *Language stocks in prehistoric Nubia*

2.1 An ancient linguistic area during the Terminal Pleistocene

Archaeological evidence indicates that during the Terminal Pleistocene, between 20,000 BP and approximately 10,000 BP, regions east and west of the Nile and its

tributaries were uninhabited by humans, as a consequence of the arid conditions and insufficient water supplies for human habitation. When precipitation started increasing after the last Ice Age came to an end, and monsoon rains reached the northern Sahara around 10,000 years ago, humans began to settle the newly emerging savannah areas surrounding the Nile region. Map 1, based on Kuper and Kröpelin (2006), shows these dramatic changes which occurred within a few millennia.



Map 1 Human settlements in northeastern Africa ~10,500 BP and ~5,500 B.P.

The linguistic map of the area surrounding the Nile today, from its sources in the Great Lakes region further south to the Nile delta, allows us to derive some historical conclusions about the typology of languages in this area in the distant past, most likely dating back to the Late Pleistocene, when human habitation on the African continent was restricted to higher elevations, such as the Ethiopian highlands and zones along major rivers such as the White Nile (and the Blue Nile).

The position of the verb relative to the subject and object in a clause is a significant parameter for the typological classification of languages, as shown first in a seminal contribution by Greenberg (1966).¹ As shown on Map 2, there is a clear south-to-north distribution in northeastern Africa of a range of genetically unrelated languages putting the verb in first position (a universally less common constituent order) followed, rather than preceded, by the subject and object. This (former) areal type starts with the linguistic isolate

¹ Typological research initiated in linguistics in the 1960s has shown that the position of the verb relative to the subject and object is an important analytical parameter, which also tends to manifest an areal (rather than mainly genetic) dimension, as the discussion in section 2.2. helps to show.

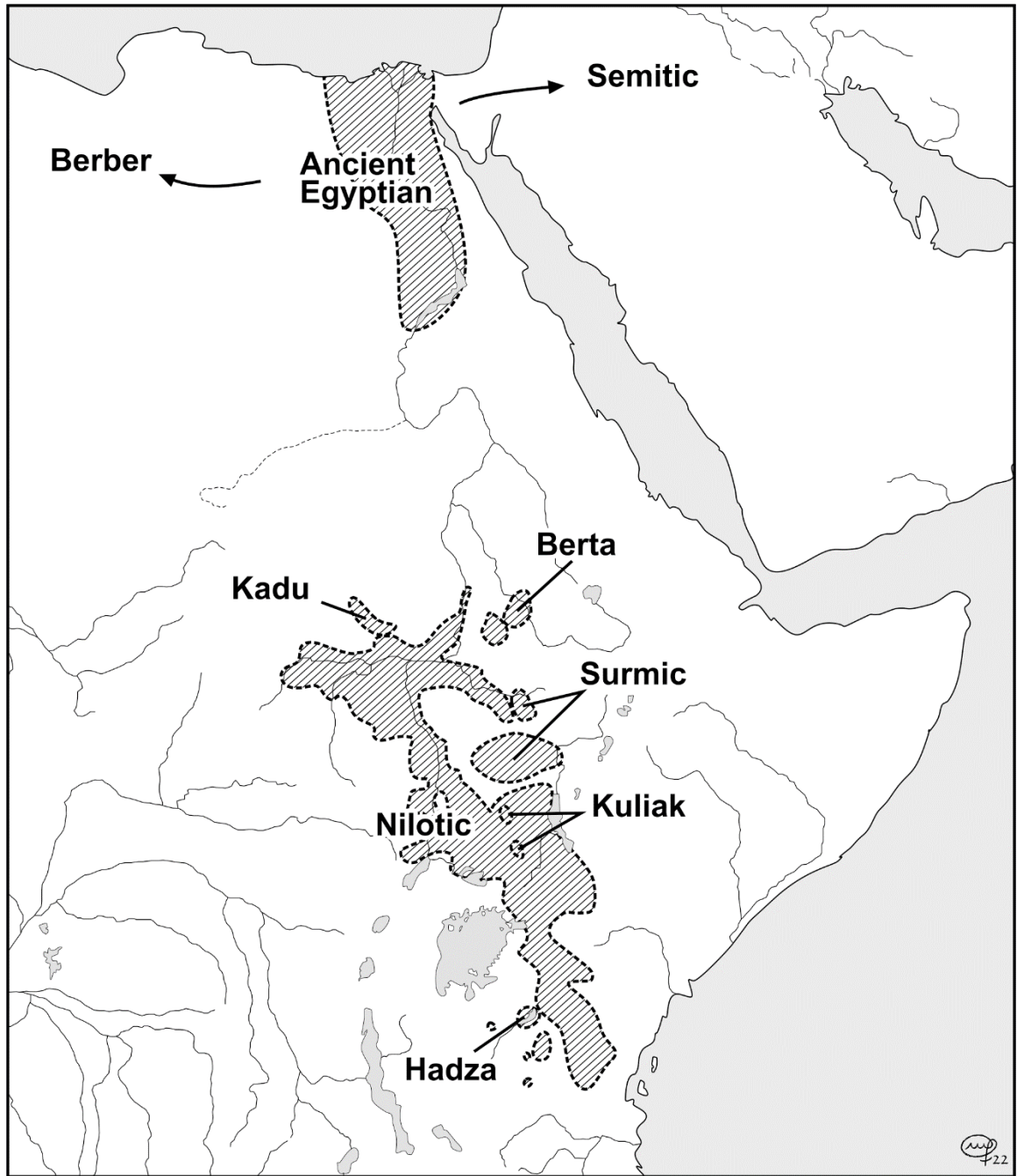
Hadza in Tanzania in the south, with Ancient Egyptian as the northernmost representative of this (former) linguistic area (Dimmendaal 2020: 213).²

In Uganda, one last representative of the Kuliak family, Ik (Teuso), is still spoken today. Whereas the present author assumes that Kuliak is an early split-off from Nilo-Saharan (Dimmendaal 2020), authors such as Sands (2009) classify this family as a genetically isolated group. In the Nuba Mountains in Sudan, another group of verb-initial languages, known as Kadu(gli), is spoken along the southern edge of this area. In his genetic classification of African languages Greenberg (1963) classified the Kadu (Tumtum) languages as “Kordofanian”, i.e. as a branch of a language family called Congo-Kordofanian by him and referred to these days as Niger-Congo; other authors have argued that Kadu may be part of another phylum established by Greenberg (1963), Nilo-Saharan. However, the actual grammatical (or lexical) evidence for these genetic links is rather thin, and consequently the present author prefers to classify Kadu as another isolated language family (Dimmendaal 2011: 324-329).

The south-to-north distribution of verb-initial languages in northeastern Africa puts what is known about Ancient Egyptian (whose written documentation date back around 5000 years) and early Semitic (dating back 4700 years) in a clear diachronic perspective. Apparently, these Afroasiatic branches were part of an ancient verb-initial contact zone along the White Nile (and possibly the Blue Nile).³ This contact zone, stretching from the Great Lakes in East Africa towards the Mediterranean coast, did not necessarily involve long-distance networks; it may well equally have come about as a result of local trading networks between adjacent communities speaking partly unrelated languages, and lasting over thousands of years during the Late Pleistocene, when human settlements were restricted to riverine systems and higher elevations.

² Whereas Greenberg (1963) classified Hadza as a member of his Khoisan family, specialists for these languages assume that the latter constitutes an areal grouping of languages with clicks, consisting of at least three language families, Northern Khoisan (Kx’ a) Central Khoisan (Khoe-Kwadi), and Southern Khoisan (Tuu), with Hadza and Sandawe constituting linguistic isolates (see Güldemann 2018: 94-107).

³ Berber and Semitic have been argued to constitute a subgroup within Afroasiatic by Kossmann and Schuchard (2018). There is no evidence for a verb-initial structure in Proto-Berber. But the fact that modern Berber languages are closely related suggests that they are the result of a fairly recent spreading, with early split-offs within Berber having disappeared without leaving any traces of a former verb-initial syntax.



Map 2 An ancient verb-initial diffusion zone

Ancient Egyptian and Semitic are widely held to be members of the Afroasiatic family, which furthermore includes Berber, Chadic, Cushitic, and Omotic, according to Greenberg 1963 (who calls Omotic “Western Cushitic”). Frajzyngier (1983) was the first author to argue that Proto-Chadic also had a verb-initial syntax, a position repeated and defended by Schuh (2003).

DNA research among speakers of Chadic languages today supports the hypothesis of a northeast African origin (Cerný et al. 2009; Dimmendaal 2019), although they appear

to bear a genetic component that is maximized in West Africans (Hollfelder et al. 2017). Modern Chadic languages are situated much further to the southwest of the Nile, but there is a natural historical explanation for this. Map 1 shows how the dramatic increase in precipitation around 10,000 BP allowed humans to move away from the Nile area, and to explore new savannah-type ecological zones west of the Nile, which had been uninhabited for thousands of years during the Late Pleistocene. When desertification set in again around 5,000 BP, the Mega-Chad paleolake and its tributaries remained as an attractive alternative ecozone for different populations most likely including the ancestral Chadic community.

As further shown in Map 2, there are also two closely related Nilo-Saharan groups situated in this (former) verb-initial contact zone, Nilotic and Surmic, as well as Berta, which all three belong to the Southern branch of the Eastern Sudanic subgroup within Nilo-Saharan (Dimmendaal 2007a). Most of these languages spoken in this area adjacent to the White Nile as well as the Blue Nile in Sudan and South Sudan, with extensions into Uganda, Kenya, Tanzania, and Ethiopia, are also verb-initial (with a cline into verb-second constituent order, the latter type also allowing for postverbal subjects, as in verb-initial languages). The Nilotic and Surmic subbranches constitute expansion zones of languages traditionally spoken by pastoralists migrating into these areas from the north (where there more distant relatives within Northeastern Nilo-Saharan are spoken). Section 2.2. below tries to explain how and why this “intrusion” of these Nilo-Saharan speech communities occurred.

A comparison of Map 2 with Map 4 below further shows that this (former) verb-initial contact zone with a distinct south-to-north distribution is interrupted in the area between Egypt and Sudan known as Nubia, where today typologically and genetically different verb-final languages are spoken. As argued in the next section, this constellation finds a natural explanation by what is known about climate change, technological developments and the migration of humans into this area during the early Holocene. The dotted west-to-east line ending in the Nile between the third and fourth cataract in Map 3 refers to a former river known as the Yellow Nile or Wadi Howar. This riverine system must have played a crucial role in the history of the Nubia area.

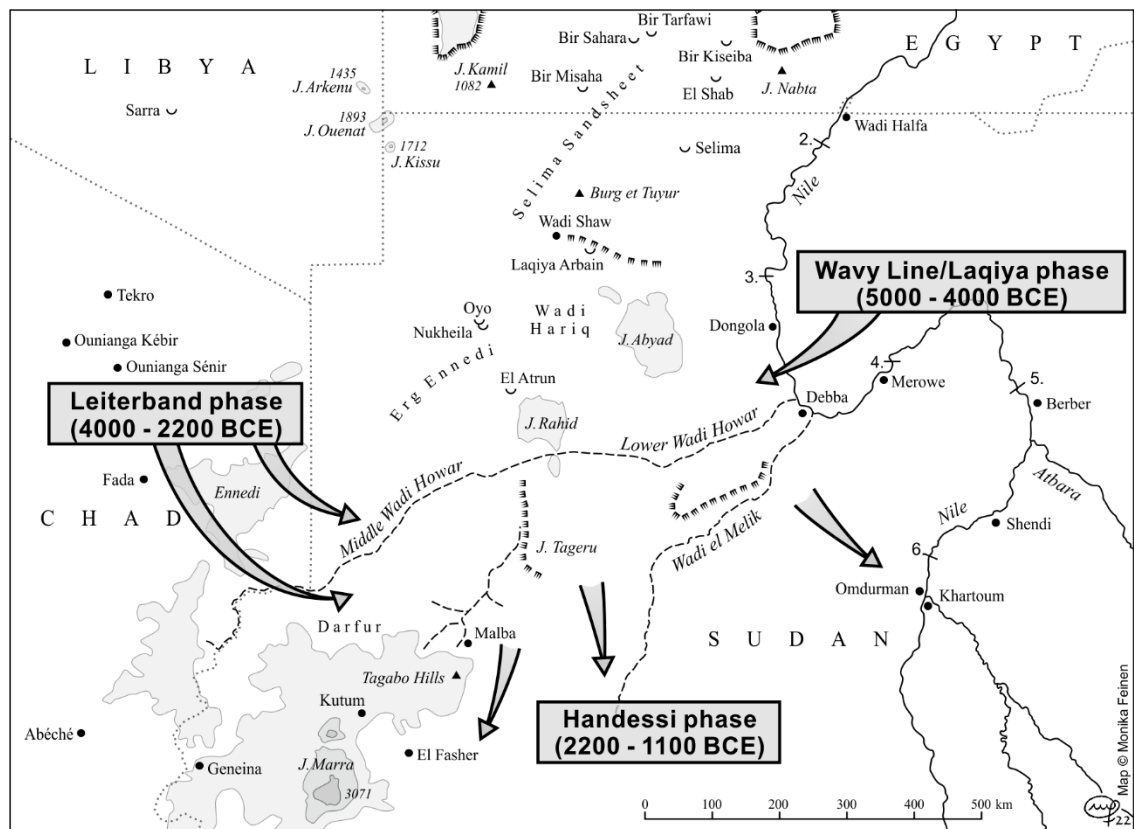
2.2 The Holocene era and the Wadi Howar diaspora

When the last glacial age (the Late Pleistocene) came to an end in Europe around 12,000 BP, wetter periods set in in northeastern Africa. As a result, a new tributary of the Nile emerged around 10,000 BP, known as the Yellow Nile or Wadi Howar. It originated in the Ennedi region of eastern Chad and entered the Nile between the third and fourth cataracts, the area associated with Nubia today.

Archaeological evidence dating back to the beginning of the Holocene, around 10,000 BP, points towards the migration of northeast African hunter-gatherers into this area and from there westward along this Wadi Howar, where they built semi-permanent settlements.⁴ This migration disrupted the ancient contact zone of fishing and hunting communities speaking verb-initial languages, as argued next.

⁴ For further details on the Neolithization of the area, the end of the hunter-gatherer way of life around the 8th millennium BP, and the emergence of predynastic Egypt, the reader is referred to Midant-Reynes (2014).

Archaeologists associate these communities with the so-called “Wavy-Line/Laqiya” (or “pre-Leiterband”) pottery tradition. Archaeological evidence from the same area furthermore points towards eastward migrations of pastoralists from the western sources of the Wadi Howar along the same riverine system between 7,000 and 3,500 BP. Their communities are associated with the so-called Leiterband culture (see Becker 2011 for a survey of the relevant literature). As further argued by the same author, osteological and isotope analyses of human remains and, for later periods, DNA analyses (which has also been compared with data from modern populations) show that these pastoral migrants were in close contact with the mainly sedentary hunter-gatherers, and that they intermixed to a considerable extent. Becker (2011: 206) points out that the results were in complete agreement with the scenario proposed by Rilly (2004) for the spreading of Meroitic and its closest Eastern Sudanic relatives Nubian, Tama(n) and Nara, and the so-called “Wadi Howar Diaspora” hypothesis for Eastern Sudanic as a whole by Dimmendaal (2007a, 2007b); moreover, alternative scenarios for the spreading of language families in (north)eastern and central Africa, for example as proposed by Blench (2006) “... appear highly unlikely” (Becker 2011: 206).



Map 3 Archaeological evidence for migrations into and out of the Wadi Howar

The relevance of the Wadi Howar and its subsequent disappearance for our understanding of the spreading of (Northeastern) Nilo-Saharan language groups was independently argued for in oral presentations almost two decades ago by the Egyptologist Claude Rilly and the present author, and published as Rilly (2004, 2007), and Dimmendaal

(2007a, 2007b), respectively.⁵ In order to be able to understand the rationale behind this hypothesis on the spreading of the Nilo-Saharan family and the modern distribution of languages belonging to this family, including those spoken in Nubia, it is necessary to briefly introduce this family.

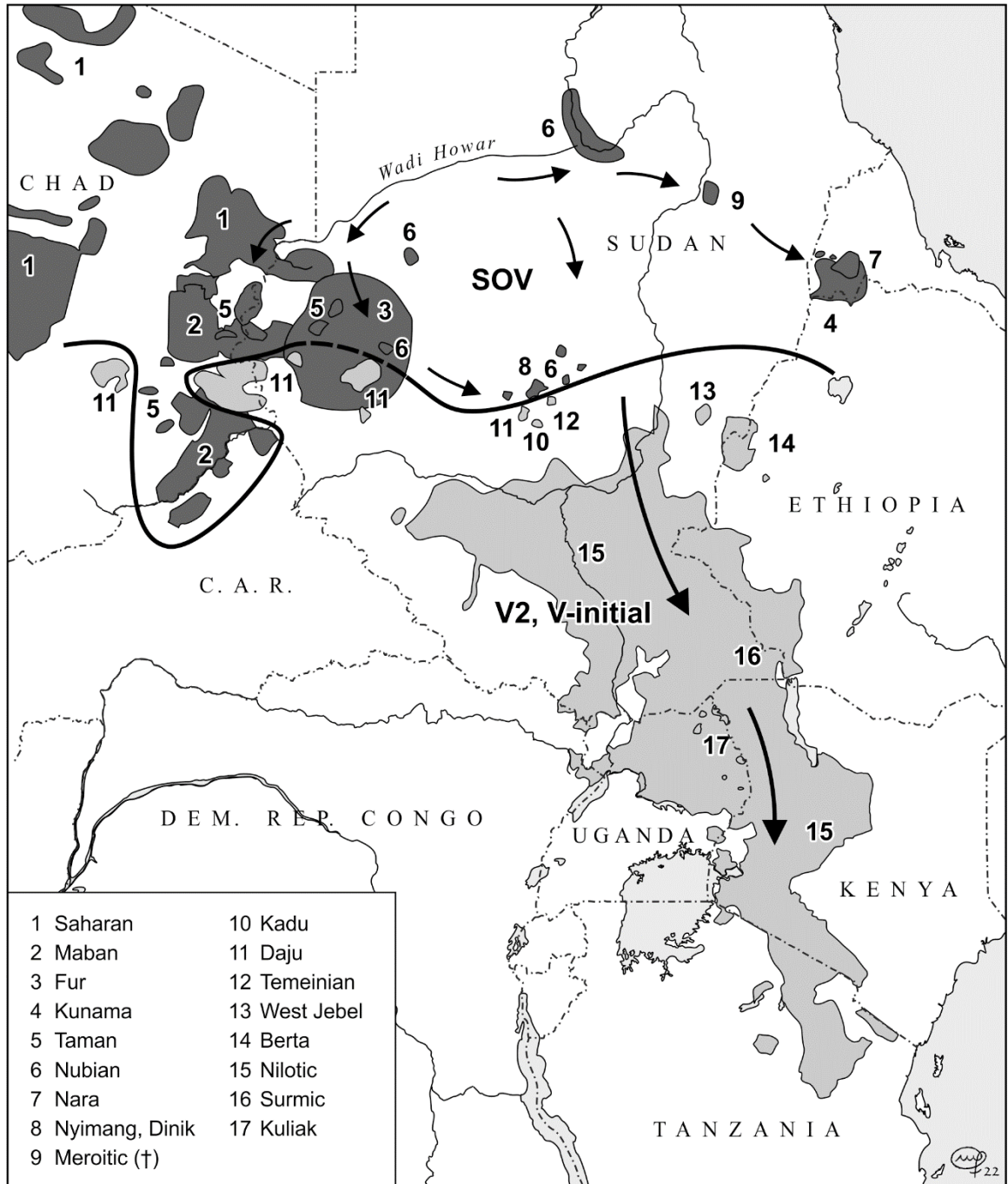
Nilo-Saharan as a language family was first established by Greenberg (1963), basing himself on a range of grammatical morphemes as well as lexical forms probably going back to a common ancestral language. Greenberg (1955) already argued that a major group called Eastern Sudanic by him, and including Nubian, Surmic, Nara, Gaahmg (Jebel), Nyima (Nyimang plus Afitti), Taman, Daju, and Nilotic (these names currently being used in order to refer to these groups) is part of the Macro-Sudanic family (later on called Chari-Nile); this family also includes Central Sudanic, Nara (also known by the derogatory name Barea) and Kunama.

In his 1963 classification of African languages Greenberg argued, again on the basis of a judicious evaluation of grammatical and (to a lesser extent) lexical evidence that the following groups (assumed to constitute independent language families in his 1955 classification) are genetically related to Chari-Nile (Macro-Sudanic): Songhay, Saharan, Maban, Mimi, Fur, Kuliak, and Temeinian. For this newly established (macro) family or phylum Greenberg (1963) proposed the name Nilo-Saharan. As shown on Map 4, a range of the more distantly related members of Nilo-Saharan are spoken along a west-to-east axis, namely the subgroups 1-9.

The Central African area most likely constituted the original homeland of the Nilo-Saharan language family. The highest degree of internal genetic diversity within Nilo-Saharan is found in this area west, southwest, and south of the Ennedi Mountains in Chad, where distantly related genetic groupings such as Maban, Fur, Saharan, part of Eastern Sudanic, and Central Sudanic are situated. According to Dimmendaal et al. (2019), the Central Sudanic subgroup within Nilo-Saharan, spread over the Central African Republic, Chad, South Sudan, and the Democratic Republic of Congo, and spilling over into Nigeria and Uganda, probably constitutes one of the two primary branch of Nilo-Saharan. This subgroup is not shown on Map 4.⁶ The remaining subgroups of Nilo-Saharan (all shown on Map 4) together form the other primary branch of Nilo-Saharan, called Northeastern Nilo-Saharan in Dimmendaal et al. (2019). Map 4 also shows a typologically significant split within Northeastern Nilo-Saharan: A verb-final ((S)ubject-(O)bject-V(erb)) constituent order in subgroups 1-9, and a smaller subgroup with a verb-initial or verb-second (V2) constituent order, all belonging to the southern branch of the Eastern Sudanic subgroup (subgroups 11-16).

⁵ See Rilly (2010: 407) for a discussion of these hypotheses and minor differences between the views of these two authors.

⁶ Dimmendaal et al. (2019) present a recent discussion of different views on the subclassification of Nilo-Saharan following Greenberg's seminal contribution. Several authors (including the present author) assume, for example that Songhay (spoken mainly along the Niger in West Africa) is not part of this phylum. For a more radical "dissection" of Greenberg's Nilo-Saharan hypothesis, the reader is referred to Güldemann (2018).



Map 4 The typological split between Northeastern Nilo-Saharan groups and the link with their genetic classification

As argued in Dimmendaal (2007a, 2007b) and Dimmendaal and Babiker (forthcoming), there are strong linguistic, genetic, and archaeological reasons for assuming that the pastoralists associated with the Leiterband Phase, who started migrating into the Wadi Howar area some 7,000 years ago spoke Northeastern Nilo-Saharan languages, and that the hunter-gatherers they met with in their eastward migration, and associated with the

Wavy Line or Laqiya phase, spoke Cushitic languages. Contrary to Central Sudanic languages, many Northeastern Nilo-Saharan languages, including the Nubian subgroup (indicated by number 6 on Map 4), share a range of significant typological features which are also attested in Afroasiatic branches like Cushitic and Omotic: A verb-final (SOV) constituent order in sentences, extensive case marking, dependent verb forms (so-called converbs) preceding the main verb, and the use of light verbs (like ‘do’, ‘say’) following a complement (noun, adjective etc.) usually referred to as coverb, with which such light verbs form a predicate. These features are also found in Ethiopian Semitic languages, i.e. Afroasiatic languages, which adapted to or converged towards their distant Afroasiatic relatives Cushitic and Omotic over the past 2,500 years. The latter two Afroasiatic subgroups, with their predominantly verb-final syntax, differ rather dramatically from the other Afroasiatic subgroups, Ancient Egyptian, Semitico-Berber, and Chadic, presumably as a result of their geographical separation (the Ethiopian Highlands as against the Nile region during the Late Pleistocene).

An example of the synchronic complexity of case marking in Northeastern Nilo-Saharan languages is presented by Jakobi and Al-Guzuuli (2016) for the Nile Nubian language Andaandi (Dongolawi). The differential marking of objects with or without an Accusative case marker in Nubian, or other Northeastern Nilo-Saharan subbranches, depends on the presence of semantic features such as animacy, definiteness, and discourse prominence (Dimmendaal 2010). Jakobi and Ibrahim (2018: 103) present examples from the Kordofan Nubian language Tagle(naa):

- (1) íyé-lî òd-dū=gī túy-ín
 shepherd-PL goat-SG=ACC milk-3
 ‘the shepherds milk the goat’
- (2) íyé-lî ēg-ī=gī túy-é-n
 shepherd-PL goat-PL=ACC milk-PLR-3
 ‘the shepherds milk (the) goats’

Converbs (i.e. dependent verbs preceding the sentence-final main verb) constitute another feature shared by Northeastern Nilo-Saharan languages spread across an area from Ethiopia in the east all the way to the Nigerian border in the west and the Afroasiatic subgroups Cushitic and Omotic, and also replicated in Ethiopian Semitic languages as a result of contact with the distant relatives Cushitic and Omotic. Hetzron (1972: 99-100) gives the following example with a converb from the verb-final Ethiopian Semitic language Amharic:

- (3) bält-ó hedá
 eat-3M:SG:CNV go.3M:SG:PST
 ‘he ate and went’

An example from the Omotic language Wolaitta in Ethiopia (Dimmendaal 2008: 301):

- (4) ʔi maay-uwa meec'c'-idi mic'c'-iisi
 3MSG:NOM cloth-M:ABS wash-CNV hang-3MSG:PFV
 '(after) having washed the cloth, he hung it up'

A typological restructuring similar to Ethiopian Semitic must have taken place much earlier in Northeastern Nilo-Saharan languages whose speakers came into initial contact with Afroasiatic communities in the Wadi Howar area some 7,000 years ago. The typological similarities between most Northeastern Nilo-Saharan languages and Cushitic as well as Omotic (and Ethiopian Semitic) are rather striking, even today, more than 3,000 years after the Wadi Howar language contact area was dissolved as a result of dramatic climate changes. This applies to constituent order, but also to the other structural features listed above. For example, Nubian languages like Tagle(naa) in the Nuba Mountains, Sudan, have converbs functioning in the same way as in the Omotic language Wolaitta in Ethiopia; Azeb Amha and Dimmendaal (2006) discuss this areal feature in Cushitic, Omotic, and Northeastern Nilo-Saharan in more detail.

Ibrahim Gulfan (2013) shows that in the Nubian language Tagle(naa) such converbs manifest fewer inflectional properties (for person, number, tense, aspect, mood) than the main verb, which occurs sentence-finally. From a semantic point of view, such converbs express sequential or simultaneous events as well as purpose, parallel to the systems found in Cushitic and Omotic (i.e. Afroasiatic) languages. As shown by the following two examples from Tagle(naa), these dependent verbs often make a formal distinction between constructions where the subject remains the same (SSC= same subject converb), and constructions where the subject of the dependent verb is different from the subject of the (final) main verb (DSC= different subject converb); again, this feature is shared with a range of Ethiopian Afroasiatic languages.

- (5) Ahmed kəyɛ-gɪ kel-ɪ kabili-n
 Ahmed meat-ACC eat-SSC finish-PRS
 'Ahmed eats (and) finishes the meat'
- (6) Ahmed kəyɛ-gɪ kel-ndɛ Ali kal-jɪ kel-un
 Ahmed meat-ACC eat-DSC Ali porridge-ACC eat-PRS
 'Ahmed eats meat and Ali eats porridge'

The presence of an additional, universally rare morphological feature, namely singulative marking for nouns (as part of an extensive number-marking system) in most of these Northeastern Nilo-Saharan languages as well as in the Eastern Cushitic branch of Cushitic, points towards additional evidence for this areal contact in the Wadi Howar area, probably between 7,000 BP and 3,000 BP. Hayward (1998: 627) illustrates singulative marking in Afar (Qafar, an Eastern Cushitic language spoken in Eritrea, Ethiopia and Djibouti), as in *ɖagor-ta* 'hair (singular)', *ɖago(o)r* 'hairs'.⁷ But a similar system of singulative number marking occurs in most Northeastern Nilo-Saharan subgroups, for example in Masalit (Chad): *anyij-gi* 'fly', *anyij* 'flies' (see Dimmendaal 2000 for a general survey, and Jakobi and Dimmendaal (2022) for an account of the complexity of number

⁷ Singulative number marking on nouns is also found in Semitic languages.

marking in Nilo-Saharan. Singulative number marking does not occur in the Omotic branch of Afroasiatic, which excludes this branch as a source for this typological feature in Northeastern Nilo-Saharan languages.

Singulative marking for nouns referring to entities frequently occurring in larger groups or pairs is also found in Darfur Nubian and Kordofan Nubian (see Tucker and Bryan 1966: 319, Thelwall 1977, Werner 1993). An example from Kadaru (Kordofan Nubian): *kɔnyɔl-tu* ‘egg’, *kɔnyɔl* ‘eggs’. Singulative marking was lost in Nile Nubian languages.

The Nilo-Saharan language Tama (spoken in Chad and Sudan) manifests the typical verb-final syntax with case marking, converbs as well as coverbs (as in example (7) below, again, characteristic of most Northeastern Nilo-Saharan languages (Dimmendaal 2008: 287)

- (7) Khàmís-ìreŋ ð!fá nék
Khamis-ACC pay do
‘pay Khamis!’

The origin of these striking typological similarities between these Nilo-Saharan languages, stretching from Chad in the west to Eritrea and Ethiopia in the east, and Cushitic (and Eastern Cushitic in particular) receive a natural explanation through the empirically well-established contact between their ancestral predecessors during the early Holocene in the Wadi Howar area.

The archaeological and genetic data emerging from research in the Wadi Howar area, as summarized in Becker (2011), presuppose a sociolinguistic constellation involving language contact, and thereby multilingualism along this former riverine system. Archaeological records, including osteological investigations, attest to a migration of hunter-gatherer communities originating from the Lower Wadi Howar area in the east and moving west, who built semi-permanent settlements in the vicinity of this new riverine system. The material culture of these communities belonged to the Wavy Line tradition, of which artifacts have been identified across the area where today Afroasiatic languages are spoken, Northeastern and Northern Africa (Keding 1997, Jesse 2004). Approximately one thousand years later, pastoral communities moved into the Upper Wadi Howar area from the west (probably speaking Nilo-Saharan languages), and intermixed with these hunter-gatherer communities, who were absorbed into these pastoralist communities. Language shift, and interference from the former languages of these hunter-gatherer communities (who most likely spoke Afroasiatic languages similar to modern Cushitic languages) affected the structure of these Nilo-Saharan languages.⁸

As pointed out above, a number of Nilo-Saharan subgroups deviate from the common verb-final sentence structure with its associated typological features described above, namely Nilotic, Surmic, Berta. These mainly verb-initial (and verb-second language like Gaahmg, the only remaining West Jebel language) languages form a genetic subgroup, the southern branch of the Eastern Sudanic branch of Nilo-Saharan (Map 4). The presumed southward migration of their ancestral communities (illustrated in Map 3) can be

⁸ The incorporation of minority groups into numerically dominant pastoral communities (rather than the other way around) can still be observed across Eastern Africa in modern times; see, for example, Mous (2017) for a description.

associated, at least to some extent, with the Handessi Phase (4200-3100 BP), and most likely was triggered by the dramatic climate change in the Wadi Howar area. These southward migrations resulted in new contact areas with speakers of the ancient verb-initial contact zone inhabiting areas adjacent to the White Nile and its tributaries (see Dimmendaal 2005, and Dimmendaal and Babiker, forthcoming, for further details of the linguistic, archaeological, and genetic evidence for the migration and contact scenarios presented above).⁹

3. *Language contact in Nubia during pharaonic times and subsequent eras*

West of the Nile between the 3rd and 4th cataract in the area adjacent to the former Wadi Howar, no Cushitic language is spoken today. East of this area, there is still one language belonging to this Afroasiatic branch, namely Beja. With three main dialect zones, Beja is a fairly uniform language and the only Northern Cushitic language still spoken today. However, archaeological evidence points towards the presence of other Northern Cushitic languages in the distant past. First, the language of the Medjay, a nomadic people living in the Eastern Desert, whose language is attested on Egyptian inscriptions from the Middle Kingdom's occupation of Lower Nubia (Liszka 2011, Rilly 2019: 11-20); second, the language of the Blemmyes, which is attested on a Napatan enthronement stela dated around 2600 BP (Christides 1980); this language may have been an older stage of Beja (see Cooper 2020b).

There is also historical evidence from personal names and topographical lists from the New Kingdom in the fourth millennium BP for the existence of a "Meroitic-like language" in historical Kush, with differentiated Afroasiatic languages in the Eastern Desert. The Meroitic language is assumed to have displaced a number of (other) Eastern Sudanic and Cushitic languages along the Nile (Cooper 2020a: 6; see also Cooper 2017a, 2017b, 2020b for additional details on the linguistic prehistory of the area).

The identification of Meroitic as a Nilo-Saharan language, more specifically belonging to the Eastern Sudanic branch and probably most closely related to Nubian, goes back to Rilly (2010). Evidence for this hypothesis is based on lexical as well as grammatical cognates (Rilly 2010: 375-380, 381-399). This extinct language, whose scripts reflect the Egyptian cultural influences of the period, is also discussed in detail by Rilly (2016). Whereas Bender (1991) grouped Nubian with Taman, Nara and Nyima (i.e. Nyimang and Afitti) within the Eastern Sudanic branch of Nilo-Saharan, Rilly (2010: 420-529) provides extensive lexical evidence for the close genetic affiliation of these groups with Meroitic.

Historical texts from the 18th dynasty of pharaonic Egypt (i.e. dating back at least 3500 years) also make reference to people south of this state by the name *Makha*, which appears to have been the self-designation for groups speaking what are now known as Nubian languages (Cabon et al. 2017: 314). The name *Nob* for these groups appears to be of later origin, possibly going back to Meroitic (Rilly 2008), and first appearing in documents around 2,300 BP, where it denoted 'slaves' (Cabon et al. 2017: 177).¹⁰

¹⁰ The name *Nuba* was extended to other groups speaking a range of languages, many of which are not genetically related to Nubian, in an area which is part of South Kordofan Province in Sudan today.

Modern linguistic evidence for the broad geographic extension of the Nubian language family in the Nile valley in the past is provided by onomastics, more specifically by place names preserved in literary records and loan words. Priese (1973), for example, identified Nubian place names in the Nile valley, in the area between the third and fourth cataract, which occur in Egyptian texts dating back approximately 2,500 years; compare also Zibelius-Chen (2014) for further details. According to Rilly (2016), the entrance of Nubian speech communities from Western Sudan into the Nile Valley put an end to the Meroitic Kingdom. Moreover, Nile Nubian probably also replaced the related language pre-Nara (today spoken in Eritrea) in this area. Rilly (2007: 285-288) furthermore points towards a “pre-Nile Nubian substrate” in Old Nubian and Nobiin which does not have cognates in the other Nubian languages, and which therefore most likely originated from other Eastern Sudanic languages in the area which have become extinct since. Cooper (2021) also cites evidence for other Afroasiatic languages in Lower Nubia.¹¹

Historical sources as discussed by different authors quoted above refer to a dynamic linguistic history of the Nubia area, with displacements of people and languages. But there is one striking feature which appears to have gone unnoticed in the literature so far: The areal convergence between Nile Nubian languages and more distantly related languages like Nara and the Kunama group (consisting of Kunama proper, Bitama, and Ilit) as well as the Northern Cushitic language Beja. Several phonological and grammatical features point towards this historical process.¹²

Morphosyntactically these languages were already fairly similar, as their ancestral languages were all part of the same convergence zone extending from Ethiopia across the former Wadi Howar towards the Ennedi Mountains in Chad, as discussed above. But Nile Nubian languages differ in significant ways from Darfur Nubian and Kordofan Nubian languages in a number of respects. First, there is the absence (loss) of glottalization (implosion) as a distinctive feature of consonants, and the presence of five vowels in Nile Nubian languages rather than seven to ten vowels, with Advanced Tongue Root (ATR) vowel harmony.¹³ The latter system is found in Kordofan Nubian, but also in other Eastern Sudanic (Northeastern Nilo-Saharan) groups such as Taman, Nyima, Nilotic, Surmic, and Temeinian. Rilly (2010: 318-325), in fact, reconstructs such a system for Proto-Northern Eastern Sudanic.¹⁴ Also, Nile Nubian languages lost the widespread Northeastern Nilo-Saharan feature of singulative number marking with nouns, features which are still found in Darfur Nubian and Kordofan Nubian languages (as pointed out above). These changes

¹¹ For a variety of phonetic, lexical, and semantic reasons, Kossmann (2011) has criticized the claim that names of dogs on a stela of Intef II of the First Intermediate Period originated from a Berber language in the area.

¹² Lexical borrowing between these languages have only been studied to a limited extent. In one of the few sources on this topic, Blažek (2014), it is concluded that in Beja borrowings from Nilo-Saharan languages like Nara, Nile Nubian languages, or Kunama appear to have been rather limited.

¹³ Rilly (2016: 7) also surmises a similar sound system for Meroitic as in Nile Nubian.

¹⁴ Bechhaus-Gerst (1984) reconstructs an eight-vowel system for Proto-Nubian, but it should be kept in mind that Kordofan Nubian languages were still poorly known at the time.

make Nile Nubian languages strikingly similar to these other languages in the area; compare Banti and Savà (2021) for Nara, Tucker and Bryan 1966: 336-347) for Kunama, and Vanhove (2017) for the Northern Cushitic language Beja.

Few Nile Nubian languages have been studied in detail (studies such as Abdel-Hafiz 1988 on Kunuz (Kenzi) constituting a rare exception); this also applies to related languages like Nara or Kunama languages. Consequently, there is more to be discovered in terms of convergence in this contact area, for example with respect to the prosodic structure of these languages. Such adaptations commonly result from areal contact and corresponding patterns of multilingualism, a hypothesis which appears to receive supporting evidence from genetics. In their article on the genetics of East African populations, Dobon et al. (2015: 6) point out that “Nubians are the only Nilo-Saharan speaking group that does not cluster with groups of the same linguistic affiliation, but with Sudanese Afro-Asiatic speaking groups (Arabs and Beja) and Afro-Asiatic Ethiopians”;¹⁵ see also Sirak, Fernandes, Lipson et al. (2021) for further details.¹⁵

Centralization of states (associated with the conquest of Egypt by the Nubians during the 25th dynasty) is known to have had a levelling effect on linguistic diversity, both genetically and typologically, in different parts of the world. This process can be observed from the Americas and West Africa and across Eurasia, because speakers of minority groups tend to learn the dominant lingua franca of the area (which then starts influencing their own primary language); alternatively, they shift towards the dominant language, either voluntarily or because they are forced to.

The sociolinguistic situation for Ancient Egyptian in pharaonic times points towards a different sociolinguistic situation. Whereas speakers of Ancient Egyptian and early representatives of the Nubian language family were in contact over a considerable period of time, linguistic evidence for this contact is restricted to technical vocabulary and trade-based words from Ancient Egyptian in the lexicons of Old Nubian (as well as Meroitic). According to Cooper (2020a: 9), “[m]uch of this lexical material may be the product of Egyptian imperialism and “colonial” administration in Nubia during the New Kingdom”.¹⁶ There appears to be no evidence for grammatical convergence between these two languages, as their languages were diametrically opposed with respect to the position of the verb (verb-initial versus verb-final) or other relevant morphosyntactic features. This in turn suggests that bilingualism was uncommon among speakers of Ancient Egyptian.¹⁷

4. *Modern Nubian languages in a historical perspective*

Until the late Middle Ages, the Nubian language area probably covered the Nile valley south of Aswan as far upstream as the confluence of the Blue Nile and the White

¹⁵ For an informative perspective on the possibilities and limits of interdisciplinary research involving archaeology, linguistics, and genetics the reader is referred to MacEachern (2012).

¹⁶ See the critical assessment of the state of the art concerning Nubian lexicon in Later Egyptian by Takács (2013).

¹⁷ This does not exclude contacts on an individual basis, for example between religious experts from the Egyptian state and its southern neighbors.

Nile, and possibly beyond these points. The area west of the middle Nile valley across the savanna of Kordofan and Darfur, where speakers of Nile Nubian languages probably originated from, as well as the northern Nuba Mountains in Sudan were also part of the former Nubian language area, as witnessed by their presence in these areas even today.

Starting with Ruppel (1829), a range of scholars have contributed to the synchronic and diachronic study of Nubian languages as well as to their external links as a language family. The most recent and most detailed survey of the literature on Nubian languages and their position within the Eastern Sudanic branch of Nilo-Saharan is found in Rilly (2010).¹⁸ In an earlier publication (Rilly 2007) as well as in Rilly (2010: 278 ad passim) phonological evidence is provided for a subclassification of the Nubian language family into two main branches based on phonological innovations:

1. Nile Nubian, which includes the medieval language Old Nubian, further comprises Nobiin (self-designation Fadicca-Mahas, Old Nubian being its predecessor); Kenzi (Kunuz, Kenuzi, self-designation Mattoki); Dongolawi (Dongolese, Dongola, self-designation Andaandi).
2. Western Nubian, the latter comprising two branches:
 - 2a. Darfur Nubian: Birgid; Midob (Meidob)
 - 2b. Kordofan Nubian (Hill Nubian) consisting of the following locality names: Abu Jinuk, Kasha, Karko, Kujurja, Fanda, Wali, Kudur, Ghulfan-Morung, Ghulfan-Kurgul, Dair, Kururu, Kadaru, Dabatna and Debri, El-Hugeirat, Tabag, Dilling.

Several Nubian languages are endangered as a result of the growing importance of (Egyptian and Sudanese) Arabic in day-to-day interaction. The construction of the Aswan Dam and the displacement of speakers of Ken(u)zi also had rather dramatic effects on the stability of this language (Rouchdy 1989).

Rilly (2010: 169) mentions that during the 17th and 18th century speakers of Kordofan Nubian languages fled from slave raids and settled in the Nuba Mountains. But it is important to keep in mind that the actual divergence between Kordofan Nubian languages must have started much earlier, as they are quite distinct lexically and grammatically. More generally, the hypothesis of the Nuba Mountains as a refugium against slavery is questioned by Dimmendaal (2015: 54-63), as the Nuba Mountains do not provide any natural defense against slave raids. Moreover, one can only hide there in caves for shorter periods, since the fertile fields are to be found in the lower regions of this plateau area. Furthermore, there do not appear to be any oral traditions about recent migrations into the Nuba Mountains in order to escape slavery (with the exception of Daju of Lagowa), and no simplified contact languages developed, a process otherwise observed when speakers of different languages come into contact with each other and start searching for a

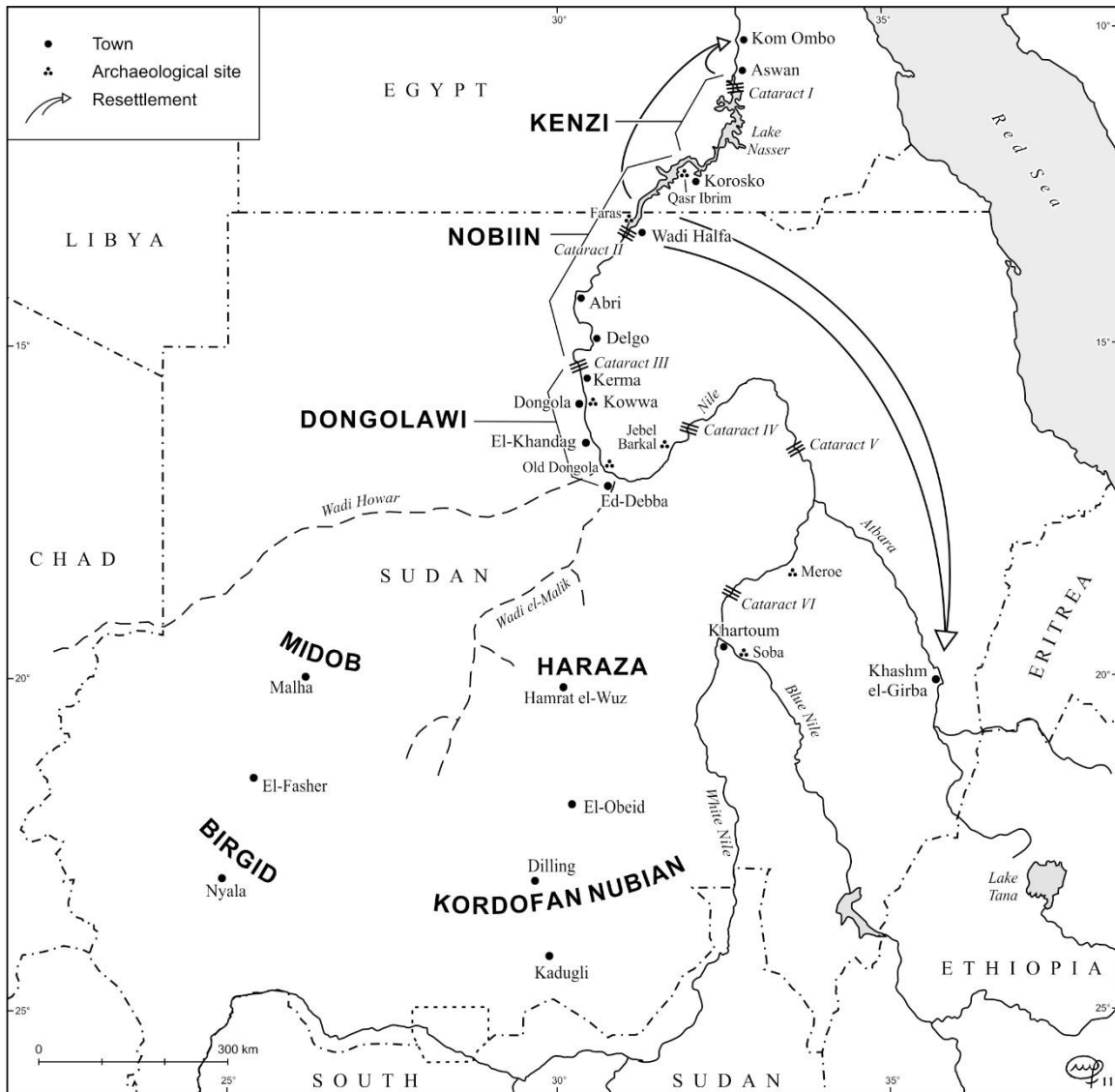
¹⁸ Jakobi (forthcoming) constitutes a detailed historical-comparative investigation of the Kordofan Nubian branch of Nubian.

common “emergency language” as a channel of communication.¹⁹ More likely then, speakers from the savannah areas joined Nubian communities which had already settled in the Nuba Mountains in the more distant past, as did so many other communities escaping the desertification from neighboring zones, probably for thousands of years. Other Nubian communities migrated towards the Nile area, where they developed contacts with speakers of Afroasiatic languages like Ancient Egyptian or different Cushitic languages, as well as with speakers of Nilo-Saharan languages like Meroitic and the ancestral communities of Kunama and Nara, and possibly other speech communities too.

Abbreviations:

ABS	=	absolute
ACC	=	accusative
CNV	=	converb
DSC	=	different subject converb
M	=	masculine
NOM	=	nominative
PFV	=	perfective
PL	=	plural
PLR	=	pluractional
PRS	=	present
PS	=	past
SG	=	singular
SSC	=	same subject converb
3	=	third person

¹⁹ For a discussion of additional reasons pointing towards the Nuba Mountain area as an ancient refugium as a result of dramatic climate change the reader is referred Dimmendaal (2015: 58-61).



Map The current areal spreading of Nubian languages

Bibliographic notes

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