

THE USE AND MISUSE OF LANGUAGE IN THE STUDY OF AFRICAN HISTORY

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1. Language Classification and History

It is staggering to contemplate the massive number of historical events implied by the five words, "Wolof and Zulu are related." The speakers of these languages are separated by thousands of miles of rain forest and desert, not to mention mountain ranges and some of the world's mightiest rivers. Yet, comparative linguistic evidence makes it clear that Wolof, Zulu, and more than 1000 other languages in Africa belong to the Niger-Kordofanian language family, a linguistic group which can ultimately trace its ancestry back many eons to a single language community, probably somewhere in West Africa. In the scheme laid out in Joseph Greenberg's *The Languages of Africa*,¹ the classification of African languages now univesally accepted among serious scholars, Niger-Kordofanian is but one of four families into which all the languages of Africa fall.

Since the scientific study of language began in the mid-19th century, linguists have developed effective techniques for determining whether or not particular languages show evidence of *genetic* relationship, i.e. whether or not we can hypothesize that certain languages have descended from a single ancestral language even though the modern languages may differ from each other at every level—pronunciation, vocabulary, and grammar. In a very few cases, we have data from the ancestral language itself as well as its descendants, the best known and best documented case being Latin and its descendants, the Romance languages such as Italian, Spanish, and French. Unfortunately, we do not have such information for most of the languages in the world, including virtually all those of Africa, but when we find that languages resemble each other in ways which could not be a result of pure chance, we can infer that such languages must have come from a single ancestor for which we have no historical

¹ J. H. Greenberg, *The Languages of Africa* (Bloomington, IN: University of Indiana, 1966).

documentation but which must have existed at a specific location and then spread through conquest, cultural dominance, or the simple need for more land. As time went on, communities speaking this original language became isolated from each other, changing their manner of speaking in ways idiosyncratic to each community, until the accumulated changes resulted in such differences between the diverging communities that they no longer spoke the "same language".

As in many world areas, documented history in Africa dates back a few centuries at best, and in most areas, there is no reliable historical linguistic documentation at all. But what Africa lacks in historical documentation, it makes up for in languages—lots of them—in fact more than in any other world area. Ruhlen² gives a total of 1,474 known African languages (probably a considerable underestimate of the actual total). By Ruhlen's count, one of the four language families of Africa, Niger-Kordofanian, alone has 1,064 languages, more than any other single language family in the world except Austric, the family covering southeast Asia and most of the Pacific. However, many of the 1,175 languages of this family are spoken on islands, and this isolation of people from each other surely accounts in part for the great linguistic diversity. The only contiguous land area which rivals Africa for complexity is New Guinea, with around 800 languages concentrated on a relatively small island, but these languages are all members of a single family. Compare this to Nigeria, a single nation with speakers of around 400 languages from three of the four African language families.

Knowing nothing more than the genetic classification of languages and their locations allows us to draw strong inferences about the history of their speakers. Consider the case of Fula (also known as Fulfulde, Pulaar, Toucouleur, Peul, Ful, or Fulani depending on where it is spoken and the language of the person referring to it). Speakers of this language range across West Africa, from the western tip in Senegal into Chad Republic and possibly beyond. Fula belongs to the West Atlantic branch of Niger-Kordofanian. All the other West Atlantic languages are spoken in Senegal, Sierra Leone, and Guinea-Bissau. Based on genetic relationships and geographic distribution, we can make only one reasonable inference: the homeland of the ancestral

² M. Ruhlen, *A Guide to the World's Languages, Volume 1: Classification* (Stanford, CA: Stanford University Press, 1991).

language of the West Atlantic branch was at the far western end of West Africa and Fula has spread eastward. In the case of Fula, we know what the reason for the spread was. The Fula are traditionally nomadic herders who must seek pasturage for their animals. Beginning from their original homeland in what is now Senegal, they could move in only one direction in search of pasturage—east. To the west was the Atlantic Ocean, to the north the Sahara Desert, and to the south the endemic tsetse fly infestation of the forested areas. In some parts of West Africa, the Fula remain nomadic, but in other areas they have settled. Thus, in northern Cameroon and contiguous parts of Nigeria, Fula is the native language of many people who are settled on the land and whose life-styles are essentially the same as those of people who speak languages indigenous to the area. Nonetheless, because Fula's nearest linguistic relatives are thousands of miles away, we know there must be some explanation for the presence of Fula-speaking communities in this area other than their having been there since time immemorial.

There are two related aspects of the West Atlantic-Fula model which have implications that are applicable where the situation is less transparent: (1) the area of greatest diversity within a genetic linguistic group is the homeland, and (2) linguistic uniformity over a large area suggests rapid linguistic spread. This is evident, for example, in the great dialectal diversity of English in Britain, the homeland of English, vs. the relative dialectal uniformity of English in North America, where English spread across the continent in a short period. Ruhlen lists 46 West Atlantic languages, 45 of which are spoken only at the far western tip of Africa.³ The one West Atlantic language not restricted to this area, Fula, extends across a vast area, yet is linguistically highly uniform across its extent—the variety of Fula spoken in Senegal is mutually intelligible with the variety spoken in Cameroon (perhaps with a little practice comparable to that needed by a Chicagooan trying to communicate with a rural Scot).

We can apply these principles to one of the more notable features of African language distribution, the Bantu area. The 380 languages usually referred to as "Bantu", called "Narrow Bantu" in Ruhlen,⁴

³ M. Ruhlen, 303-04.

⁴ *ibid.*, 312.

include languages as far flung as Ewondo (Cameroon), Luganda (Uganda), Kikuyu (Kenya), Chaga (Tanzania), ChiNyanja (Malawi), Shona (Zimbabwe), Bemba (Zambia), Zulu (South Africa) and, of course, Swahili, spoken throughout East Africa. While the large number of Bantu languages would seem to represent diversity, from a linguistic point of view they represent uniformity. These languages do not differ linguistically from each other much more than do the Germanic languages of Western Europe. Greenberg (1966) gives only a single entry, "Bantu", to cover the entire group rather than listing the individual languages. However, if one moves to southwestern Cameroon and contiguous areas of Nigeria, one finds dozens of "Bantu-like" languages which share some linguistic traits with Bantu but which are quite different from Bantu and from each other. This is the area of diversity that we are looking for. Clearly, the homeland of the ancestor language to the Bantu languages was somewhere in what is now the southern Nigerian/Cameroon border area. The expansion of Bantu to cover nearly all the African continent from the Niger Delta east to the Indian Ocean and south to the Cape has taken place in very recent times in terms of language evolution.

There is still evidence of the linguistic situation prior to this expansion. There are pockets of non-Bantu languages in East Africa surrounded by Bantu, particularly in Tanzania. These include, among others, the Southern Cushitic languages (Iraqw, Dahalo), Hadza, and Sandawe. The Southern Cushitic languages are related to languages such as Somali and Oromo, much further north. Greenberg (1966) classifies Hadza and Sandawe together with the Khoisan languages of the Kalahari desert and South Africa. The Khoisan languages themselves are almost entirely surrounded by Bantu languages. This language distribution implies that the Cushitic subfamily probably at one time extended along the entire eastern part of Africa north of the equator, and the Khoisan languages probably occupied most of the continent south of the equator.

Moreover, across the rainforests of equatorial Africa are the Pygmy peoples. A number of Pygmy groups speak Bantu languages, for example "Babinga" of southern Cameroon, which is a cover term for several distinct Bantu languages. As we will see in §2, it is dangerous to relate language and race in any direct way, but assuming that the speakers of the ancestral language of the modern Bantu languages

comprised a fairly homogeneous ethnic community, and assuming the people of that community resembled the people in modern southwestern Cameroon, it seems safe to say that the ancestors of the racially distinctive Pygmy peoples did *not* speak a Bantu language.⁵

Survivals of non-Bantu languages can be found in the Bantu languages themselves in the form of borrowed words from non-Bantu languages. In East African Bantu languages can be found words for iron-working, for example, which cannot be reconstructed for proto-Bantu.⁶

In summary, we can make many inferences about undocumented history by piecing together a puzzle composed of a genetic classification of languages, the present distribution of those languages, and details from those languages, such as the origins of particular vocabulary items. However, not all historical work using linguistic data has dispassionately approached the task, letting the linguistic data lead where it might despite external factors such as race, culture, political importance, or preconceived notions of what the history *should* be. In the remainder of this paper I will discuss two studies where examination of the linguistic data as it has been used does not support the historical proposals. The first, Meinhof's notion of a "Hamitic" family, I will discuss only briefly. Meinhof's "Hamitic" has long been discredited as a valid linguistic group, but his methodology provides a particularly clear example of the invalidity of introducing factors such as race and culture as evidence for linguistic classification. Most of the

⁵ The term "Pygmy" is in some disrepute, but I use it for lack of an alternative. Terms such as "Baka", preferred in some quarters, are *linguistic* designations, but the peoples designated by the ethnic/racial term "Pygmy" speak a number of unrelated languages, as noted below. It is hard to say what kind of language the ancestors of the Pygmies did speak, or even if they ever comprised a homogeneous ethno-linguistic community. Pygmies today speak languages from three vastly different genetic groups: Bantu languages (as just noted), languages of the Adamawa-Eastern branch of Niger-Congo, and languages of the Nilo-Saharan family. One proposal is that the ancestors of the Pygmies originally spoke a language or languages of the Khoisan family. Ian Maddieson, in personal communication, has told me that there is some DNA evidence for a genetic connection between the Pygmies and the modern speakers of Khoisan languages.

⁶ See C. Ehret, "Linguistic Inferences about Early Bantu History," in C. Ehret and M. Posnansky (eds.) *The Archaeological and Linguistic Reconstruction of African History* (Berkeley and Los Angeles: University of California Press, 1982) 57-65, who also summarizes the reconstructed history of the Bantu expansion.

paper will be devoted to the Pan-African theory of Cheikh Anta Diop, in which Diop claims to show the genetic unity of all African languages.

2. Carl Meinhof's Theory of "Hamitic" Racial and Linguistic Unity

Carl Meinhof was perhaps the most important figure in African linguistics in the early 20th century. He published voluminously, and the validity of some of his work endures today, in particular his work on comparative Bantu.⁷ However, his book, *Die Sprachen der Hamiten*,⁸ was an unfortunate publication which misdirected the course of the study of the languages involved in ways that endured for decades.

The term "Hamitic" in the title of Meinhof's book refers to the descendants of Ham, Noah's youngest son who laughed at his father as he lay drunk and naked. The term "Hamitic" is in contrast with "Semitic", which refers to the descendants of Shem, Noah's oldest son, who, along with his brother Japheth, covered their father's nakedness without looking at him.

The Semitic languages (Arabic, Hebrew, Aramaic, Akkadian, Amharic, etc.), long the subject of linguistic scholarship, form an obvious genetic unit in which the languages have much shared vocabulary and numerous grammatical similarities. The languages originally referred to as "Hamitic" include Ancient Egyptian, the Berber languages, Somali, and a few others. They have clear affinities with the Semitic languages in both vocabulary and grammar. Meinhof was not the first to use the term "Hamitic" to refer to a genetic linguistic group, but he was the first to attempt to relate certain languages of sub-Saharan Africa to the languages already recognized as "Hamitic".⁹

⁷ C. Meinhof, *Grundriss einer Lautlehre der Bantusprachen, nebst Anleitung zur Aufnahme von Bantusprachen. Anhang: Verzeichnis von Bantuwortstämmen*, (Berlin: Dietrich Reimer, 1910).

⁸ C. Meinhof, *Die Sprachen der Hamiten* (Hamburg: L. Friedrichsen & Co., 1912.)

⁹ The traditional name for Greenberg's Afroasiatic family is Hamito-Semitic (or Semito-Hamitic), a term still used by many Europeans. The implication of this name is that there are two coordinate subfamilies, Hamitic and Semitic. While Semitic does constitute a genetic unit, "Hamitic" does not, i.e. Egyptian, Berber, etc. do not together form a subfamily coordinate with Semitic.

Meinhof (1912) looks at seven languages in detail: *Ful* (= Fula), *Hausa*, *Schilh* (= Shilha or Tashilhet, a Berber language of Morocco), *Bedauye* (= Beja, a Cushitic language of northeastern Sudan), *Somali* (the national language of Somalia, also Cushitic), *Maasai* (a member of the Eastern Sudanic branch of the Nilo-Saharan family in Greenberg's classification), and *Nama* (a member of the Khoisan family in South Africa). We now know that some of these languages are related—Hausa, Schilh, Bedauye, and Somali are all members of the Afroasiatic family. Fula, Maasai, and Nama, however, each belong to one of the three other African language families. Why, then, did Meinhof group them all as "Hamitic"? The answer is that he used a mixture of racial and linguistic criteria, most of which are spurious. The introduction to Meinhof (1912) is a confused discussion which wanders between linguistic and racial issues. The basic premise concerning race emerges in the following statement:

Es ist ja bei einem Blick auf die Sprachkarte Afrikas evident, daß die hamitschen Sprachen als Sprachen von Leuten kaukasischer Rasse zusammengetroffen sind mit den Sprachen der Nigritier. Wie es scheint, hat sich der Vorgang im Lauf der Geschichte immer wiederholt, daß hamitische Stämme als Herrenvolk unter dunkelfarbigen, anderssprachigen Völkern auftraten, sie unterwarfen und beherrschten. Dabei fand selbstverständlich ein sprachlicher Austausch zwischen der herrschenden Minorität und der beherrschten Majorität statt.¹⁰

[It is quite evident from a glance at a language map of Africa that the Hamitic languages, as languages of people of Caucasian race, have come together with the languages of the Negroes. As it seems, the course of history has ever repeated itself, in that Hamitic tribes have shown up as a dominant people among the dark colored peoples speaking other languages, subjugated them and controlled them. Thereafter, obviously a language exchange has taken place between the dominating minority and the dominated majority.]

¹⁰ Meinhof, *Die Sprachen der Hamiten*, 2.

One learns about the proto-type of these dominant Hamites in an appendix to Meinhof, "Hamitische Typen", by one Felix v. Luschan. Herr von Luschan says,

Jedwede Betrachtung "hamitischer" Typen muß ihren Ausgang von des alten Ägyptern nehmen. ... Man braucht heute nur eine einzige der vielen altägyptischen Darstellungen zu betrachten, auf denen wirkliche dunkle Afrikaner neben Ägypter jene Unterschiede einschätzten, als der modern Anatom das getan hat.¹¹

[Any examination of the "Hamitic" type must take its starting point from Ancient Egypt. ... Today one need only consider a single one of the many ancient Egyptian pictures in which true dark Africans appear next to Egyptians in order to see immediately how much more properly the ancient Egyptians assess that difference than modern anatomy has done.]

This appendix goes on at length discussing hair type, nose shape, and other physical characteristics of Egyptian mummies, comparing these physical parameters to measurements taken from various people around Africa and to pictures of mummies and Africans displayed in plates following the index. Not surprisingly, the speakers of "Hamitic" languages who lack the prototypical Egyptian features have undergone race mixing:

Freilich sind [die Ful und die Hausa] alle mehr oder weniger "angeneuert" und haben teilweise durch direkte Aufnahme von überwiegenden Mengen Negerblut auch wirkliche Negereigenschaften angenommen ...¹²

[Admittedly [the Fula and Hausa] are all more or less "Negrified" and have in part taken on true Negroid attributes as a result of the predominant quantity of Negro blood ...]

All this, of course, is bad physical anthropology and bad history which would be dismissed today as having no validity of any kind. But even if the racial and historical criteria for grouping the "Hamites" are bogus, we must still ask whether Meinhof provides valid linguistic

¹¹ In Meinhof, *Die Sprachen*, 241-42.

¹² *ibid.*, 255.

evidence for the grouping he proposes. The answer is no, and the basic reason emerges in the first sentence of his introduction:

Unter des Sprachen Afrikas finden sich eine große Anzahl von Idiomen, die durch das grammatische Geschlecht und des Ablaut an die semitischen und indogermanischen Sprachen erinnern.

[Among the languages of Africa are found a large number of tongues which, because of grammatical gender and ablaut, are reminiscent of the Semitic and Germanic languages.]

Meinhof, in this sentence, mentions two linguistic traits: grammatical gender and ablaut (changes in vowels to signal grammatical differences, as in English *sing, sang, sung*). Modern linguistics calls traits such as these "typological features", i.e. general features of a grammatical system. To say that a language has grammatical gender is to say that it is a certain *type* of language, but this observation alone says nothing about genetic relationship. Thus, both Hebrew and French categorize all nouns as masculine or feminine, but these languages are entirely different from each other with respect to the markings they use to show gender distinctions. Consequently, no one has proposed that Hebrew and French are genetically related to each other, at least on the basis of the criterion that they both have grammatical gender.

Meinhof's (1912) method of comparing the seven languages is to list a variety of typological features, then to show how each language exhibits those features. Some of the features he uses are the following: *consonantal changes, ablaut, tone, reduplication, gender, number, case, verb stem shape*. He shows how each language exhibits those features, but in very few cases does he explicitly show that the manifestations of those features resemble each other across languages. Without such specific resemblances the presence of such typological traits is meaningless for genetic classification. For example, almost all African languages ("Hamitic" and otherwise) are tone languages, as are most languages of east Asia and Mexico; all African languages use reduplication to show iteration, frequency, etc., but this is probably a nearly universal trait of human languages (cf. *splish-splash, rinky-dinky*, etc. in English).

Consider the case of grammatical gender, cited as a feature relating "Hamitic" to Semitic. For Hausa, Meinhof notes that feminine nouns usually end in *-a*, e.g. *abōkī* 'friend' (m), *abūkia* 'friend' (f), and he mentions a genitive *n-* for masculine, *r-* (*t-,l-*) for feminine (with no example phrases).¹³ For Masai, he mentions a masculine definite article *ol-*, feminine *en-*.¹⁴ For Nama, he cites forms like *khoe-b* 'the man', *khoe-s* 'the woman'.¹⁵ The only possible reaction to this data is, "So what?!" It would have been equally meaningful to include French *grand* 'tall' (m), *grande* 'tall' (f). On the other hand, he does not call attention to comparisons which *could* support a hypothesis of genetic relationship. Thus, in Schilh, he gives a number of examples where feminine is marked by *t-*, e.g. *asggen* 'black' (m), *t-asggen-t* 'black' (f),¹⁶ but nowhere in the book does he point out the fact that the *t-* feminine of Schilh might resemble the *t-* feminine of Hausa, seen, for example, in ordinals, e.g. *na-fari* 'first' (m), *ta-fari* 'first' (f).¹⁷

There is no point in pursuing further examples. The outline in the preceding paragraph typifies the methodology of the entire book, and Greenberg has thoroughly refuted Meinhof's treatment of Fula,¹⁸ Maasai,¹⁹ and Nama,²⁰ showing that these languages are *not* Hamitic, but rather are obvious members of the West Atlantic, Nilo-Saharan, and Khoisan families respectively.

One can only conclude that Meinhof approached the Hamitic enterprise with a preconception about what kind of people would speak Hamitic languages—in particular, Caucasian looking, war-like cattle herders. Some languages spoken by people lacking these racial and cultural traits have features so similar to those in recognized "Hamitic" languages that Meinhof could not ignore them. This includes Hausa, whose speakers, despite being black agriculturalists, managed a place in

¹³ Meinhof, *Die Sprachen*, 72.

¹⁴ *ibid.*, 195.

¹⁵ *ibid.*, 219.

¹⁶ *ibid.*, 98.

¹⁷ *ibid.*, 73.

¹⁸ Greenberg, *The Languages of Africa*, 24-27.

¹⁹ *ibid.*, 90-95.

²⁰ *ibid.*, 67-72.

the Hamitic ranks. (A likely aid to Hausa's achieving Hamitic status was the fact that most Hausa speakers live in large, well-organized states whose rulers are of Fula descent.) On the other hand, the Fula, the Masai, and the Nama were obvious candidates for Hamitude because of their pastoral cultures, and indeed, Meinhof managed to discover Hamitic traits in their languages never noticed before or since!

3. The Pan-African Theory of Cheikh Anta Diop

The Senegalese scholar Cheikh Anta Diop has written a number of articles and books, most notably *Parenté génétique de l'égyptien pharaonique et des langues négro-africaines* (1977), in which he claims to demonstrate a relationship between the language of Egypt in the Pharaonic period and the modern *langues négro-africaines* [languages of black Africa].²¹ The only language of the latter group from which he supplies significant amounts of data is his native language, Wolof. Were he able to show unequivocal resemblances between Egyptian and Wolof, this would, of course, show that Egyptian must also be related to linguistic relatives of Wolof. However, I will show that Diop does not provide any convincing evidence for an Egyptian-Wolof connection. Moreover, he fails to mention several groups of *langues négro-africaines* which share no apparent resemblances to Wolof but which *do* share features with Egyptian, namely the Chadic languages of west and central Africa, the Cushitic languages of northeast Africa, and the Semitic languages of Ethiopia and Eritrea.

Diop makes lavish claims regarding both the innovative nature of his work and the certainty of his hypotheses, e.g.

Pour la première fois dans l'histoire de la linguistique africaine, il a été possible de rendre compte scientifiquement de l'état actuel d'une langue (morphologie, syntaxe, lexique walaf) à partir de l'égyptien ancien ... C'est le caractère systématique de

²¹ Diop is not explicit about what he means by *langues négro-africaines*. Taken in its most literal sense, it would mean all the languages in Africa spoken by black people.

cette explication quasi totale qui n'a épargné presque aucun aspect de la langue expliquée qui est vraiment nouveau.²²

[For the first time in the history of African linguistics, it has been possible to scientifically account for the present state of a language (morphology, syntax, and lexicon of Wolof) beginning from Ancient Egyptian. ... It is the systematic nature of this near total explanation which has left almost no aspect of the language under discussion untouched which is truly new.]

Peut-être pour toutes ces raisons cet ouvrage fonde-t-il réellement la linguistique historique africaine, en tout cas il confère à la linguistique africaine la dimension historique qui lui faisait défaut.²³

[It may be that for all these reasons this work actually establishes African historical linguistics; in any case it confers upon African linguistics the historical dimension which it lacked.]

We will examine the extent to which Diop really demonstrates the connection of Wolof to Egyptian below. But what about the "dimension historique qui faisait défaut [à la linguistique africaine]"? To take Diop's statements at face value, one would think no one had ever done any historical work on African languages before 1977. Looking at his bibliography, one finds no mention of any work in African historical linguistics. For example, there is no mention of Carl Meinhof, who, as noted in the previous section, did fundamental work in Bantu historical linguistics as well as his less creditable work on "Hamitic" languages, no mention of Diedrich Westermann, who wrote voluminously on both synchronic and diachronic aspects of African languages, no mention of Pierre Alexandre, whose popular book, *Langue et language en Afrique noire* (1967), summarized the generally accepted relations between African languages, and most particularly, no mention of Joseph Greenberg, whose work in African language classification dates from the 1940's and is now the universally accepted classificatory scheme. It may be that Diop did not know of these works

²² Cheikh Anta Diop, *Parenté génétique de l'égyptien pharaonique et des langues négro-africaines* (Dakar: Les Nouvelles Éditions Africaines, 1977) xxiii-xxiv.

²³ *ibid.*, xxiv.

or, on the other hand, that he chose to ignore them. Either way, the scholarship underlying his work is suspect. None of these recognized scholars, and a number of others, who have dealt with African languages on a continent-wide basis has ever even hinted that there might be some demonstrable connection between Wolof and Egyptian.²⁴ To take Diop's theories seriously, we would like, at the very least, some guidance to understand why his predecessors missed something which he was able to discover.

Diop does not provide this guidance, but we can still examine his work and compare it to that of others to see whether it really does set African historical linguistics on a new and more profitable course. In order to put some limit on the discussion, I will concentrate on just two aspects of Diop's comparisons: (1) his claim that the noun class systems of the *langues négro-africaines* derive from elements found in the Egyptian language and (2) his claim to have identified a large number of lexical items common to those languages and Egyptian.

Diop himself considers the first aspect to be particularly significant:

Pour étendre cette tentative de systématisation de l'explication [de l'égyptien] aux autres langues africaines, il nous a paru intéressant de partir d'un trait dominant de la morphologie de celles-ci: (classes nominales) qui commande même la syntaxe.²⁵
 [In order to extend this attempt at a systematization of the explication [of Egyptian] to other African languages, it has seemed interesting to us to begin with a dominant trait in the morphology of the latter (nominal classes) which controls even the syntax.]

A convincing scenario linking features of Egyptian word structure to the noun classes of the *langues négro-africaines* would indeed constitute powerful evidence for the claimed genetic relationship. Noun classes are deeply embedded in many aspects of grammar in large numbers of African languages, making it unimaginable that clear

²⁴ Ironically, Meinhof (*Die Sprachen*) might be interpreted as having indirectly proposed such a connection with his classification of Fula, which is closely related to Wolof, as "pre-Hamitic" and hence related in some vague sense to the "Hamitic" language, Egyptian.

²⁵ Diop, xxiv.

resemblances between Egyptian word structure and noun classes could have developed independently or been borrowed.

As for lexical comparison, the fact that Diop devotes 223 pages of his 400 page book to lexical resemblances between Egyptian and Wolof demonstrates the importance he gives to this evidence. From a linguistic point of view, lexical resemblances are perhaps the most convincing type of evidence for genetic relationship because of the arbitrary link between form and meaning—since there is no relationship between what a word sounds like and what it means (cf. the large number of homonymous word pairs in English), the only good explanation for recurrent sound/meaning resemblances between words of two languages is that they descend from a single ancestral language where those words were pronounced in a way similar to their pronunciation in the descendant languages.

3.1. Lexical Evidence for an Egyptian-Wolof Connection

Let us consider the lexical evidence first. It is beyond the scope of this brief study to look at every item in Diop. I will therefore look at this evidence from several perspectives, citing a few salient examples. In every case, the number of examples could be multiplied manyfold. The conclusion will be that Diop presents virtually *no* lexical resemblances between Egyptian and Wolof of the type that can be found between languages that are generally accepted as being genetically related.

Before examining the *quality* of resemblances, it is worth noting that the *quantity* of resemblances that Diop suggests is inflated significantly in two ways. First, there are many cases where a single Wolof item is paired with several Egyptian items. In some cases, such as the first one cited below, the Egyptian words are themselves derived from a single root and should, strictly speaking, be listed as a single item, i.e. one would not give three entries in an English-German comparative word list, separately comparing English *child*, *children*, *childhood* with the single German word *Kind*. In other cases, apparently unrelated words in Egyptian, such as 'ferry', 'jar', and 'desert', are each paired separately with the same Wolof word. Such a situation cannot legitimately constitute three entries in the comparative word list. If an etymological relationship does exist, it can only be

between the Wolof word and *one* of the Egyptian words. We may not definitively be able to say which one, but the single Wolof word gives us the right only to list one etymology, perhaps together with all the Egyptian words as candidates.²⁶

Egyptian words in separate head entries		Wolof word	
<u>h</u> rd/ <u>h</u> rdt/ <u>h</u> rdw/ <u>h</u> rd	'child/group of children/ childhood/gazelle calf'	xale (halé)	'child'
mbhi/mbhi/m <u>h</u> t	'flooded land/swim/flood waters'	bàq (bah)	'flooded land'
mn <u>h</u> /mn <u>h</u> w	'strong/excellence'	man	'be able'
mn <u>h</u> w/mn <u>h</u>	'foam/reed'	manq (manh)	'suck up' ('slurp')
mr/mr/mrw	'ferry/jar/desert'	mar	'thirst'
nmjt/nmm/nm'	'bed/bed (in old texts)/ sleep'	nemm	'be lying down'
ps <u>š</u> ty/ps <u>š</u> w	'part/arbitrator'	pàcc (pa <u>š</u>)	'cut in two, divide'
r/r'	'mouth/sun'	ree (ré)	'to smile'
snm/snmw/ snm	'consume/provisions/ gluttony'	ñam	'food'

²⁶ Certain orthographic conventions will be used in examples. Most Egyptian entries are composed only of consonants. Egyptian hieroglyphs did not write vowels, making it impossible to know what the vowels of most words were. Special symbols in Egyptian transliteration are the following: h = x (velar fricative), t = ç, d = j, i/y/j apparently all = y, the difference having to do with position in the word or period of the language. Diop uses a rather idiosyncratic orthography for Wolof. I have given the modern standard representation of the Wolof words with Diop's representation in parentheses where the two representations differ. I checked all the Egyptian words cited in this paper against the entries in R. O. Faulkner, *A Concise Dictionary of Middle Egyptian* (Oxford: Printed for the Griffith Institute at the University Press by Vivian Ridler, 1976) and all the Wolof words against A. Fal et al., *Dictionnaire wolof-français*, (Paris: Karthala, 1990) and in most cases against P. Munro and D. Gaye, *Ay Baati Wolof, A Wolof Dictionary* (Los Angeles: UCLA Department of Linguistics, 1991).

The second way the number of items in Diop's list is expanded without providing evidence for additional etymologies has to do with the Egyptian writing system. In Egyptian hieroglyphic writing, many words had alternate spellings. Diop not infrequently includes alternate Egyptian spellings as separate entries, e.g.

	or		p'd	'knee'	pooj (pod)	'thigh'
	or		mnḏ	'chest'	men (?meen 'mater-nal line')	'breast'
	or		mḥr	'lowland'	xur (hwr)	'valley'

Eliminating such multiple entries for what are really single etymologies would probably reduce the number of entries by one third or more. However, there would still be several hundred entries, a number large enough to show a relationship between Egyptian and Wolof if the quality of the entries is good. But is it? Below are a few typical comparisons:

Egyptian		Wolof	
ḥs(y)	'weak, humble'	xas (has)	'reprimand'
ḥbsjt	'spouse'	séét (št)	'new bride'
ḥbsw	'spouse'	habasw	("épouse")
(neither form in Faulkner)		(second form not in Wolof dictionaries)	'toilette intime d'une femme'
ḥ'py	'Nile'	xepp (heèp)	"complètement mouille"-- actually an ideo-phone for <i>tooy</i> 'be wet'

i't	'back'	yaatu (yatw) (derived from <i>yaa</i>)	'be broad, wide'
ikn	'cup' ("jarre")	kan gënn	'hole' 'mortar'
iknw	'hoe'	kan	'hole'
it	'father'	yitt (it)	'beat, discipline'
itt	'fly away'	cuuj (tw̄t)	'chick'
mwt	'vulture'	mwt (Fal et al. give only <i>muut</i> , an ideophone for 'full')	'avalier, manger avec voracité'
ndmndm	'get sexual pleasure' (derived from <i>ndm</i> 'sweet, pleasant')	domm (not in dictionaries) doom (dōm)	'agreeable' 'child, offspring'
nsywt	'javelin'	nàcc (nat)	'bleed'
s'h̄	"au cou des animaux à la fête du dieu «Min»" (Faulkner gives 'be noble; nobility')	séq (sehh)	'mane (of horse)'
snty	'likeness'	sant	'family name'
sw (? Faulkner has <i>sb'</i>)	'star'	so	'set (of the sun)'

In these and many of the other putative etymologies Diop cites, there is only a vague cultural or physical world connection between the Egyptian and Wolof meanings—"reprimanding" someone causes him to look "weak or feel humble", the "Nile" is "wet", the "back" is the "broadest" part of the body, "cups" and "mortars" are hollowed out

like a "hole", a "hoe" can be used to dig a "hole", etc. Note that 'cup/mortar/hoe/hole' present a further illustration of multiplying the number of entries by listing the same word under more than one etymology. The Egyptian words *ikn* 'cup' and *iknw* 'hoe' are surely unrelated except that they happen to share some sounds, as do English *cup* and *cap*, for example. The Wolof word *kan* 'hoe' therefore cannot be paired with both Egyptian *ikn* and *iknw* as separate etymologies. On the other hand, the unrelated Wolof words *kan* 'hole' and *gënn* 'mortar' cannot both be paired with the same Egyptian word.

In some cases, knowledge of word structure makes even the phonetic resemblances less compelling. Though neither *hbsjt* nor *hbsw*, both defined 'epouse' ['female spouse'] by Diop, are in Faulkner (1976), Faulkner does give a word *hbs* 'clothe, cover'. *Hbsjt* and *hbsw* are probably compounds based on this word—few, if any underived Egyptian words have more than three base consonants. A link between Egyptian *i't* 'back' and Wolof *yaatu* 'be broad', questionable semantics aside, is rendered even less likely by the fact that the final *-t* in the Egyptian word is a feminine suffix, not part of the root, and *-tu* in Wolof is a verb derivational suffix, also not part of the root.²⁷

I should stress that I did not select especially questionable looking comparisons for the list of examples above—similar items can be found on every page of Diop's comparative word list. To be sure, there are some items which look relatively convincing, e.g. Egyptian *hrwy* 'testicles', Wolof *xuur* (*hwr*) 'testicle'; possibly *hrd* 'child', Wolof *xale* 'child'; and a few others, but this is no surprise. One can find a few chance resemblances in words between any two randomly chosen languages. With selected words and a fertile imagination, one can furnish apparent "proof" that *English* and Wolof are related!

Wolof		English
bëy	'goat'	buck
dee	'to die'	die
fan	'when?'	when
gémminñ	'mouth'	gums

²⁷ A. Diallo, *Éléments systématiques du wolof contemporain* (Dakar: Centre de Linguistique Appliquée de Dakar, 1983).

góór	'man'	guard ²⁸
lekk	'to eat'	lick
man	'I, me'	me
nag	'cow'	nag (in the sense of 'decrepit horse')
ñam	'food'	yum-yum ²⁹
ndox	'water'	dock
nit	'person'	native
nopp	'ear'	lobe
safara	'fire'	fire (<i>sa-</i> a prefix in Wolof?)
xale	'child'	child (<i>ch</i> < * <i>k</i> —cf. German <i>Kind</i>)
yow	'you (sing.)'	you

When comparing languages that are genetically related, the main types of words where one expects to find a fair number of clear sound/meaning pairings are items of "basic" vocabulary, i.e. words found in every language which remain relatively stable in meaning and which are resistant to replacement, whether by borrowing from other languages or from language internal changes. These include small numbers, terms for body parts, universal environmental elements ('sun', 'moon', 'water', 'fire'), and verbs referring to basic life functions ('die', 'eat', 'drink'). Depending on the geographical/cultural area, certain animals, plants, occupations, etc. might also be considered "basic", e.g. 'goat', 'dog', 'elephant', 'guinea fowl', 'okra', and 'farm(ing)' could be viewed as "basic" to the lexicons of African languages. But working through Diop's list, one finds few one-to-one sound/meaning pairings in basic vocabulary between Egyptian and Wolof. Below is an exhaustive list of the words I was able to find in Diop's Egyptian-Wolof comparisons where items that could be considered to be from basic vocabulary had the same or uncontroversially related meanings between Egyptian and Wolof.

²⁸ Cf. 'personne courageuse' given as one of the meanings for *góór* in Fal et. al. Ian Maddieson has suggested that an even better Wolof-English "cognate" would be Wolof *góór*, English *were-wolf*, which originally meant "man-wolf"!

²⁹ Pairing *yum-yum* with Wolof *ñam* is not as farcical as it may appear. It is not unlike Diop's frequent inclusion of Wolof ideophones such as *xep* "complètement mouillé" in his comparative sets.

' <u>h</u> t (probably fem. form of ' <u>h</u> 'spirit'; -t is a feminine suffix, not part of the root)	'eye' (of god)	gēt (This is the plural of bēt 'eye', hence not a good g/ <u>h</u> match.)	'eye'
b'nt (-t is a fem. suffix)	'neck'	baat (bāt)	'neck'
d(w)	'give'	jox (dioh, <u>d</u> oh)	'give'
<u>d</u> nh	'wing'	dunq (<u>d</u> un <u>h</u>)	'feather'
dns	'heavy'	dīs (dīs)	'heavy'
<u>h</u> , h', <u>h</u> rd, <u>h</u> nw	'child'	xale	'child'
it'	'steal'	sācc (saṭa)	'steal'
itn	'sun'	jant	'sun'
nh <u>d</u> t	'tooth'	bēñ (beñ) ñe <u>d</u> j (Pulaar)	'tooth'
nwy	'come' (but base meaning is 'return')	ñew (ñiew)	'come'
rk <u>h</u>	'fire, light'	lakk	'burn, roast; conflagration'
t'	'hot'	tàng (tang)	'hot'
tf ³⁰	'spit'	tēfli (tef)	'spit'
tp	'head'	bopp (bop)	'head'

Sound resemblances between Egyptian and Wolof in most of these items are dubious at best. A couple look reasonable, e.g. *nwy/ñew* 'come' and *dnh/dunq* 'wing/feather', but as already noted, it would be surprising if there were not at least some similar words in large

³⁰ Not in Faulkner, but cited in Greenberg, *The Languages of Africa*, 62.

comparative lists of any two randomly chosen languages. In most cases, however, there are sounds present in Egyptian which are inexplicably absent in Wolof (*dns/diis* 'heavy') and vice-versa (*it'/sàcc* 'steal'), there are different sound matches in different words (Egyptian *d* [ʤ] in 'wing' and *d* in 'heavy' both matched with *d* in Wolof), and there are cases with no obvious similarity at all, e.g. Egyptian *tp* 'head', with initial *t*- and final *-p* has as much in common with French *tête* as it does with Wolof *bopp!* The Wolof word *xale* 'child' shows up literally dozens of times in Diop's wordlist, compared with various Egyptian words. Most of the proposed Egyptian cognates with *xale* are problematic for the same reasons given for other words. In short, it is not an exaggeration to say that the fictional cognates in the Wolof-English list above are at least as convincing for "demonstrating" relationship as the items from Diop's Egyptian-Wolof list.

In contrast, if we compare Wolof and a language to which it really is genetically related, we do find convincing cognate pairs in basic vocabulary. Compare the Egyptian-Wolof list above with the following items from Wolof and Fula.³¹ The Fula nouns and verbs have suffixes set off by hyphens. These are noun class markers, about which more below. The two Wolof numbers at the end of the list have apparent prefixes, seen also in *ñaar* 'two'.

Wolof		Fula	
nopp	'ear'	nof-ru	'ear'
bët (sg), gët (pl)	'eye'	yite-re (sg), git-e (pl)	'eye'
lammiñ	'tongue'	dem-ngal	'tongue'
naac	'sun'	naa-nge	'sun'
weer	'moon'	lew-ru	'moon'
ndox	'water'	ndiy-am (sg), di'-e (pl)	'water'
góór	'man'	gor-ko	'man'
nit	'person'	ned-fo	'person'
nag	'cow'	nag-ge	'cow'
bëy	'goat'	mbee-wa (sg), be'-i	'goat'
ñey	'elephant'	nyii-wa	'elephant'

³¹ Fula data from H. Labouret, *La langue des Peuls our Foulbé: lexique français-peul* (Dakar: IFAN, 1955).

ñam	'food'	ñam-de	'to eat'
ñe-tt	'three'	tati	'three'
ñe-nt	'four'	nayi	'four'

3.2. Noun Classes as Evidence for an Egyptian-Wolof Connection

I now turn to Diop's claim of having located the source of the noun classes of the *langues négro-africaines* in Egyptian. Before examining his scenario for this development, it is necessary to give a broad picture of how noun classes work in the languages which have them. Languages with noun class systems in the sense to be described below are found in all branches of Greenberg's Niger-Kordofanian family with the exception of Mande, the branch comprising languages such as Bambara, Soninke, Mende, and others in the West African savannah region.

It is important to reemphasize a point made above about noun class systems. These systems involve an elaborate subcategorization of all the nouns of a language into many distinct classes. This classification system is integrated into grammar at all levels, such as marking on the nouns themselves, nominal derivation, agreement patterns between nouns and their modifiers, systems of pronominal forms, etc. It is inconceivable that such systems would have been created independently from language to language or that a language without such a system would have borrowed it *in toto* from another language. The implication, therefore, is that African languages which have such noun class systems must have *inherited* them from an ancestral language which already had them. Those Niger-Kordofanian languages which no longer have noun classes, such as the Mande languages or many languages of the Kwa group along the West African coast, must have *lost* the noun class systems that their ancestral languages possessed. This hypothesis is supported by the fact that we can find many languages today where the noun class systems are in various stages of being lost as an active part of the grammar, but essentially no languages which are creating noun class systems.

Noun classes are somewhat like grammatical gender familiar from Indo-European languages, i.e. in the same way that languages like Latin or German categorize all nouns as "masculine", "feminine", or

"neuter", languages with noun classes categorize all their nouns as belonging to abstract classes which determine what adjectival agreements to use, etc. There are differences between European gender systems and Niger-Kordofanian noun class systems, however. First, class languages have many more than the two or three genders of European languages—depending on the language, the number of noun classes may range from 8 or 9 to over 20. Second, sex does not play a role in determining noun class, though in many class languages, there are rough correlations between a noun's meaning and its class, e.g. nouns referring to humans (regardless of sex) typically belong to a particular class, animals (particularly domestic animals, regardless of sex) will typically belong to a particular class, things that occur as non-countable masses (water, milk, grain) will belong to particular class, etc. Third, and most important, number (singular or plural) is not a distinct grammatical category from class. That is, there are classes that refer to individuals (the "singular" classes) and classes that refer to more than one (the "plural" classes), but there is no marking for plurality that is grammatically distinct from class marking. For example, in Wolof, *nag wi* 'the cow' is shown to be singular because it is modified by the "definite article", *wi*, of the "w-" class, a singular class typically used with animals. *Nag yi* 'the cows', on the other hand, is shown to be plural because it is modified by the "definite article" *yi* of the *y-* plural class. There is no extra marking that can be called a specific mark of "plural", like the *-s* of French or Spanish, which may be added to either masculine or feminine nouns.

Class languages spoken today mark nouns for class in a remarkable variety of ways. Some examples are seen in the table below. Wolof shows no class marking on the noun at all—class of a noun shows up only on noun modifiers, pronouns, etc. Fula marks nouns by suffixes and by a set of alternations in the initial consonants of nouns, which depend on which class a noun is in. Avatime, a language of Ghana, marks class by prefixes on nouns.³² The table gives examples of nouns in each class of the respective languages, modified by a "definite marker", roughly equivalent to a definite article. In Wolof and Fula,

³² For the varying positions of noun class affixes in Niger-Congo languages, see J. H. Greenberg, "How Does a Language Acquire Gender Markers?" in J. H. Greenberg (ed.) *Universals of Human Language* (Stanford: Stanford University Press, 1978).

the definite markers are separate particles; in Avatime, they are suffixes on the noun. Generally in class languages, there is a singular/plural class pair, i.e. if a noun in the singular belongs to class *x*, in the plural it will belong to class *y*. In Wolof and Fula, there are fewer plural classes than there are singular classes, such that some of the plural classes pair with more than one singular class. In Avatime, on the other hand, each singular class pairs with a distinct plural class.³³ The table is laid out with each noun shown in a singular/plural pairing. This table does *not* claim to be aligning corresponding classes across languages, a task beyond the scope of this paper and my knowledge of comparative Niger-Kordofanian.

Wolof (10 classes)	Fula (21 classes)	Avatime (13 classes)
góór gi 'the man'	gor-ko o 'the man'	ś-dz-ē 'the woman'
góór ñi 'the men'	wor-ŋe ŋe 'the men'	bá-dzē-wà 'the women'
jigéén ji 'the woman'	hoo-re nde 'the head'	ò-mwē-nò 'the orange'
jigéén ñi 'the women'	ko'-e ɗe 'the heads'	ǰ-mwē-nè 'the oranges'
cin li 'the pot'	ngaa-ri ndi 'the bull'	li-gùmè-nē 'the cow'
cin yi 'the pots'	ga'-i ɗe 'the bulls'	ē-gùmè-nā 'the cows'
xaj bi 'the dog'	rawaa-ndu ndu 'the dog'	kī-bu-è 'the thorn'
xaj yi 'the dogs'	dawaa-ɗe ɗe 'the dogs'	bī-bū-wè 'the thorns'
nag wi 'the cow'	nag-ge nge 'the cow'	kū-ts-ē 'the death'
nag yi 'the cows'	na'-i ɗi 'the cows'	bè-tsē-wà 'the deaths'
nit ki 'the person'	jun-ngo ngo 'the hand'	kè-zi-à 'the bowl'
nit ñi 'the persons'	juu-ɗe ɗe 'the hands'	kù-zi-ò 'the bowls'
suuf si 'the sand'	sond-u ndu 'the bird'	sǰ-yà-sè 'the hair'
suuf yi 'the sands'	col-li ɗi 'the birds'	(no plural)
meew 'the milk'	baaf-al ngal 'the door'	
mi	baaf-e ɗe 'the doors'	
	laaw-ol ngol 'the road'	
	laab-i ɗi 'the roads'	
	mbee-wa ba 'the goat'	
	be'-i ɗi 'the goats'	

³³ Avatime is a tone language. Some classes are distinguished from each other only by tone, e.g. the *kū*-singular class, exemplified by *kū-ts-ē* 'death', where the noun prefix bears mid or high tone, vs. the *ku* plural class, exemplified by *kù-zi-ò* 'bowls', where the noun prefix bears low tone. Avatime data are from Russell G. Schuh, "Avatime Noun Classes and Concord," *Studies in African Linguistics* 24.2. (1995). Fula data here and elsewhere are from Y. Sylla, *Grammaire Moderne du Pulaar* (Dakar: Les Nouvelles Éditions Africaines, 1982), and H. Labouret.

laan-a ka	'the canoe'
laa-d'e d'e	'the canoes'
huf-o ko	'the reed'
kuf-i di	'the reeds'
ndiy-am dam	'the water'
bi-ngel ngel	'the baby'
bi-kon kon	'the babies'
ken-al kal	'the little
(plural?)	wind'
bale-jum dum	'the black
(plural?)	thing'

Diop proposes the following scenario to explain the development of class marking in the *langues négro-africaines*:³⁴

- (1) Egyptian had five distinct "consonantal morphemes" to question 'who?', 'what?', viz. *m*, *p*, *s*, *l* and *t*,³⁵ plus two further consonants, *k* and *w*, seen in the constructions *ky...ky* 'the one ... the other', *we...we* 'the one ... the other'. It is this set of seven consonants which corresponds to the consonants characteristic of the class markers in the *langues négro-africaines*. (Note that Diop is *not* claiming that the class languages got their class-marking consonants from Egyptian, only that Egyptian gives us a picture of what the non-written African languages may have looked like at the time when Egyptian was spoken—cf. point #2 just below.)
- (2) The *langues négro-africaines* extended the set of consonants seen on interrogative words by a principle of euphony with the initial consonants of the nouns to which they refer. In Diop's words,

Dans les autres langues de la famille africaine qui, à l'époque des pyramides, se trouvaient dans le même état d'évolution que l'égyptien ancien, et qui n'étaient pas écrites, la conjugaison euphonique fut le procédé le plus économique pour la spécialisation fonctionnelle de ces morphèmes; pour des

³⁴ Diop, xxvi-xxviii.

³⁵ Diop, 4-5. As far as I can tell, only the first four are really parts of question words. The last, *t*, is part of a particle *ter* or *ty* which accompanies the question words (p. xxvii). This may not be the fifth "consonantal morpheme" that Diop had in mind, but I cannot see any other candidates in the list he gives.

langues de ce type, présentant cette structure particulière, l'oralité a dû jouer un rôle accélérateur ...³⁶

[In the other languages of the African family which, in the epoch of the pyramids, were in the same state of evolution as Ancient Egyptian but which were not written, euphonic conjugation was the most economical process for the functional specialization of these morphemes; for the languages of this type, manifesting this particular structure, orality [i.e. being spoken but not written—RGS] must have played a role in accelerating [the trend toward euphonic agreement]]

- (3) With these variant forms of the interrogative words as a basis, demonstratives and relative pronouns developed with the same set of "euphonic" consonants, e.g. from an interrogative like Wolof *ban* 'which one?' (*b*- class) came demonstratives like *bii* 'this one' (*b*- class) and relative pronouns as in *xale bu më gis* 'child whom I see' (*b*- class).

Let us examine this scenario. With respect to the Egyptian interrogatives referred to in (1), Diop says,

L'Égyptien avait cinq manières différentes (cinq morphèmes consonantiques différents) d'interroger, de dire «quoi», «qui», c'est-à-dire apparemment la même chose: ou bien il existait déjà une conjugaison euphonique embryonnaire masqué aujourd'hui par le système d'écriture hiéroglyphique, ou bien il s'agit d'une profusion de pléonasmes, ce qui est improbable ...³⁷

[Egyptian had five different ways (five different consonantal morphemes) for asking questions, for saying "what", "who", that is to say, [for expressing] apparently the same thing; either an embryonic conjugation based on euphony already existed, masked today by the hieroglyphic writing system, or it had to do with a profusion of pleonasm, which seems improbable ...]

³⁶ *ibid.*, xxvi.

³⁷ *ibid.*, xxvi.

But the suggestion/claim that these Egyptian morphemes meant "the same thing" is entirely gratuitous. Callender gives different meanings and different syntactic functions for all the Egyptian words in question. He defines *m* as 'who?' and calls it an AGENTIVE; he defines *p* as 'what specific entity, what, who?' and calls it an ADJECTIVAL; he defines *s* as 'which one?' and calls it a NON-SPECIFIC; and he defines *l* as 'from/at/in what place, where?' and calls it an ADJECTIVAL or ADVERBIAL, depending on syntactic environment.³⁸ To say that these Egyptian question words meant the "same thing" would be like saying that English has a set of morphemes *-o(m)*, *-at*, *-ich*, *-ere* that mean the same thing when attached to the question morpheme *wh-*.

Perhaps more important for the discussion at hand is that the "variant forms" of the question words in Egyptian share no functional similarity to the noun class markers. It is agreement with the class of a noun which accounts for the differences between noun class markers, regardless of function (interrogatives, demonstratives, etc.). In the quotation above, even Diop only speculatively hints at anything like this to account for the variants of Egyptian question words when he speaks of "une conjugaison euphonique embryonnaire", but he presents no evidence for this, nor does he pursue it anywhere in his book. In short, the claim in (1) would require us to believe that a set of functionally and phonologically distinct question words would first have to lose their functional distinctions, then these apparently meaningless variants would have to be reinterpreted as having an entirely different function, viz. agreement with nouns starting with different consonants.

This brings us to (2), the notion that the languages "qui n'étaient pas écrites" [which were not written] multiplied the number of consonants in interrogatives beyond the seven seen in Egyptian by a principle of euphony with the initial consonants of nouns to which they referred. Here, Diop must have in mind the fact that in Wolof the consonant of class markers for a particular noun will often be the same as the initial consonant of the noun, e.g. *weñ wi* 'the fly', *garab gi* 'the tree', *janax ji* 'the mouse', *meew mi* 'the milk', *suuf si* 'the sand', etc. Examples such as these aside, it is easy to show that consonantal euphony plays no role in the structure of Niger-Kordofanian noun class systems. Even in Wolof, the number of nouns with "euphonic" class

³⁸ J. B. Callender, *Middle Egyptian* (Malibu, CA: Undena Publications, 1975) 96-98.

markers is very small when looking at the full nominal lexicon. Diallo lists this as only one out of a large number of criteria for determining a noun's class marking. Some of the other criteria he mentions are the following: (i) *un "genre humain"* is marked by singular *k-*, plural *ñ-* (*nit ki* 'the person', *nit ñi* 'the people'); (ii) nouns derived from verbs by initial consonant alternation belong to the *l-* class (*caaf li* 'the roasted peanuts' < *saaf* 'to roast'); (iii) manner nouns derived with the suffix *-in* belong to the *w-* class (*doxin wi* 'the conduct' < *dox* 'to walk'); (iv) liquid and mass nouns belong to the *m-* class (*soow mi* 'the cultured milk'); (v) fruits belong to the *b-* class (*màngo bi* 'the mango'); etc.³⁹ There are even homophonous nouns which belong to different classes depending on meaning, e.g. *weñ wi* 'the fly' but *weñ gi* 'the iron'.

These examples, and thousands of others, show that consonantal euphony as a determinant for noun class, far from being the *source* of multiple noun class markers, is obviously a rather recent development in Wolof. In the first place, as far as I know, no other class languages show any evidence whatsoever of consonantal euphony as a principle for determining noun class—a glance through the table above reveals no correlation between class marking consonants and initial consonants of noun stems in Fula or Avatime, nor would similar lists from hundreds of other languages show any such correlation. Rather, the typical correlations with noun class are like those illustrated for Wolof from Diallo (1983), i.e. meaning of the noun, as in (i, iv, v), or derived features of the noun, as in (ii, iii). The rough correlation in Wolof of noun initial consonant with class marking consonant is straightforwardly accounted for by the historical linguistic principle of *analogy*, whereby apparently non-functional variation levels out, for example as in English, where nearly all nouns are now pluralized in *-s* as opposed to the more complex system of Old English (still reflected in modern German). Indeed, in Wolof the analogical principle continues to level the noun class system today. In Dakar, many nouns are being shifted to the "default" *b-* class, even though they belong to other classes in more conservative varieties of the language, e.g. *loos wi* 'the neck' vs. Dakar *loos bi*.

³⁹ Diallo, 48-50.

Diop links the specific class marking consonants of Wolof to the Egyptian consonants he singles out under (1) above, viz. *m*, *p* (which he links to the Wolof "default" class, *b-*), *s*, *ʔ* (seen as *c-* in Wolof locatives such as *ci* 'in (here)', *ca* 'in (there)'), *k*, *w*, and a couple of other forms which need not concern us here.⁴⁰ Here again, the specific comparison between Wolof and Egyptian is misleading. In the first place, Wolof has a smaller number of noun classes than most class languages—the average is probably something between the 10 of Wolof and the 21 of Fula. This makes it easier to find putative relations with Egyptian than would be the case, say, with Fula.

More important are the specifics of the noun classes themselves. Perhaps some of the consonants of the Wolof classes can be matched with the consonants of Egyptian interrogatives, but how characteristic are the Wolof classes of class languages in general? A complete answer to this question would require an in-depth comparative study of Niger-Kordofanian, but one can note a few of points of interest. One is the *m-* class, where Diallo notes an association with liquids.⁴¹ This association runs throughout the Niger-Kordofanian family, being seen in the *-m* of Fula'am (see the word for 'water' in the table above) and occurring universally in the Bantu languages, e.g. Swahili *ma-ji* 'water'. One wonders what possible connection this *m-* marking liquid or mass in Niger-Kordofanian could have to the Egyptian *m* interrogative 'who?, what?!'

Another comparative point is the Wolof *l-* class. Diop relates Wolof *l* to Egyptian *n*, though he does not relate the *l-* class marker to any specific Egyptian morpheme as far as I can tell.⁴² This *l-* class is found throughout Niger-Kordofanian class systems, e.g. as illustrated by the Avatime word for 'cow' above, Swahili (where it is the concord marker for the *ji-* class) *ji-no li-pi* 'which tooth?', and possibly the Fula *ndi* class (cf. the Fula word 'bull' in the table above).

Notably absent in Wolof is a *b-* class referring to plural humans, seen in Fula'e, Avatime *ba-*, and in all Bantu languages (the name "Bantu" itself is a generalized Bantu word meaning 'people'). Presumably if this *b-* were related to Egyptian, it would be to Egyptian *p-*, which is

⁴⁰ Diop, xxvii (fn), 4 ff.

⁴¹ Diallo, 49.

⁴² Diop, 3.

specifically a masculine *singular* form. It is hard to imagine how this could have become related to a general human plural.

Consider now the Wolof default *b-*, which is a *singular* class. Diop explains the predominance of this class marker in Wolof as follows:

... en effet, nous venons de voir que l'égyptien ne possédait que le démonstratif *pw*, devenu *bw* en wolof; celui-ci, qui est à l'origine le morphème de classe le plus spécialisé et le plus courant, régit naturellement le plus grand nombre de termes dans la langue.⁴³

[... in fact, we have just seen that Egyptian had only the demonstrative *pw*, which has become *bw* in Wolof; the latter, which is the origin of the morpheme marking the most specialized⁴⁴ and most common class, naturally controls the greatest number of terms in the language.]

Here again, using Wolof as the point of comparison presents a skewed picture. In fact, a *b-* singular class, much less a *b-* default class, seems to be non-existent elsewhere in Niger-Kordofanian—in fact, it may well be restricted to Wolof. The origin of the *b-* class in Wolof is, at the moment, unclear,⁴⁵ but it is inconceivable that Wolof alone would retain it as an archaic feature whereas huge numbers of Niger-Kordofanian languages *independently* would have developed a plural human *b-* class and lost a default singular *b-* class.

⁴³ *ibid.*, 4.

⁴⁴ My translating ability from French to English may be at fault here, but it seems to me that there is a contradiction in calling Wolof *b-* both *le plus spécialisé* and *le plus courant* (the most specialized and the most common). Normally, specialization should refer to use in a restricted number of contexts.

⁴⁵ Diallo's association of *bi* to words for fruits may give a hint as to the origin of this class marker (49). Throughout Africa, the generic term for 'fruit' is "child of tree". In Niger-Congo, the nearly universal word for 'child' or 'beget' is **bi* (cf. Fula *fi-ngel*, Avatime *õ-bi-ẽ*). A "bi" root in this meaning seems to be absent in Wolof. It may therefore be that the *b-* class in Wolof originated in the expression "child [of]". Another possibility is that the Niger-Congo **b-* human plural class was generalized. In a number of languages, notably some of the Grassfields Bantu languages of Cameroon, this class is being generalized as the plural for all nouns, regardless of singular class. Such a generalization could have taken place in Wolof, then extended to *all nouns* regardless of number. Whatever the case, Wolof is unusual within Niger-Congo in (1) lacking a *b-* human plural class and (2) having a *b-* (default) singular class.

To summarize the thrust of this discussion, there is absolutely no evidence that the relatively large number of noun class distinctions in *langues négro-africaines* could have come from consonantal euphony with the initial consonants of nouns. The following statement by Diop shows not only a fundamental misunderstanding of the workings of noun class systems in general, but also of Wolof in particular. The emphasis of a key phrases by small caps is mine (see below):

Les langues africaines qui possèdent un nombre variable de consonnes pouvant se substituer chacune au *p* du démonstratif égyptien *pw* SANS MODIFICATION DE SENS, sont appelés des langues à classes. Ces consonnes ou semi-consonnes sont, pour le walaf, au nombre de huit (*b, m, s, w, k, g, d, l*); cela veut dire que l'on peut ... remplacer par un permutation circulaires le *p* [de l'égyptien] ... par chacune de ces huit consonnes et le sens grammatical reste le même, SEUL LA VALEUR «EUPHONIQUE» CHANGE.⁴⁶

[African languages which have a variable number of consonants which can each be substituted for the *p* of the Egyptian demonstrative *pw* WITHOUT MODIFICATION IN MEANING, are called class languages. These consonants or semi-consonants [= *y* or *w*—RGS] are, for Wolof, eight in number (*b, m, s, w, k, g, d, l*); this means that one can ... replace, by circular permutation, the *p* [of Egyptian] ... with each of these eight consonants and the grammatical meaning stays the same, ONLY THE "EUPHONIC" VALUE CHANGES.]

One gets the picture of the preliterate ancestors of the speakers of these *langues à classes* euphonicly alliterating modifiers with the nouns they modify because this was easier than keeping track of abstract semantic and grammatical classes of nouns. This picture cannot possibly have been the case. The discussion above has shown that euphony is not now and has never been an important force in noun classification. Contrary to Diop's claim that class markers existed *sans modification de sens*, classes surely did arise in semantic and/or grammatical categories, a number of which can still be clearly identified across the Niger-Kordofanian languages, including Wolof, even after

⁴⁶ Diop, 3-4.

millenia of class realignments, reductions, augmentations, etc. in individual languages. In the light of these facts, the credibility of a hypothesis whereby class markers arose from something like the interrogatives of Egyptian evaporates.⁴⁷

I have little to say about part (3) of Diop's scenario for the development of noun classes, i.e. that classes first developed in interrogatives, then spread to demonstratives, and finally to relative pronouns. The last part of this claim probably is true—a parallel exists in Indo-European languages, where relative pronouns have come from question words, as in the Romance languages and English (cf. French *qui*, English *who*), and from demonstratives, as in German (cf. *der* 'the' or relative 'who' for masculine singular nominative nouns). However, the only claim of importance in part (3) of Diop's scenario is that interrogatives served as a model for demonstratives, and this, in turn, is important only because the noun class markers of the *langues négro-africaines* putatively are related to the consonants seen in Egyptian interrogatives. Since there is no credible evidence for this relationship, a directionality of relationship between interrogatives and demonstratives ceases to be of interest.

4. The Real Linguistic Relatives of Egyptian in Africa

Consider the title of the book under review here, *Parenté génétique de l'égyptien pharaonique et des LANGUES NÉGRO-*

⁴⁷ The origin of lexical noun classes in semantic distinctions has a parallel in most East Asian languages, where nouns are accompanied by "classifiers" in many contexts. Thus, in a language like Vietnamese, one cannot say 'two children', 'two pencils', etc. Rather one must say *hai đũa nhỏ* 'two "beings" children', *hai cây viết chì* 'two "sticks" pencil', etc. Interestingly, Diop does not mention a better Egyptian parallel to the Niger-Kordofanian noun classes than the interrogatives. In the Egyptian hieroglyphic writing system, the written representation of almost every word includes a "determinative". This is a symbol which tells the semantic class of a word, e.g. a hieroglyph representing a house for words referring to dwellings, a tree for the word 'tree' and words for types of trees, a child for words referring to children, a schematic map for words referring to places, a scroll referring to abstract concepts such as 'peace', a phallus referring to male creatures, walking legs referring to motion (Sir A. Gardiner, *Egyptian Grammar*, 3rd ed. (Oxford: Griffith Institute, 1979) 438-543, lists several hundred such determinatives). However, this is only a typological parallel, showing the human tendency to put things and actions into semantic categories. Unlike Niger-Kordofanian noun class markers, the hieroglyphic determinatives played a role only in the written representation of words, not in their pronunciation.

AFRICAINES (my caps—RGS). In Chapter VII,⁴⁸ Diop briefly mentions the following languages: Serer (Sérére), Diola (Dōlā), Fula (Peul), Nuer, Shilluk (Shillouk), Swahili, Kinyarwanda, and Bambara.⁴⁹ Not surprisingly, there are specific and convincing connections between most of these languages and Wolof inasmuch as all but Nuer and Shilluk are members of the Niger-Kordofanian family, and the first three, along with Wolof, are members of the West Atlantic sub-family of Niger-Kordofanian. Diop makes only sparse and schematic comparisons of these languages directly with Egyptian. In most cases, there is an assumption that a relationship between Wolof and Egyptian has been established, and therefore if a connection between language *x* and Wolof can be established, then language *x* is likewise connected to Egyptian. This is, in principle, a good assumption, but it depends crucially on the strength of the Egyptian-Wolof connection. A case in point is initial consonant alternations, found throughout the West Atlantic languages. Diop says, "Les alternances consonantiques rencontrés en égyptien ancien, en walaaf, en peul, etc.... sont attestés en sérère ..."⁵⁰ [The consonant alternations found in Ancient Egyptian, in Wolof, in Fula, etc. ... are attested in Serer ...]. This is followed by a Serer example *o pad* 'a slave', *fad ne* 'slaves'. The *pf* alternation here can be found in many word pairs in West Atlantic languages, such as Wolof *po* 'game', *fo* 'to play', Fula *pul-lo* 'a Fula person', *ful-e* 'Fula people'. As Greenberg has noted, these unusual yet highly specific alternations form a strong piece of evidence for the relatedness of these languages.⁵¹ On the other hand, the *only* example I can find in Diop (1977) of such an "alternation" in Egyptian is *per* 'house', *fari* 'Pharaoh', the latter putatively a plural of the former. This is nonsense, not only from a semantic point of view, but also from the point of view of structure. Nominal plural in Egyptian is marked by *-w*, i.e. *prw* 'houses'. In fact, when one looks at Diop's list of supposed consonant alternations, the "alternations" he speaks of are not *within* Egyptian, but between Egyptian and Wolof, e.g. Egyptian *p'hd* 'be turned upside

⁴⁸ Strangely, this chapter is not listed in the Table of Contents of the book.

⁴⁹ Diop, 117-159.

⁵⁰ *ibid.*, 117.

⁵¹ Greenberg, *The Languages of Africa*, 25-27.

down', Wolof *faxaj* (*fahad*) 'dislocation of joint'⁵² In short, the rather extensive discussion devoted to consonant alternation in the sections on Serer, Diola, and Fula provides evidence for the genetic affiliation of these three West Atlantic languages but is irrelevant to establishing a relationship with Egyptian, which had nothing remotely resembling consonant alternations.

Diop's chapter on languages other than Wolof thus provides evidence that a few Niger-Kordofanian languages are related to each other, a fact long recognized by Africanist scholars. But what of the more than 1000 other languages of sub-Saharan African languages which Diop presumably lumps together as *langues négro-africaines*? Greenberg (1966) divides them into four families: Niger-Kordofanian, Nilo-Saharan, Afroasiatic, and Khoisan.⁵³ He places Egyptian in Afroasiatic, i.e. in a different family from the few languages which Diop has specifically included in his discussion. However, Greenberg does include within his Afroasiatic family several groups of people who are *négro-africains* in the sense that they are black and their homeland is south of the Sahara, viz. the speakers of the Cushitic languages of northeast Africa, such as Somali and Oromo, the speakers of the Semitic languages of Ethiopia and Eritrea, such as Amharic and Tigrinya, and the speakers of Chadic languages of central and west Africa, such as Hausa and Margi. I will limit discussion here to the Chadic languages because this is the family with which I am most familiar, because speakers of these languages unequivocally count as *négro-africains*, and because they are essentially as geographically remote from the Egyptian homeland as are the languages which Diop discusses.

4.1. Lexical Evidence for an Egyptian-Chadic Connection

If Greenberg is correct in grouping Egyptian and Chadic into a single family, we should be able to link the Chadic languages to

⁵² Diop, 73-78.

⁵³ Since Diop provides no overall classification of African languages nor of Africans by race, it is difficult to tell what he means by "*NÉGRO-africaines*". Speakers of the Khoisan languages of southern Africa are, by and large, racially distinct from speakers of languages from the other families. This issue is not important for present purposes, however.

Egyptian on the basis of specific lexical and morphological evidence of the type that is lacking in Diop (1977). Such evidence exists. Consider the following wordlists of Egyptian, two Chadic languages, and, for comparison, Wolof. The hyphenated *-t*'s in Egyptian are feminine suffixes. The hyphenated *-w* in 'water' is a plural suffix. The hyphenated *-k*'s in Ngizim are nominal suffixes.

	Egyptian	Ngizim	Hausa	Wolof
'what?'	m	ta-m	me	lan
'two' ⁵⁴	snw	širin	(biyu)	ñaar
'three'	xmt	kwan	uku	ñett
'four'	fdw	fədu	huɗu	ñent
'bone'	ks	(awuk)	kaši	yax
'tongue'	ns	(marnyi)	halše	lāmmiñ
'excrement'	hs	šau	kaši	duul
'water'	m-w	am	(ruwa)	ndox
'fire'	x-t	aka	(wuta)	safara
'sun, sky'	p-t 'sky'	afa 'sun'	(rana, sama)	jant, asamaan
'oil'	mṛḥ-t	məra-k	mai	diw
'lion'	rw	wura-k 'leopard'	(zaki)	gaynde
'die'	mt	mətu	mutu	dee
'eat'	t 'bread'	ta	či	lekk 'eat' ñam 'food'
'know'	sni 'resemble' snw 'companion'	(zəgaw)	sani	xam
'join'	gmi 'find'	ndagamu 'meet'	gama 'join'	daje 'meet' fekki 'find'
'come'	ii, iw	yi 'go'	ya- 'come!'	ñəw 'come' dem 'go'

⁵⁴ Ehret (273) does not consider the *sn* Egyptian and **sn* Chadic roots to be cognate. However, I believe that there is too much similarity for this resemblance to be a result of chance.

The parenthesized forms in the Chadic languages are not claimed to be cognate with the corresponding Egyptian forms. They do, however, raise an issue in comparative linguistics, viz. comparing languages pairwise as Diop did is fraught with problems.⁵⁵ On the one hand, if one has enough imagination and does not use other languages as a check, one can probably find apparent resemblances between any two languages to "demonstrate" relationship, as in the list of fictitious Wolof-English "cognates" above. If one were to compare only Hausa and Egyptian, one would be tempted to relate Hausa *rana* 'sun' to Egyptian *r* 'sun, sun god.'⁵⁶ However, looking across the Chadic family, one finds no other language with a word in the meaning 'sun', 'sky', or related concepts which resembles the Hausa word. The origin of Hausa *rana* is a mystery, but one thing is certain: Hausa did not inherit this word in this meaning from proto-Chadic and hence could not have inherited it from proto-Afroasiatic; it therefore is unrelated to the Egyptian word in question.

On the other hand comparing languages in groups helps confirm relationships which would otherwise be less clear. If we were to draw up a large list comparing Ngizim and Hausa, we would find many cognate pairs, confirming a relatively close genetic relationship. Both these languages are also related to Egyptian, though far more distantly than they are to each other. As time passes, different words are replaced in different languages, e.g. Ngizim has retained the original Chadic word for 'two' (reconstructable as something like **sər-*) whereas Hausa has replaced it with a Niger-Kordofanian borrowing, *biyu*; conversely, Hausa has retained the original word for 'bone' (reconstructable as something like **Jaṣu*), which Ngizim has replaced.⁵⁷ The existence of the reconstructable roots in many languages across the family gives us confidence that we can relate them

⁵⁵ What follows is basically an exposition of the principle of *mass comparison*, extensively explicated in Greenberg (*The Languages of Africa*, Chapter 1) and elsewhere in Greenberg's work.

⁵⁶ M. H. Jinju, "Asalin Hausawa da Harshensu" [The Origin of the Hausas and Their Language], in A. Rufa'i, I. Y. Yahaya & A. Y. Bichi (eds.) *Nazari a Kan Harshe da Adabi da Al'adu na Hausa, Littafi na Uku* (Kano: Cibiyar Nazarin Harsunan Nigeria, 1993), 6, does exactly this.

⁵⁷ See P. Newman, "Chadic classification and reconstructions." *Afroasiatic Linguistics* 5.1 (1977): 1-42, for reconstructions.

to Egyptian even though a particular root may be missing from a particular language.

Returning to the comparative list above, it should be obvious which languages are genetically related. The Chadic languages show repeated resemblances with Egyptian, a set of resemblances which could be extended by extending the list of words and the number of Chadic languages we compared to Egyptian. On the other hand, there is not a single good match between Wolof and Egyptian (or Wolof and the Chadic languages). Note, moreover, that the words here are from "basic" vocabulary, the part of a language's lexicon which we expect to be most stable and the part of the lexicon where even claimed correspondences were notably absent between Egyptian and Wolof.

4.2. Grammatical Evidence for an Egyptian-Chadic Connection

Turning to grammar, Diop proposed that Egyptian had developed a series of interrogatives which varied in form but not meaning, and that the system of noun classes in Wolof was historically related to the Egyptian interrogatives and extended by euphony with the consonants of nouns. I showed that both the claim of meaningless variation in the Egyptian interrogatives and the euphonic nature of noun class marking are false, and moreover that any functional link between interrogatives and noun classification is dubious at best. In contrast to this far-fetched scenario linking Egyptian interrogatives and Niger-Kordofanian noun classes, the systems of nominal classification and nominal morphology in Egyptian and Chadic languages resemble each other in a number of details.⁵⁸

In Egyptian, all nouns fall into one of two genders, masculine or feminine, and plurality is a separate category from gender, though in some cases, the gender distinction is neutralized in the plural. Gender and number show up in a variety of grammatical constructions, including the following:

⁵⁸ Greenberg, *The Languages of Africa*, 46-48, mentions most of the resemblances here.

	Marking on noun	Demonstrative	Possessive link (n + gender/number)
Masc. sing.	ikn 'cup'	s'b p-n 'this judge'	nsw n Kmt 'king of Egypt'
Fem. sing.	rnp-t 'year'	ip-t t-n 'this task'	niwt n-t nhh 'city of eternity'
Masc. pl.	ikn-w 'cups'	mn ny 'pd-w 'these birds'	wrw n-w bdw 'chiefs of Abydos'
Fem. pl.	rnp-w-t 'years'	mn ny b'k-w-t 'these maidservants'	hmwt n-t wrw 'wives of the chiefs'

In its general outline, this is a system found in many Chadic languages: singular nouns are grammatically masculine or feminine gender and plural is a separate category from gender. Compare the Egyptian system above with the following examples from two Chadic languages, Hausa (H) and Warji (W):⁵⁹

	Marking on noun	Demonstrative	Possessive link
Masc. sing.	H: baʁo 'guest (m)' W: zhiʁa-na 'ram'	H: wan-can baʁo 'that guest' W: sanda-n tana 'this stick'	H: baʁo-n-su 'their (m) guest' W: zhiʁa-n sara 'ram of the chief'
Fem. sing.	H: baʁu-wa 'guest (f)' W: sərna-i 'knife'	H: wac-can baʁuwa 'that guest' W: danga-i cina 'this pot'	H: baʁuwa-ɾ-su 'their (f) guest' W: sərni tə sara 'knife of the chief'
Plural	H: baʁ-i 'guests' W: zhiʁa-wi-na 'rams' sərna-wi-na 'knives'	H: waɗan-can baʁi 'those guests' (No Warji examples w/ plural demonstratives.)	H: baʁi-n-su 'their guests' (No Warji examples w/ a plural possessed noun.)

In terms of system, the only difference between Chadic and Egyptian is that no Chadic language marks a masculine/feminine distinction in the plural—the plural of a noun root can refer to all males, all females, or

⁵⁹ Warji data come from P. Newman, n.d. "Notes on Warji," ms.

mixed sexes (unless, of course, the root could only refer to males or females, such as 'stallions' or 'mares'). In pronouns, Egyptian and Chadic share even the gender neutralization feature in the plural (see below).

More important than the abstract *system*, which is not unlike that of a number of European languages, such as Spanish or French, are the specific markers of gender and number, in particular *t* feminine and *n* plural. The ubiquitous marker of feminine gender in Egyptian is *t*, which shows up as a suffix on virtually all nouns of feminine gender and on all modifiers of feminine nouns. The nominal suffix and the agreement on demonstratives are seen in the table above. Numbers also show the agreement, e.g. *w'jw* 'one (m)', *w'jt* 'one (f)', *sn(y)* 'two (m)', *snt(y)* 'two (f)', etc. The *n* plural in Egyptian shows up primarily in the demonstrative system, seen in the table above.

Chadic languages have the same *t* feminine, *n* plural pattern. Warji cites all nouns with a suffix *-na* for masculine singular and plural and *-(a)i* for feminine singular. The feminine *-i* comes originally from **t*, which changed to *i* in Warji and closely related languages except at the beginning of words. The *t* feminine, *n* plural pattern is seen in the Hausa demonstrative elements *wac-* feminine (from **wat-*) and *wadān-* plural. There are no examples with plural demonstratives in the Warji data available to me, but in the very closely related Miya language, we find forms such as *takən* 'am 'this woman', *niykin təvam* 'these women'.⁶⁰ The *t* feminine genitive linking element is seen in Hausa *-ḥ* (originally **t-*, which regularly becomes *ḥ* at the end of a syllable) and Warji *tə*. Hausa has plural *-n* genitive. Miya again can supply the plural in *təmakwiy* *niy* *Vaziya* 'Vaziya's sheep'.⁶¹

⁶⁰ Russell G. Schuh, 1989. "Gender and Number in Miya," in Z. Frajzyngier (ed.), *Current Progress in Chadic Linguistics* (Amsterdam: John Benjamins, 1989) 171-181.

⁶¹ Greenberg, "An Afro-Asiatic Pattern of Gender and Number Agreement," *Journal of the American Oriental Society* 80: 317-321, describes an Afroasiatic pattern *n* masculine, *t* feminine, *n* plural. The masculine singular form varies more throughout the Afroasiatic family than the feminine and plural forms. Thus, in Egyptian, *p/f* are associated with masculine singular. Callender (15-16) mentions a "neuter" *n*, which he lumps with plural. This may be a remnant of the Afroasiatic *n* masculine, though another possibility is that it is simply the plural in impersonal reference, something like English "they", as in "they say ...". In Chadic, *s* and *k* are often associated with masculine singular. The variation in Afroasiatic masculine singular forms is probably related to the fact that masculine singular is usually the

Another specific resemblance in noun marking between Egyptian and Chadic is a *-u/-w* plural ending. This is the regular plural in Egyptian (see table above). It is also fairly common in Chadic languages, e.g. Hausa *laya/layu* 'charm/charms', Miya *kam/kamamaw* 'house/houses', and the *-wi* suffix in the Warji nouns above, used together with the *n*, also associated with plural. Unlike the *t* feminine, *n* plural, which represent a *pattern* which is indisputably inherited into both Egyptian and Chadic, I have less confidence that this *-u/-w* plural is an inherited feature, but the pluralization *type* certainly is the same in Egyptian and Chadic, in contrast to Niger-Kordofanian class languages, which do not mark pluralization on nouns as a separate category at all.

In the previous paragraph, I emphasized the word *pattern* in referring to *t* feminine, *n* masculine. Individual resemblances between languages, as in vocabulary items or the possibly plural ending *-u/-w*, are good evidence for genetic relationship, but any particular resemblance could be a result of simple chance, as in English *die*, Wolof *dee*. On the other hand resemblances which form an interlocking pattern greatly reduce the odds that the overall resemblance could be a result of chance rather than genetic inheritance. The pronominal systems of Egyptian and Chadic present such a pattern and indeed, when compared with pronominal systems in Semitic, Berber, etc., these systems provide the strongest evidence for the unity of Afroasiatic. Consider the following paradigms of pronouns. In Egyptian and Chadic, the forms on the left side of the slash are essentially the "independent" form of the pronoun—the pronoun that would be used in an exchange such as "Who's there?", "Me."⁶² The forms on the right of the slashes are possessive clitic pronouns. In Wolof, the forms on the left are the independent pronouns, the forms in the middle are preverbal subject clitics, and the forms on the right are possessives. The parenthesized forms in Egyptian and the Chadic languages are probably *not* cognate.

"default" form when gender and/or number are unknown or irrelevant. See Russell G. Schuh, "The Evolution of Determiners in Chadic," in E. Wolff and H. Meyer-Bahlburg (eds.) *Studies in Chadic and Afroasiatic Linguistics* (Hamburg: H. Buske Verlag, 1983) 157-210, for gender marking elements in Chadic.

⁶² The Hausa forms are actually the subject pronouns used in the Perfective aspect. However, they correspond to the independent pronouns in closely related languages.

	Egyptian	Ngizim	Hausa	Wolof
'me/my'	wi/-i	iyu/-ā	(na)/-a	man/ma/sama
'you/your (m.sg.)'	čw/-k	či/-či	ka/-ka	yow/nga/sa (m or f)
'you/your (f.sg.)'	čn/-č	kəm/-kəm	kin/-ki	
'him/his'	sw/(-f)	ači/-ri	ya/-shi	moom/mu/-am (m or f)
'her/hers'	(sy/-s)	atu/-ra	ta/-ta	
'us/ours'	n/-n	(ʃa, wa/-ja, -wa)	(mun/-mu)	nun/nu/sunu
'you/yours (pl)'	čn/-čn	kun/-kun	kun/-ku	yéen/ngeen/seen
'they/theirs'	sn/-sn	(akši/-kši)	sun/su	ñoom/nū/seen

Egyptian and Chadic share a number of points of detail:

- *First person singular*: This form is vocalic whereas all the other person have the form Consonant-Vowel(-Consonant).
- *Second person singular*: Both Egyptian and Chadic (as well as Semitic and Berber) distinguish male and female addressees. The *masculine* form can be reconstructed **kV*. This was probably **ka*, though Ngizim, and, it appears, Egyptian have changed to *i*, probably via some unstressed "neutral" vowel. The change in vowel has caused the **k* to palatalize to *č* (misleadingly represented as *ʔ* in standard Egyptian transliteration). More striking than the **k* masculine pronoun correspondence is its pairing with a feminine pronoun which has two forms: **k-N* (probably more specifically **kim*) in the "free" pronoun but **ki* in the clitic form. Correspondences at this level of detail—paired masculine and feminine, both with initial *k*, and a feminine with two forms, one ending a nasal consonant and one lacking it—can have no explanation other than inheritance from a common ancestor.
- *Second and third persons plural*: Both Egyptian and Chadic have the consonant series **k-(n)* second person, **s-(n)* third person, where the *n* is probably the general *n* plural discussed above.
- *First person plural*: The West, Biu-Mandara, and Masa branches of Chadic have lost the *n*- first person plural forms seen in Egyptian.

However, *n*- first person plural is retained in the East branch of Chadic and presumably is reconstructable for proto-Chadic, e.g. Dangaleat has 1st plural subject pronouns *ni* 'we (inclusive)', *ní* 'we (exclusive)'.⁶³

• *Third masculine singular*: Though the archetypal pronoun for 3rd masculine singular in Egyptian is *pf*, the free pronoun has *s-*, which is one of the more widespread Chadic forms (cf. Hausa possessive clitic).

In short, Egyptian and Chadic match in detail throughout the entire system of personal pronouns. Indeed, the only apparent *non*-match is 3rd feminine singular, where Chadic has forms with the ubiquitous *t* feminine, but Egyptian has forms in *s-*. Even here one could speculate on a development in Egyptian something like **ti* 'her' > **çi* > **ši* > *si*, though I know of no independent evidence for this.

Contrast the correspondences between Egyptian and Chadic with the *non*-correspondences between Egyptian and Wolof. The one person where Wolof looks better than the sample Chadic languages is the *n*- first person plural. But a chance resemblance or two is not unexpected—even English *me* and *you* resemble the corresponding Wolof pronouns. In any case, we saw that an *n*- is reconstructable for Chadic, though it is lost in the sample languages cited here. Diop compares the Egyptian and Wolof pronouns without much comment, apparently assuming that resemblances are obvious.⁶⁴ He does mention one resemblance which does not emerge in the table above, viz. Wolof 3rd masculine singular *f*, a striking resemblance with Egyptian *pf*. However, this form in Wolof appears as part of only one tense aspect marker, *dafa*, as in *da-fā bay* 'he FARMED'.⁶⁵ The canonical consonant associated with 3rd singular (where there is any consonant at all) is *m-*, seen in the examples in the table.

In short, there is a *parenté génétique de l'égyptien pharaonique et des langues négro-africaines*, but this *parenté* is not the one that Cheikh Anta Diop proposes, viz. one between Egyptian and Wolof. Rather it is between Egyptian and the languages of the sub-Saharan branches of the Afroasiatic family, i.e. the Cushitic, Ethiopian/Eritrean

⁶³ C. Ébobissé, *Die Morphologie des Verbs im Ost-Dangaleat (Guera, Tschad)* (Berlin: Dietrich Reimer, 1979) 30.

⁶⁴ Diop, 25.

⁶⁵ Diallo, 63, refers to this form as "Emphatique du Verbe."

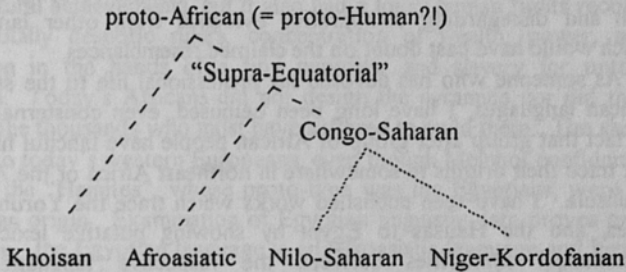
Semitic, and Chadic groups. I must make very clear the claim that I have been making in comparing Egyptian and Chadic (and that I also could have made for Egyptian and the Cushitic and Semitic languages): Egyptian and the Chadic languages are related in that they have all descended from an ancient ancestral language for which we have no historical record—the *Chadic languages did not descend from Egyptian*. Diop also did not claim that Wolof and the other languages he mentions are direct descendants of Egyptian. It is actually quite likely that these languages *are* related to Egyptian, but if they are, it is a relationship far more remote than that between Egyptian and Chadic. I return to this point below.

5. Conclusion: All African Languages Probably *are* Related (So what?!)

In this paper, I have gone to some lengths to show the untenability of a particular “language origin” theory, but more important is a general lesson about the use of linguistic data in history: *the only data relevant for linguistic classification is linguistic data, and one must let the data lead where it will, without preconceptions about what the results should be*. There is nothing original in this statement—these are points made repeatedly in Greenberg’s work on classification.

I have no question that Cheikh Anta Diop was sincere in his attempt to show a relationship between the Egyptian language and what he calls *les langues négro-africaines*. In fact, I have no question that Egyptian and these languages *are* related! The human species had its origin in Africa, and human language had its origin in the species. These facts mean that human language has existed on the African continent longer than anywhere else in the world—perhaps in a time frame measured in hundreds of thousands of years. Greenberg’s classification of African languages into four great families is now universally accepted and has been repeatedly confirmed by more detailed study and additional data. As far as I know Greenberg himself has not proposed a yet higher grouping of these families, but the following super-tree of the African families is not inconceivable. Dotted lines connecting to a node indicate that a proposed grouping

based on empirical evidence has been made;⁶⁶ dashed lines mean that no proposals supporting a genetic relationship have been made in print as far as I know:



Greenberg, applying the italicized principles in the first paragraph of this section, proposed a single linguistic family, Afroasiatic, which includes Egyptian (the language of one of the greatest civilizations in human history) and Arabic and Hebrew (the liturgical languages of two of the world's great religions) on the one hand, and, on the other hand, the 150 or so Chadic languages of central and west Africa, many of which are spoken by people who lived in isolated mountain villages, wore no clothes, and practiced animist religions well into this century. Judging by the diversity of the languages across the major branches of Afroasiatic—Egyptian, Semitic, Cushitic, Berber, and Chadic—the ancestral language of all these languages must have been spoken at least 10-15,000 years ago. This is two to three times the depth of the Indo-European family, which itself comprises languages as structurally different and as geographically distant from each other as English and Hindi.

The implication of these observations is that if the tree above presents a reasonable hypothesis of relationship, the time depth between any given language of the Niger-Kordofanian family (e.g. Wolof) and Egyptian must be immense—perhaps 20,000 years or more. Over such a time period, it would be astonishing to find *any* linguistic resemblances that could be unequivocally attributed to genetic

⁶⁶ E. A. Gregersen, "Kongo-Saharan." *Journal of African Languages* 11.1 (1972): 69-89.

inheritance, much less the large number of resemblances that Diop claims to exist between Egyptian and Wolof. The only conclusion that one can reach is that Diop assumed these languages were related, then looked for ways to connect features of the languages by using leaps of faith and disregarding comparative evidence from other languages which would have cast doubt on the claimed resemblances.

As someone who has devoted his professional life to the study of African languages, I have long been bemused, even consternated, by the fact that group after group of African people have fanciful histories that trace their origins to somewhere in northeast Africa or the Arabian Peninsula. I have seen published works which trace the Yorubas, the Ewes, and the Hausas to Egypt by showing putative lexical and grammatical similarities between the respective languages and Egyptian, though none attain Cheikh Anta Diop's detail and sophistication of argumentation, and unlike Diop, who claims that Wolof and other languages *share an origin* with Egyptian, these works claim the respective languages to have *descended from Egyptian*.⁶⁷ Another theory shared by some Hausas is that they come from Ethiopia (called "Habasha" in Hausa, whence the name "Hausa"!), and I have collected oral histories from a people speaking other Chadic languages who claim to have come from Yemen or Saudi Arabia.

One wonders what origin myths existed in sub-Saharan Africa prior to the arrival of Arab intellectuals and European explorers. One strongly suspects that the widespread fascination with an "eastern" origin must be an attempt by people to connect their ancestors to a civilization which has been legitimized by the "establishment", but what does ancient origin have to do with modern "worth"? The great civilizations of Egypt, Mesopotamia, Greece, Rome, the Yucatan, Central Mexico, and the Andes have long ago disintegrated thanks to a variety of human and natural forces. The ancestors of Western Europeans and their North American cousins, whose civilization, for better or worse, now dominates the world stage, were illiterate tribal barbarians a mere 2 millenia ago when Rome ruled the Western world.

⁶⁷ For Yoruba, see J. Olumide Lucas, *Yoruba Language, Its Structure and Relationship to Other Languages* (Lagos, Ore Ki Gbe Press, 1964). I regret that I cannot supply an exact reference for the Ewe study. I looked through this book on Ewe in 1988, when I saw it on sale at the Village du Bénin, a language institute in Lomé, Togo. For claims of Egyptian-Hausa connections, see Jinju and other references to his own work which Jinju cites.

The modern descendants of any of these societies, regardless of the state of the society where they currently live, cannot take credit for the achievements of their ancestors nor be blamed for their evils. Egypt was home to some of the world's great intellectual, artistic, and architectural achievements, but it also had a lousy human rights record, with brutally despotic rulers, concentration of wealth, power, and education in the hands of a tiny minority, and slavery for untold numbers. Today's Africans did not design the pyramids nor did they enslave the thousands who must have suffered to build them. The same applies to today's western Europeans, even though Meinhof confidently claimed the "Hamites", whose proto-type was the Egyptians, were of Caucasian origin. Examination of Egyptian linguistic data proves only one thing: the Egyptian language is an Afroasiatic language and hence is a descendant of the same ancestral language as all other Afroasiatic languages, regardless of who speaks them.