Niger-Congo languages

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December 24, 2013

Abstract

The Niger-Congo languages show an enormous geographic distribution across the African continent, ranging from Senegal in the north to South Africa in the south. This puts them in contact with a number of other African language families, resulting in distinctive influences for different subgroups, e.g., Khoisan influence on the Bantu languages in the south of the continent and Chadic influence on Benue-Congo languages much farther to the north.

With respect to the internal patterns of Niger-Congo, one finds a striking region, roughly in the family's center, where a number of subgroups have been affected by areally-determined changes, involving, for example, reductions in word size and noun class systems. One result of these changes is a center-periphery pattern, where Atlantic languages in the family's northern zone and Bantu languages in its southern one share typological features that are frequently lacking in the languages between them. Part of the explanation for these changes must lie outside of Niger-Congo itself, since the most affected branches of the family lie within a proposed large linguistic area that cross-cuts a number of phyla and has recently been labelled the Macro-Sudan belt.

A different issue relating to areality is presented by observed low-level patterns of language creation and diversification in the family. These suggest that a distinctive language ideology is held by the multilingual societies that characterize much of the Niger-Congo area which is likely to play a key role in devising comprehensive models of the family's areal development.

Niger-Congo languages

1 Niger-Congo: A stock spanning many areas

Niger-Congo is one of the largest language families in the world—perhaps even the largest—spanning an enormous area of Africa from the southern edge of the Sahara desert to the south of the continent itself. It further spreads across a diverse range of ecological environments, from rain forest to desert, as well as a number of apparent linguistic areas. Its internal genealogical diversity is similarly remarkable, as well as controversial in some key respects. Any discussion of the areal linguistics of the family can only begin to scratch the surface, especially if sociocultural dimensions of its language dynamics are to be taken into account. The goal of this chapter is, therefore, merely to give some general sense of the "flavor" of the areal patterns of the family's languages and highlight select topics that they raise of potential interest to the study of areal linguistics generally.

The discussion begins with an overview of the geographic distribution of the family and the state of the art with respect to the genealogical classifications of its languages in section 2. A brief summary is then given regarding salient features that most Niger-Congo languages have in common in order to set a "baseline" for discussion of areal patterns within the family, which is the subject of section 3. The paper then shifts in section 4 from a more geographic-centered view of areality to consider the relatively underexplored issue of how an appreciation of the social dynamics of speakers of Niger-Congo languages is likely to play a crucial role in coming to a fuller understanding of the family's areal patterns. In section 5, the paper concludes with a brief discussion of possible future directions for the study of Niger-Congo areal linguistics.

2 Genealogical and geographic overview

2.1 Genealogical overview

Niger-Congo is the largest referential language group in world (Williamson & Blench 2000: 11), dominating Subsaharan Africa geographically. The extent to which the "traditional" group of Niger-Congo languages forms a true genealogical unit is not clear, however, and this obviously complicates any examination of the areal linguistics of the family. Overviews of Niger-Congo can

be found in the chapters of Bendor-Samuel (1989) and in Williamson & Blench (2000), with a more up-to-date discussion of the state of scholarship on the comparative linguistics of the family to be found in Dimmendaal (2011: 85–92). Only a brief summary is given here, and Dimmendaal's (2011) treatment is given the most serious consideration as an especially recent statement on the composition of the family, though it should be stressed that not all specialists would agree with the full range of his conclusions.

There is a relatively uncontroversial "core" to the family comprising the following groups: Benue-Congo, which includes many languages of southern Nigeria, the Bantu languages, and much in between; Kwa, found in southern West Africa from Côte d'Ivoire to the Nigerian border in a contiguous band along the Atlantic coast moving substantially inland; Gur, found in an inland region of West Africa, including the bulk of Burkina Faso, southern parts of Mali, northern parts of Côte d'Ivoire, Ghana, Togo, and Benin, as well as a small portion of western Nigeria, and whose southern and eastern borders are with Kwa and Benue-Congo languages respectively; Adamawa, also an inland group, found in scattered areas of Nigeria, Cameroon, Chad, and Central African Republic; Kru, found in a strip along the West African coast directly to the west of Kwa, including the southwestern part of Côte d'Ivoire and much of Liberia; the so-called Atlantic group of languages found along and near the Atlantic coast, in an area detached from the other groups given above, in parts of Senegal, the Gambia, Guinea, and Sierra Leone; and some languages commonly referred to as Kordofanian found in the Nuba mountains of Sudan, a region quite distant from the rest of the family.

Even if the membership of the languages of these groups as part Niger-Congo is considered uncontroversial, there are still numerous questions concerning their subgrouping. To pick just one example, the validity of the languages grouped under the label Atlantic as a coherent subgroup of Niger-Congo has never been properly established, with some even suggesting it has not been abandoned merely due to "scholarly inertia" (Childs 2003: 47).

In addition to the above, various other groups have also been placed under the Niger-Congo umbrella, but their genealogical status with respect to the family remains controversial. Perhaps the most significant of these from an areal perspective is the Mande group, which occupies a large portion of western West Africa. While the inclusion of Mande within Niger-Congo has been part

of textbook presentations of the family for decades (see, e.g., Williamson & Blench (2000: 18)), the evidence for its inclusion in Niger-Congo is comparatively weak, in large part because languages of the group neither exhibit functioning noun class systems nor clear-cut remnants of them (Williamson 1989b:36; Williamson & Blench 2000:19). If Mande is not part of Niger-Congo, then some of its noteworthy features which appear to show up in less robust form in other Niger-Congo languages would be good candidates for treatment as resulting from contact-induced change affecting languages found in an area of historical Mande influence (see section 3.4). For example, Mande languages are known for their rigid S-Aux-OV-Other clausal syntax (Gensler 1994; 1997). If they are not part of Niger-Congo, then cases of other Niger-Congo languages showing Mande-like word order patterns, of the sort documented in Güldemann (2007) (see also Heine (1975:35–36; 1976:41–42; Creissels (2006))) would be candidates for having undergone syntactic change due to Mande influence. On the other hand, if Mande is part of Niger-Congo, then one must also consider the possibility of shared inheritance. Problems like these do not prevent us from describing contemporary areal patterns in the family, though they do suggest that one must avoid over-interpreting the evidence at hand with respect to specific historical scenarios.

Where relevant, further details of Niger-Congo genealogical classification will be discussed below. Since it can be daunting for an outsider to keep track of the details of a family of this size, the key points to bear in mind are that (i) there is an uncontroversial core to the family, (ii) a number of other groups have been proposed to be part of the family but the evidence is less clear, and (iii) even within the "core", very significant aspects of subgrouping remain obscure.

2.2 Geographic overview

There is one aspect of the geographic spread of Niger-Congo whose significance in terms of the areal patterns of the family seems hard to overstate: The family traverses an enormous north-south distance of around 5000 kilometers, ranging from the south of the Sahara down to the Kalahari and the southeast coast of the continent. Across this distance, one finds a wide range of ecological environments from rainforest to savannah to even Mediterranean climates in parts of South Africa. Moreover, differences in altitude can produce distinctive ecologies even in regions that are nearby

to each other, thus highland areas such as the Cameroonian Grassfields can be markedly cooler than nearby lowland regions, with concomitant impacts on food production, presence of tropical disease, etc.

The north-south distribution of the family should not be viewed merely as an interesting curiosity. As discussed by Diamond (1997: 183–189) (see also Diamond & Bellwood (2003: 599)), the relative consistency of patterns of daylight and seasons across the east-west axis facilitates spread of domesticated plants and animals, and, by extension, people and languages. Clearly, Niger-Congo patterns of language spread, especially the Bantu spread (see section 3 for further discussion) managed to overcome this bias, but the dominating pattern of areality in the family, associated with what Güldemann (2008) has termed the Macro-Sudan belt, does seem to fit within this pattern, capturing a number of branches of Niger-Congo across an east-west axis, not a north-south one. In addition, if we exclude the Bantu languages from consideration due to their relatively recent expansion and their status a subgroup of Benue-Congo (see Schadeberg (2003: 155)) rather than a primary branch of the family, Niger-Congo's overall pattern of geographic spread is much more strongly east-west than north-south.

A key concern for understanding the areal linguistics of Niger-Congo, then, is establishing the extent to which its areal patterns may have been shaped by ecological factors and determining what factors allowed Bantu to exceptionally spread from a point around the Cameroon-Nigeria borderland to contemporary South Africa. Aspects of these issues will be taken up below, though the present state of our knowledge in these regards is largely incomplete.

3 The areal patterns of the family

3.1 Niger-Congo and "African" features

Any consideration of the areal linguistics of Niger-Congo must start with some sense of the features that are found throughout the family, bearing in mind the complications surrounding its precise composition discussed in section 2.1. For instance, SVO word order predominates in the family, as it does in Subsaharan Africa generally (Dryer 2013b), though there are exceptional subgroups such as Mande, which, as discussed in section 2.1 exhibits an unusual type of SOV word order where

only a single argument is permitted before the verb and other arguments after. Similarly, languages of the Ijoid group of the Niger Delta region of Nigeria (which is only questionably Niger-Congo (Dimmendaal 2011: 92)) exhibit a more canonical SOV syntax, where the verb tends to be final in the clause (Williamson & Blench 2000: 23), as do languages of the Dogon group (see, e.g., Heath (2008: 17)) (though Dogon's status as a Niger-Congo is also not proven (Dimmendaal 2011: 90)). If we exclude these groups from Niger-Congo, SVO word order would dominate it much more than otherwise. If we were to include these groups, then, perhaps, SVO would be considered more areal in nature, prominent in the western parts and southern parts of the family but not as much so in the "central" ones.

By contrast, another noteworthy feature of Niger-Congo that is general to the family is the presence of tone. Like SVO word order, this is also a general African feature (see Maddieson (2013b)), but, while there are Niger-Congo languages lacking in tone, such as Wolof and Swahili, these are relatively restricted in their distribution rather than characterizing an entire major subgroup.

Not surprisingly given Niger-Congo's expansive range over Subsaharan Africa and ancient origins of its spread, it is difficult to find typological characteristics that would uniquely characterize Niger-Congo in opposition to the other major language families of Africa it is in contact with.[1] Thus, in the summary of "African" morphosyntactic features given in Creissels et al. (2008: 149–150), which lists around twenty different properties that seem especially common in African languages, many (if not all) of the points would apply just as well to Niger-Congo alone, such as, for instance, the relative lack of case (see, e.g., Creissels et al. (2008: 87–91)) or the presence of applicatives (Polinsky 2013).[2] This overlap between "Niger-Congo" and "African" features could be due, in principle, to a contact situation where Niger-Congo features were spread to the rest of Africa with the family itself or where Niger-Congo "absorbed" features common to much of Africa during its expansion, with the most likely possibility, of course, being some mix of the two.

[1] Heine & Leyew (2008) suggest that Africa, in its entirety, may even form a linguistic area (see also Greenberg (1983) for earlier discussion along these lines). This conclusion would seem to require a relatively weak sense of the notion "linguistic area", however, which is why the focus here is on possible areas within Africa en route to understanding Niger-Congo patterns. Güldemann (2010: 576) presents a view of the areal profile of the continent, dividing it into three "areas" and two "spread zones" in the sense of Nichols (1992; 1997).

[2] König (2008) provides a monograph-level overview of reported instances of case marking in African languages.

From a historical comparative perspective, the most significant features of Niger-Congo languages are probably noun class systems (Heine 1980: 99) and verbal extensions, the latter of which constitute a class of suffixes involved in marking valency alternations, certain kinds of aspects, and other derivational or quasi-derivational functions (see Hyman (2007a)). The presence of each of these features has been reconstructed for Proto–Niger-Congo (see Williamson (1989a: 37–40) for noun classes and Voeltz (1977) for extensions), and noun class systems, in particular, have been a key diagnostic for family membership (see, e.g., Schadeberg (1981: 122–124)). However, while these are important historical features for the family, patterns of change, in many cases connected to areal influences (see section 3.2), have dismantled these systems in even some "core" Niger-Congo languages (Hyman 2004; Good 2012). Thus, these can only be considered to be Niger-Congo features from a diachronic perspective rather than a synchronic one.

3.2 The Macro-Sudan belt set against the periphery

Almost certainly, the most significant areal patterns of Niger-Congo are found in a region which Güldemann (2008) (see also Güldemann (2011)) has recently termed the "Macro-Sudan belt", but which has long been known to be linguistically distinctive (see, e.g., Westermann (1911); Wallis (1978)), even if the role of areality as the central factor in explaining this was not recognized (Güldemann 2008: 170–174).[3] This large region runs roughly from the Atlantic Ocean in the west to the Ethiopian Highlands in the east and is bounded in the north by the Sahara and Sahel and in the south by the Central African rainforest. It contains Afro-Asiatic and Nilo-Saharan languages, as well as languages from essentially every major subgroup of Niger-Congo. The Bantu languages on the whole fall outside of the region, while the other members of its parent subgroup, Benue-Congo, lie within it, allowing divergence between Bantu and its closest relatives to serve as a useful indicator of areality, though as we will see other "peripheral" groups, such as Atlantic, are also relevant to establishing the relevant patterns as areal as well.

Perhaps the most salient linguistic feature of this region is the presence of labial-velar stops, such as *kp* and *gb*. Consonants of this kind are uncommon in almost the entire world except for

[3] Like this chapter, Dimmendaal (2001a: 365–387) also considers how features connected to the Macro-Sudan belt relate to areal patterns in Niger-Congo.

within the Macro-Sudan Belt. And, as Maddieson (2013b) writes, "The pattern is clearly strongly areal, as it is compact and crosses the boundaries of language families." For present purposes, what is additionally significant is that it does not just cross the boundaries of language families but also subgroups of Niger-Congo. Thus, if we look at Benue-Congo, there is clear divide between the Bantu languages, and the rest of the subgroup: Bantu languages generally lack labial-velars while other Benue-Congo languages generally have them. Moreover, on the whole, those Bantu languages which do show labial-velar consonants are found at or near the southern edge of the Macro-Sudan Belt (Güldemann 2008: 157).

Other features which can be associated with the Macro-Sudan belt are: the presence of ATR harmony (Clements & Rialland 2008:50–53; Güldemann 2008:158–159); the presence of labial flaps (Olson & Hajek 2003; Clements & Rialland 2008:41–42; Güldemann 2008:165–166); the presence of nasal vowels and the lack of contrastive nasal consonants (Clements & Rialland 2008:45–49; Hajek (2013)); implosive consonants (Clements & Rialland 2008:55–60; Maddieson 2013a); the presence of three or more tone levels (Wedekind 1985:109; Clements & Rialland 2008:70–74, Maddieson 2013c); special "lax" prosody for marking yes-no questions other than via final rising pitch (Clements & Rialland 2008: 75–80); the presence of logophoric markers (Güldemann 2003); S-Aux-OV-Other word order (see section 2.1 and Güldemann (2008: 159–163)); VO-Neg word order (Dryer 2009, Güldemann 2008:163–164); and the presence of serial verb constructions (Dimmendaal 2001a: 382–387). On a macro-level, the relative typologically similarity of languages within the belt can be seen in the treatment of African language typology in Cysouw & Comrie (2009: 202) which shows that, when looking at a number of typological features in aggregate, there is a pattern of east-west influence within the Macro-Sudan belt not seen strongly elsewhere on the continent.

To these general Macro-Sudan patterns, which cross-cut major language families, one can add a more specific set of changes that have been discussed specifically for Niger-Congo languages in the center of the Macro-Sudan belt. These changes are most strongly associated with languages of the Kwa subgroup and involve what one might broadly characterize as morphological reduction. This occurs both in the noun and noun phrase, where noun classes can show significant attrition, to the point of being lost entirely in synchronic terms (see Good (2012)), and in the verb and verb phrase,

where, for instance, verbal derivational suffixes are lost with serialization strategies often taking their place (see Hyman (2004)). There is a phonological aspect to this reduction as well, wherein roots tend to be reduced to CV, possibly with additional relic prefixes in nouns (see Williamson (1985)). This set of characteristics have been grouped together as comprising key features of the Kwa "type", which encompasses not only Kwa languages but also many Benue-Congo languages, especially in parts of Nigeria. At the same time, not all genealogical Kwa languages are good instances of the Kwa type. For instance, Ghana-Togo Mountain languages do not show the noun class attrition associated with the Kwa type (see Heine (1968: 112–130) and Schuh (1995)). Thus, this seems to be a good example of a properly areal pattern within Niger-Congo.

The characteristics listed above do not, in fact, uniformly characterize the entire Macro-Sudan belt. For instance, the labial flap is isolated to a central area of the region moving roughly southeast from Nigeria to the border of Uganda. Other features spread past it, such as 'surpass' comparatives, which are also found in eastern Bantu languages to the south of the belt. And, while Kwa-type languages are found within the Macro-Sudan belt, they are restricted to a central area within it, as just mentioned. Moreover, in some cases, categories like those listed above mask significant variation. For instance, while the presence of more than three tone levels is, indeed, characteristic of the Macro-Sudan belt, this blanket classification leaves out the fact that there are pockets within the region of higher tonal complexity. For instance, one finds languages with four or five tone levels in places such as southern Côte d'Ivoire where this is found for languages of the Kru, Kwa, and Mande groups, the first two of which are uncontroversially considered Niger-Congo and the last questionably so (see section 2.1).

At the same time, on the whole, the array of features found more or less within the belt is striking, covering both phonological and syntactic features with no obvious coherence, some of which are also otherwise cross-linguistically rare (e.g., labial-velar stops, ATR vowel harmony, VO-Neg word order), strongly suggesting areality is at play. The region's vast geographic spread and the fluidity of the locations of its characteristic features indicate that, rather than viewing the region in terms of long-term convergence due to multilingualism of the sort associated with prototypical sprachbunds (see, e.g., Thomason & Kaufman (1988: 95–97)), it is better conceptualized as a "zone", generalizing from the sense of the word in the terms *spread zone* and *accretion zone* of

Nichols (1992; 1997). That is, what makes it an "area" is not the specific dynamics holding among its speaker communities at any given moment but, rather, the fact that the region is conducive to the spread of features within its borders but not across them. As discussed in section 2.2, the fact that the Macro-Sudan Belt is primarily oriented along an east-west axis is probably not a coincidence here but, rather, is connected to the tendency for subsistence strategies to generally spread more effectively from east to west than north to south (see also Güldemann (2010: 580)).

In this regard, the region resembles a spread zone in the sense of Nichols (1992; 1997), though one where features spread rather than whole languages, which is quite different from the more canonical case of a spread zone of the Eurasian steppe, where features have spread more directly with languages themselves (see, e.g., Nichols (1997: 369)). Indeed, a striking feature of the Macro-Sudan Belt is the extent of its linguistic diversity since it overlaps notably with the Sub-Saharan Fragmentation Belt of Dalby (1970: 163), characterized by a greater density of distinctive languages and language groups than other parts of the continent and stretching from Senegal to the East African highlands across a width averaging 700 miles to south of the Sahara (see also Good (2013)). This pattern of feature convergence within a region of linguistic fragmentation is likely connected, at least partly, to a distinctive language ideology that characterizes the Niger-Congo area (see section 4).

3.3 "Peripheral" Niger-Congo

The Macro-Sudan Belt, just discussed in section 3.2, broadly speaking, encompasses the "center" of the Niger-Congo family, and it is largely by comparing Niger-Congo—or salient sub-parts of it, such as the region occupied by Kwa-type languages—within and outside of the Belt that the areal features of Niger-Congo languages found within it can be established at all. One of the "peripheral" groups used for such comparison, in particular, has long had a special place in Niger-Congo linguistics. This is the Bantu languages, which, in strict geographic terms, hardly seem peripheral, occupying the greater part of the southern half of the African continent, ranging from Cameroon in the west to Kenya in the east to South Africa in the south. However, their current distribution is the result of a relatively late expansion in Niger-Congo terms, though its beginnings are not nec-

essarily particularly recent, with Nurse & Philippson (2003: 5) suggesting it commenced around 5000 years ago. More important than the precise timing is the consensus that treats Bantu as a relatively minor offshoot of Benue-Congo in genealogical terms (see, e.g., Schadeberg (2003: 155)), a conclusion first explicitly reached by Greenberg (1949).

Bantu languages are generally believed to be relatively conservative in a Niger-Congo context, especially in the morphological domain. This is quite clear, for example, when they are set against many of their closest relatives in Benue-Congo and Kwa, which have been affected by the Kwa-type changes described in section 3.2. In all likelihood this is due to Bantu's status as a geographic "offshoot", which protected it from waves of change within the Macro-Sudan Belt. There are still many open questions regarding the dynamics of the Bantu expansion (see , e.g., Vansina (1995)) for a significant relatively recent proposal and Pakendorf et al. (2011) for an up-to-date synthesis bringing data from genetic investigations into the picture). However, the end result from an areal perspective is clear: A vast region of Sub-Saharan Africa has become much more linguistically homogenous than its neighboring regions, creating a distinctive linguistic area in its own right. Here, however, the overall consistency is primarily due to language spread, rather than convergence, though ongoing contact among Bantu languages has been extensive (see Schadeberg (2003: 158)), which presumably has served to reinforce spread-induced homogeneity.[4]

Nevertheless, one should be wary of overemphasizing the homogeneity of Bantu languages. Bantu languages of the "canonical" type showing, for instance, well-developed noun class systems (Katamba 2003) and significant prefixing and suffixing verb morphology (Hyman 2011: 4) are not found throughout the Bantu spread area. In the northwest region of the Bantu area, in particular, one finds languages with highly reduced noun class systems, including one language, Komo, which is reported to have no noun classes (Harries 1958: 269). (Maho (1999: 127–142) provides a general overview.) Some of the explanation for such reduced systems may be due to the effects of contact with non-Bantu languages. Komo, for instance, is spoken in a region of the Democratic Republic

[4] In the present context, it is worth pointing out that, before the arrival of Bantu, there is evidence for the presence of an older (non–Niger-Congo) linguistic area which has been referred to as the Kalahari Basin. See Güldemann (2010: 572–573).

of the Congo where Ubangian and Central Sudanic languages are found.[5] Moreover, the presence of labial-velars in the language (Harries 1958:265–266; Thomas 2011:11) suggests an affinity with the Macro-Sudan Belt (see section 3.2) unlike most of Bantu. Similarly, a language like Ewondo, found at the northwest extreme of the Bantu area in Cameroon, shows a comparatively high degree of analyticity with respect to the marking of Tense-Mood-Aspect, as evidenced by the ability of pronominal objects to appear between verbal auxiliaries and the main verb (Redden 1979: 166). This is presumably connected to close contact with Bantoid languages to the north that have been partly affected by the changes associated with the Kwa type discussed in section 3.2.

To pick another, less extreme case, the so-called interlacustrine languages seem to represent a distinctive area within the larger Bantu picture (Bastin 2003). These are languages found "between the lakes", roughly to the west of Lake Victoria around southern Uganda, Rwanda, and Burundi. By contrast, the Bantu languages found in the equatorial forest, another region that can be defined via physical features, are much more heterogenous, suggesting that, despite common ecology, there has not yet been noteworthy areal convergence (Grégoire 2003). As a final example, Güldemann (1999a) discusses some unusual patterns of suffixation on nouns in Bantu languages found in disjoint areas in the eastern and southern portions of the Bantu zone. However, even if Bantu is not as homogenous as often implicitly portrayed, it still is the case that the region is much more homogenous than the rest of the Niger-Congo area, especially in terms of lexicon. The shorter time depth of the subgroup is clearly part of the explanation for this, but sociocultural factors have presumably also played a role, as will be discussed briefly in section 4.4.

Another peripheral language group of Niger-Congo that should be considered here is Atlantic.[6] As mentioned in section 2.1, the languages subsumed under Atlantic are not clearly a genealogical grouping, but this does not prevent them from being examined from an areal perpective. Found at the northwest edge of the Niger-Congo area, languages in this group are, like Bantu, not part of the core of the Macro-Sudan area (Güldemann 2008: 152). From a Niger-Congo perspective,

[5] Current consensus would seem to place the Ubangian languages outside of Niger-Congo despite a common previous classification linking them to Adamawa languages (Dimmendaal 2008: 842). Central Sudanic languages have been classified within the Nilo-Saharan phylum.

[6] Due to its relative lack of study, I leave out detailed discussion of the most "peripheral" Niger-Congo group, Kordofanian, which is markedly detached from the rest of the family. However, based on what we know of the family, its languages show reasonably robust noun classes and verbal extensions (Good 2012:303, fn.7; Hyman 2007b:154), bringing them roughly in line with the other peripheral groups.

what is striking about some languages of this group is their relatively elaborated morphology, for instance in the domain of noun class systems (see, e.g., Corbett (2011)) and verb extensions (see Hyman (2007a)). For instance, some varieties of the Fula have exceptionally large numbers of noun classes, numbering twenty or more (see, e.g., Arnott (1970: 67–109); Breedveld (1995: 295–460)), making them much more "Bantu"-like than "Kwa"-like, despite the fact that Kwa-type languages intervene between Atlantic and Bantu (see also Hyman (2004); Good (2012)). Indeed, the parallels between the verbal structure attributed to Proto-Bantu (Meeussen 1967: 108-111) and that of the Atlantic language Bijogo, spoken on islands off the coast of mainland Guinea-Bissau (Segerer 2000:369; Segerer 2002:369), are particularly striking, especially given the geographic distance separating Bantu from Bijogo.

The historical interpretation for the similarities between Bantu and Atlantic is controversial, with the central question being the extent to which their similarities represent Niger-Congo archaisms as opposed to parallel developments, presumably facilitated by both groups' marginal status with respect to the Macro-Sudan Belt (see, e.g., Nurse (2007); Güldemann (2011); Hyman (2011)). Nevertheless, from a synchronic areal perspective, this does not prevent us from speaking of a comparatively morphologically elaborated Niger-Congo periphery against a more morphologically reduced Niger-Congo core, with extensive clinal variation in between as evidenced by, for instance, Gur languages (see, e.g., the papers in Miehe & Winkelmann (2007)).

3.4 Contact among language groups and families

The discussion to this point has largely focused on high-level areal linguistic patterns within Niger-Congo, but, of course, there is also the issue of more conventional kinds of language contact in shaping Niger-Congo grammatical patterns. (See Childs (2010a) for overview discussion of language contact in Africa.) Probably the most well-known such case involves the presence of clicks in southwestern Bantu languages (see, e.g., Herbert (1990); Vossen (1997); Bostoen & Sands (2012)). The presence of these in Bantu languages is universally attributed to contact with Khoisan languages (Güldemann & Stoneking 2008: 99), though it is not the case that they appear simply due to the borrowing of words with clicks, since clicks can be found in words that are not borrowed

from Khoisan languages, as in the form */umáte* 'tomato' in Manyo (Gciriku) (Bostoen & Sands 2012: 125), a clear European loanword. The phonological category of the click may have entered Bantu languages via Khoisan, but this has not prevented expansion in their range of use.

While clicks in some Bantu languages are the most salient outcome of contact between Bantu and Khoisan, other influences are reported as well, though these have not seen the same level of attention. Louw (1986: 152–153), for instance, discusses apparent cases of morphological borrowing from Khoe into the southern Bantu language Xhosa, such as the case of a form that derives adjectives from other adjectives and nouns with a meaning comparable to English *-ish* (see also Louw (2013: 443) and Güldemann (1999b)). However, Vossen (1997: 361) indicates that such effects were unusual in Bantu-Khoisan contact situations. Moreover, the presence of clicks has been attributed, at least in some cases, to the presence of avoidance registers in Bantu societies. This may have prompted the borrowing of clicks as a means to create lexical items fulfilling requirements of these registers, wherein words containing the same syllables as a specific set of names had to be avoided. Since clicks would not have originally been found in native Bantu words, any syllable in which they appeared would have automatically met the restrictions of such registers (see Herbert (1990: 304)), which may have motivated their borrowing even in the absence of especially intimate language contact. Taken together, these patterns suggest relatively limited language contact between Bantu speakers and Khoisan speakers without, for example, the presence of long-term stable bilingualism (Vossen 1997: 362).

Less generally well-known contact situations are found in the northern parts of the Niger-Congo area, though these have had more significant grammatical effects than the Bantu-Khoisan case (even if the actual grammatical impact is less salient than the borrowing of clicks). One such contact situation is found between Benue-Congo and Chadic languages in central Nigeria, where there is evidence for lexical, phonological, morphological, and syntactic convergence without a clear general pattern of the directionality of the changes as emanating from one group into the other (Wolff & Gerhardt 1977; Gerhardt 1983) (see also Storch (2009: 301–303) for more recent discussion). For instance, one finds the relatively uncommon intransitive copy pronoun construction in languages of both groups wherein a copy of a subject pronoun appears after the verb in intransitive clauses (see Atindogbé et al. (2011) for an overview).

Another significant region of contact influence in the northern Niger-Congo area involves the impact of Mande languages on various branches of the family. As discussed in section 2.1, there is not consensus at present regarding Mande's genealogical affiliation, and it is variously classified within Niger-Congo or as an isolate family. Nevertheless, even among those would who would place it within Niger-Congo, it is considered to represent an early branch from the rest of the family (see, e.g., Williamson & Blench (2000: 18)), and it is grammatically and lexically distinctive enough to make contact between it and the rest of Niger-Congo more comparable to contact between distinct families than, say, contact among varieties in a dialect continuum, which is characteristic of other parts of Niger-Congo, especially the Bantu area.

The most salient apparent contact effect of Mande on other Niger-Congo languages involves effects on word order. While there is not consensus on all historical details, Heine (1976: 57–58) identifies a region of West Africa that he terms the "Mande nucleus" defined by the word order properties of its languages, for instance showing genitive-noun and SOV word order (which can be seen in recent surveys such as (Dryer 2013a;b)). The special "Mande" SOV pattern, characterizable as S-Aux-OV-Other above (see section 2.1 and section 3.2) is even more widespread as a contact effect than surveys indicate, since it often appears as a common variant word order in languages otherwise characterizable as SVO (see, e.g., Heine (1976: 41); Güldemann (2007)). Childs (2003:195–203, 2010a:699–704, 2010b) discusses Mande influence on Atlantic and provides historical background accounting for why the influence appears to mostly have involved imposition of Mande patterns on other languages rather than the reverse.[7] However, this is not to say that Mande languages were not affected at all by contact. Bird (1970), for instance, suggests some degree of simplification affected the Mande language Manding due to widespread second language acquisition.

The discussion here has emphasized cases where Niger-Congo languages were impacted by contact with other language families (or divergent members of their own family) but, of course, Niger-Congo languages have also significantly impacted languages in other families. Dimmendaal (2001b) describes cases where Nilotic languages have been affected by contact with Bantu lan-

[7] See Dombrowsky-Hahn (1999) for a detailed study of a contact situation between a Mande language and a language from the Gur subgroup which shows a similar asymmetry.

guages, for instance with respect to the development of a set of tense markers in languages of the Kalenjin cluster which are functionally parallel to tense prefixes in nearby Bantu languages (Dimmendaal 2001b: 89–93) (see also Heine & Kuteva (2005: 144–147)). A more striking example is found in the mixed language, Ma'á (Mous 1994, 2003a, 2003b; Thomason 1997). Ma'á grammar is "more or less identical to that of Mbugu" a Bantu language closely related to Pare (Mous 2003a: 209–210). The difference between Ma'á and Mbugu is in the lexicon. Ma'á makes use of a "parallel lexicon" containing morphological forms with generally the same syntax and semantics as corresponding forms in Mbugu, but differing in phonological form. This parallel lexicon consists of a number of words of Cushitic origin, assumed to be elements retained from an earlier East Cushitic language spoken by the ancestors of the Ma'á speakers, making it another apparent case of Niger-Congo imposition on a language of another family—in this case, almost to the point of complete language shift.

4 Sociocultural dynamics and language ideologies

4.1 From areal states to areal processes

The discussion to this point has focused on what one might call areal "states" rather than areal "processes" (extending ideas of Greenberg (1978; 1995) to areal patterns). However, it is clear that, if we want to fully understand the areal patterns of a family like Niger-Congo, we should be aiming to not only document them as they are now but also to understand the dynamics holding among the languages of the family that were the driving factor behind the development of those areal patterns in the first place.

At least in a Niger-Congo context, this issue has not received extension investigation in the context of family-wide patterns of areality. However, there is work on the language dynamics of specific communities of clear relevance and which appears to be broadly consistent with observed family-wide patterns. In section 4.2, I will discuss some cases of language contact in urban situations, which are comparatively well studied, and in section 4.3, I will compare these cases with selected work on the linguistic and cultural dynamics of rural regions. In section 4.4, I will then

sketch out the implications of the dynamics found in these two domains for our understanding of Niger-Congo areal linguistics.

4.2 The formation of urban varieties in Niger-Congo

Language use in urban Africa has been the subject of comparatively extensive research, especially when set against non-urban areas of the continent (see, e.g., the collected papers of Mc Laughlin (2009a) and the detailed sociolinguistic investigation of Accra in Kropp Dakubu (1997)). While the languages of urban regions are, of course, not limited to those of the Niger-Congo group, including not only other languages of Africa but also colonial languages, the family's domination of the continent means that they are an integral part of the urban linguistic environment across the Sub-Saharan region.

One of the better studied cases of a Niger-Congo urban language variety is that of urban Wolof in Senegal (Mc Laughlin 2008; 2009b) (see also Irvine & Gal (2000: 47–59) for broad historical context). Urban Wolof is a prestige variety, functioning as an informal national language (despite French being the official language of the country) and is most saliently distinct from rural varieties by virtue of extensive borrowing from French. It has further become associated with urbanization in Senegal in general, rather than being the variety of a specific city (Mc Laughlin 2009b: 84) and with a distinctive urban-oriented identity (Mc Laughlin 2008: 155–156). The significance of urban Wolof in the present context relates to something that failed to happen in Senegal: Rather than French or "regular" Wolof becoming the language of the new urban populations, a new linguistic variety emerged, based on a Niger-Congo variety that was already present but with significant intermixing of "foreign" elements. This urban variety, moreover, has not replaced rural varieties but, rather, is "additive" in its sociolinguistic effect.

While each case of language contact has its own history, the particular result of contact in the Wolof case, the creation of a new variety, does not appear to be at all unusual in a Sub-Saharan African context. Kiessling & Mous (2004), for instance, discuss a number of recently formed urban youth languages in Sub-Saharan African areas dominated by Niger-Congo languages. Not all of these are primarily based on Niger-Congo varieties. For instance, Camfranglais, a youth language

of Cameroon, is primarily French-derived, but with significant influence from Cameroonian Pidgin and several other Cameroonian languages (Kiessling & Mous 2004: 306). In other cases, such as that of Isicamtho (Childs 1997, 2003:212–216; Kiessling & Mous 2004:310), the language is primarily based on a Niger-Congo variety (in this case, Zulu). However, less important than the particular linguistic mixture is the fact that urban social contexts of this part of the world seem especially prone to the formation of such kinds of new varieties, and, as Kiessling & Mous (2004: 305) point out, a notable feature of them is the fact that they do not merely arise but are also named, enhancing their visibility as lexicogrammatical codes.

Thus, as with Urban Wolof, urban youth languages again point to a pattern characteristic to Sub-Saharan Africa where language contact leads to the development of recognized new linguistic varieties. I am not aware of any work which suggests this is specifically a Niger-Congo pattern, as opposed to encompassing Sub-Saharan Africa more generally, but it certainly is the case that this linguistic culture implicates much, and in all likelihood most, of the Niger-Congo area. (Of course, it is difficult in general to ever specifically separate out any "Niger-Congo" pattern from a "Sub-Saharan" one given Niger-Congo's spread on the continent.)

Other examples of such new variety formation are not hard to find (see Childs (2003: 214–215) and Kiessling & Mous (2004)). A relatively well-studied case is that of Sheng, originating in Nairobi and which is described as involving a mixture of elements of Swahili, English, and other languages of Kenya (see, e.g., Mazrui (1995); Rudd (2008)). A less well-studied parallel variety has also arisen in Nairobi known as Engsh, which is more heavily English-based than the Swahili-dominated Sheng (Abdulaziz & Osinde 1997). While the general interpretation of the development of these varieties is that they are connected to the construction of new identities in urban contexts, as will be discussed in section 4.3, there is reason to believe that the processes that underlie their development are not specifically "urban" in nature but, rather, have their roots in patterns of language use also found in more traditional contexts.

Alongside varieties specifically associated with urban environments, the development of various contact varieties of Niger-Congo languages, some of which have been treated as partially pidginized or creolized, also bears mentioning at present as providing additional cases where new language formation has taken place as new social contexts form. Mufwene (2003) presents an

overview of significant issues with respect to contact languages of the Bantu area, which are comparatively well studied in this regard.

4.3 The continuity of urban and rural language dynamics

It is clear that many urban contexts dominated by Niger-Congo languages have proven to be fertile ground for the formation of new language varieties. A question that arises from this is whether there is something special about urban contexts in Africa that causes them to not merely be multilingual, but to also promote the creation of new languages on top of indigenous and colonial ones or whether this urban pattern may represent simply a new instantiation of processes that characterized the Niger-Congo area long before modern patterns of urban living.

In fact, there is a fair amount of evidence that what we see in urban environments is not particularly distinctive in historical terms. For instance, urban youth vernaculars, such as those discussed in section 4.2, are typically seen as having developed, at least partly, out of a desire for secrecy. This is suggested, for example, by Isicamtho's origins as being associated with criminals (Childs 1997: 345) and Sheng's purported origins as a variety for groups of teenagers seeking special in-group communication (Abdulaziz & Osinde 1997: 49). Such varieties show immediate parallels to secret languages used for ritual purposes such as what is described in Storch (2004: 344–345) and Lüpke & Storch (2013: 81–82) for Jukun languages of the Benue-Congo subgroup. As Dimmendaal (2011: 252) describes it, "modern youth languages constitute a continuation or extension of ancient traditions of language manipulation." He, thus, draws an explicit link between urban and rural language dynamics. More generally, there is rich documentation of what one might call a tendency towards language "inventiveness" found throughout Sub-Saharan Africa, where new varieties emerge to serve specific social functions, often via what appears to be deliberate linguistic manipulation (see, e.g., Storch (2011) and Lüpke & Storch (2013: 77–122)).[8]

It is useful here to return to the case of Wolof given Irvine's (1978) study of variation in the language in a rural context. In this case, variability in the use of noun classes was associated with a speaker's social position. Wolof, thus, provides us with a instance where variation is tied to social

[8] Avoidance registers fall into this class as well and, as discussed in section 3.4, an avoidance register is likely to have been one of the routes through which clicks entered southern Bantu languages.

status in both urban and rural contexts (see section 4.2), but where the locus of variation is different in each environment. Urban Wolof is most saliently distinct by virtue of its French borrowings, while rural varieties construct distinctiveness using the "native" material of noun classes. In both cases, one can observe a kind of creative varietal formation to serve social ends.

Di Carlo & Good (2014+), on the basis of a case study of a small, linguistically diverse and rural region of Cameroon known as Lower Fungom, have argued for the prominence of a language ideology in Sub-Saharan Africa that is primarily *indexical* rather than *essentialist* in orientation.[9] That is, languages are not treated as markers of "essential" and immutable ethnicities, as is typical of Western language ideologies in the form of the so-called Herderian equation of language, culture, and nation (see, e.g., Hymes (1968; 1972); Foley (2005)). Rather, their primary function is to index a speaker's association with a particular socio-political group (in the Lower Fungom case, a specific village), comparable to the notion of a "community of practice" as developed in the sociolinguistic literature (see, e.g. Bucholtz (1999); Eckert (2000)).

Di Carlo & Good (2014+) further suggest that this ideology can be correlated with patterns of change that do not align well with standard models of language diversification as involving tree-like or wave-like patterns, but, rather, are more likely to involve language mixing as a means to rapidly create new identities. This would be a clear rural parallel to the formation of a variety like Sheng, discussed in section 4.2, with the major difference that, in the rural Lower Fungom case, the apparent mixing is only among Bantoid languages, rather than taking place between a Niger-Congo language and an Indo-European one. It seems important to bear in mind, in this regard, that language mixing is most visible when involving distantly related languages, which means that there might be many cases of mixing among closely related Niger-Congo languages that have yet to be detected.

It is useful here to consider ethnographic work like that of Kopytoff (1987), which tries to identify general cultural patterns in Sub-Saharan Africa and, by extension, Niger-Congo (see also Zeitlyn & Connell (2003)). Kopytoff (1987: 24) specifically characterizes societies in this part of the world as being built around groups of solidarity, ranging from the kin group to the village to the kingdom. A given individual would be attached to several such groups as a means to ensure

[9] Good (2013) considers this region form an areal perspective.

personal security. Following Di Carlo & Good (2014+), one of the most salient means to signal such group affiliation would be through the use of the linguistic varieties associated with these groups. While this is an emerging, rather than established, area of research, it suggests that a distinctive underlying cultural pattern may be responsible for noteworthy aspects of language use and diversification both in contemporary urban and traditional rural Sub-Saharan Africa, in particular the association of new social contexts with the development of new linguistic varieties.

When this is linked to additional observable complex patterns of multilingualism (see, e.g., Lüpke & Storch (2013: 13–48)) in the Niger-Congo area, a pattern emerges that suggests one of the defining areal features of Niger-Congo is the way a particular language ideology results in language dynamics associated with the frequent emergence (and, necessarily, loss) of language varieties to fulfill different social functions. These dynamics can involve creative use of ambient grammatical material, either through manipulation or mixing, to construct new varieties and are led by speaker communities where individual mastery of multilingual repertories is the normal state of affairs. To the extent that this sketch is correct, it has consequences for long-term patterns of historical change in Niger-Congo, and this is briefly explored in the next section.

4.4 From local dynamics to areal patterns

If we take seriously the idea that patterns such as those described in section 4.2 and section 4.3 are not merely isolated cases of new variety formation but, rather, represent instantiations of a more general Niger-Congo pattern, then this has clear consequences for our understanding of the areal dynamics of the family. In particular, it seems clear that repeated instances of the formation of new varieties involving creative mixing and manipulation of "ambient" grammatical material would be unlikely to result in tree-like or wave-like patterns of diversification, of the sort that have long been considered to be the normal state of affairs for language change, and which are still frequently applied to Bantu data (see, e.g., Holden & Gray (2006)).

This is not to say that Niger-Congo diversification would never have involved such types of change. For instance, the genealogical division between some groups in contact, such as Gur and Kwa has been viewed as completely unambiguous, indicating that tree-like diversification must

have taken place at some (distant) point in Niger-Congo's history. But, at the same time, one is confronted with long-standing problems such as the fact that clear criteria for distinguishing Bantu languages from their closest relatives have never been devised (see Nurse & Philippson (2003: 5–7)). More strikingly, despite success in reconstructing Proto-Bantu elements, it has not been possible to arrive at consensus on Bantu-internal subgrouping (see, e.g., Schadeberg (2003)).

It seems worth considering that this may not be due to a failure on the part of comparative linguists to find the "right" grammatical and lexical features but may rather be due to the historical forces shaping language change in the family itself. Perhaps millennia of new variety formation, following the patterns outlined above, have obscured tree-like patterns of divergence, or even prevented them from developing in the first place in many cases.[10] If so, this suggests that the future of Niger-Congo areal studies may need to consider much more closely the special role that the cultural configurations of Niger-Congo societies and, in particular, their language ideologies, may have played in shaping the current areal patterns of the family. This would require moving away from models that simply treat language change as resulting from "natural" processes of diversification and, instead, view it as inherently culturally embedded (see also Heggarty et al. (2010: 3830)).

Adopting this perspective may also play a role in understanding why the Macro-Sudan Belt shows grammatical convergence in a manner reminiscent of what is found in spread zones, despite showing extreme linguistic diversity (see section 3.2). Communities in this region may have required outwardly distinct languages for social purposes while simultaneously consistently exchanging grammatical features as a result intimate, low-level contact. The end result would be typological convergence, but linguistic divergence.

5 Moving forward in Niger-Congo areal studies

As obvious as it may be, it bears repeating that the present state of our knowledge of the areal linguistics of Niger-Congo is severely limited. The vastness of the family, in terms of numbers of languages, speakers, and geographic spread presents daunting challenges for synthesizing the data

[10] One can, of course, attempt to fit a tree onto any comparative linguistic data, as Holden & Gray (2006) do with Bantu lexical data, but this sort of work begins with the assumption that the basic nature of divergence will result in tree-like patterns and cannot, therefore, test the validity of the model in the first place.

required to come to a full understanding of its areal patterns. But, we are also confronted with a lack of consensus regarding the composition of the family and its internal subgrouping (see section 2.1).

The usual response to such a situation—that we need more data—of course, to some extent, applies. However, simply adding more data on top of the already considerable amount of unsynthesized data already available will not suddenly reveal a clear picture, where there was, previously, a murky one. Instead, we would seem to need new models for understanding the nature of language contact and language change in the Niger-Congo area, which build the observed realities of widespread multilingualism and rapid formation of new varieties into their foundations. Only by arriving at an improved understanding of how Niger-Congo cultures have impacted Niger-Congo languages will we be able to seriously explore salient linguistic questions such as what has allowed labial-velars to spread widely within the Macro-Sudan Belt but not beyond it, why the striking and "marked" Khoisan feature of clicks was able to be integrated into Bantu languages without significant grammatical change, or why it has been so difficult to find clear linguistic dividing lines for many subgroups despite linguists' intuitions that they should exist—just to pick three of the many important areal questions posed by the family.

References

Abdulaziz, Mohamed H. & Ken Osinde. 1997. Sheng and Engsh: Development of mixed codes among the urban youth in Kenya. *International Journal of the Sociology of Language* 125. 43–63.

Arnott, D.W. 1970. *The nominal and verbal systems of Fula*. Oxford: OUP.

Atindogbé, Gratien G., Anne Storch & Roger M. Blench. 2011. Introduction. In Anne Storch, Gratien G. Atindogbé & Roger M. Blench. (eds.), *Copy pronouns: Case studies from African languages*. Köln: Rüdiger Köppe.

Bastin, Yvonne. 2003. The interlacustrine zone (zone J). In Derek Nurse & Gérard Philippson (eds.), *The Bantu languages*, 501–528. London: Routledge.

Bendor-Samuel, John (ed.). 1989. *The Niger-Congo languages: A classification and description of Africa's largest language family*. Lanham, MD: University Press of America.

Bird, Charles S. 1970. The development of Mandekan (Manding): A study of the role of extra-linguistic factors in linguistic change. In David Dalby (ed.), *Language and history in Africa*, 146–159. New York: Africana Publishing Company.

Bostoen, Koen & Bonny Sands. 2012. Clicks in south-western Bantu languages: Contact-induced vs. language-internal lexical change. In Matthias Brenzinger & Anne-Maria Fehn (eds.), *Proceedings of the 6th World Congress of African Linguistics (WOCAL 6)*, 121–132. Köln: Köppe.

Breedveld, J. O. 1995. *Form and meaning in Fulfulde: A morphophonological study of Maasinankoore*. Leiden: Research School CNWS.

Bucholtz, Mary. 1999. "Why be normal?" Language and identity practices in a community of nerd girls. *Language in Society* 28. 203–223.

Childs, G. Tucker. 1997. The status of Isicamtho, an Nguni-based urban variety of Soweto. In Arthur K. Spears & Donald Winford (eds.), *The structure and status of pidgins and creoles*, 341–367. Amsterdam: Benjamins.

Childs, G. Tucker. 2003. *An introduction to African languages*. Amsterdam: Benjamins.

Childs, G. Tucker. 2010a. Language contact in Africa: A selected review. In Raymond Hickey (ed.), *The handbook of language contact*, 695–713. Chichester, West Sussex: Wiley-Blackwell.

Childs, G. Tucker. 2010b. The Mande and Atlantic groups of Niger-Congo: Prolonged contact with asymmetrical consequences. *Journal of Language Contact* THEMA 3. 15–46.

Clements, George N. & Annie Rialland. 2008. Africa as a phonological area. In Bernd Heine & Derek Nurse (eds.), *Africa as a phonological area*, 36–85. Cambridge: CUP.

Corbett, Greville G. 2011. Number of genders. In Matthew S. Dryer & Martin Haspelmath (eds.), *The World Atlas of Language Structures online*. Munich: Max Planck Digital Library. http://wals.info/chapter/30.

Creissels, Denis. 2006. S-O-V-X constituent order and constituent order alternations in West African languages. In Rebecca T. Cover & Yuni Kim (eds.), *Proceedings of the thirty-first annual meeting of the Berkeley Linguistics Society*, 37–51. Berkeley: Berkeley Linguistics Society.

Creissels, Denis, Gerrit J. Dimmendaal, Zygmunt Frajzyngier & Christa König. 2008. Africa as a morphosyntactic area. In Bernd Heine & Derek Nurse (eds.), *A linguistic geography of Africa*, 86–150. Cambridge: CUP.

Cysouw, Michael & Bernard Comrie. 2009. How varied typologically are the languages of Africa. In Rudolf Botha & Chris Knight (eds.), *The cradle of language*, 189–203. Oxford: OUP.

Dalby, David. 1970. Reflections on the classification of African languages: With special reference to the work of Sigismund Wilhelm Koelle and Malcolm Guthrie. *African Language Studies* 11. 147–171.

Di Carlo, Pierpaolo & Jeff Good. 2014+. What are we trying to preserve? Diversity, change, and ideology at the edge of the Cameroonian Grassfields. In Peter K. Austin & Julia Sallabank (eds.), *Endangered languages: Ideologies and beliefs*. Oxford: OUP.

Diamond, Jared. 1997. *Guns, germs, and steel*. London: Vintage.

Diamond, Jared & Peter Bellwood. 2003. Farmers and their languages: The first expansions. *Science* 300. 597–603.

Dimmendaal, Gerrit J. 2001a. Areal diffusion versus genetic inheritance: An African perspective. In Alexandra Y. Aikhenvald & Robert M. W. Dixon (eds.), *Areal diffusion and genetic inheritance: Problems in comparative linguistics*, 359–392. Oxford: OUP.

Dimmendaal, Gerrit J. 2001b. Language shift and morphological convergence in the Nilotic area. In Derek Nurse (ed.), *Historical language contact in Africa* (SUGIA 16/17*)*, 83–124. Köln: Rüdiger Köppe.

Dimmendaal, Gerrit J. 2008. Language ecology and linguistic diversity on the African continent. *Language and Linguistics Compass* 2. 840–858.

Dimmendaal, Gerrit J. 2011. *Historical linguistics and the comparative study of African languages*. Amsterdam: Benjamins.

Dombrowsky-Hahn, Klaudia. 1999. *Phénomènes de contact entre les langues minyanka et bambara (sud du Mali)*. Köln: Köppe.

Dryer, Matthew S. 2009. Verb-object-negative order in central Africa. In Norbert Cyffer, Erwin Ebermann & Georg Ziegelmeyer (eds.), *Negation patterns in West African languages and beyond*, 307–362. Amsterdam: Benjamins.

Dryer, Matthew S. 2013a. Order of genitive and noun. In Matthew S. Dryer & Martin Haspelmath (eds.), *The World Atlas of Language Structures online*. Leipzig: Max Planck Institute for Evolutionary Anthropology. http://wals.info/chapter/86.

Dryer, Matthew S. 2013b. Order of subject, object and verb. In Matthew S. Dryer & Martin Haspelmath (eds.), *The World Atlas of Language Structures online*. Leipzig: Max Planck Institute for Evolutionary Anthropology. http://wals.info/chapter/81.

Eckert, Penelope. 2000. *Linguistic variation as social practice: The linguistic construction of identity in Belten High*. Oxford: Blackwell.

Foley, William A. 2005. Personhood and linguistic identity, purism and variation. In Peter K. Austin (ed.), *Language documentation and description, volume 3*, 157–180. London: Hans Rausing Endangered Languages Project.

Gensler, Orin D. 1994. On reconstructing the syntagm S-Aux-O-V-Other to Proto–Niger-Congo. In Kevin E. Moore, David A. Peterson & Comfort Wentum (eds.), *Proceedings of the twentieth annual meeting of the Berkeley Linguistics Society, special session on historical issues in African linguistics*, 1–20. Berkeley: Berkeley Linguistics Society.

Gensler, Orin D. 1997. Grammaticalization, typology, and Niger-Congo word order: Progress on a still-unsolved problem. *Journal of African Languages and Linguistics* 18. 57–93.

Gerhardt, Ludwig. 1983. Lexical interferences in the Chadic/Benue-Congo border-area. In Ekkehard Wolff & Hilke Meyer-Bahlberg (eds.), *Studies in Chadic and Afroasiatic linguistics*, 301–310. Hamburg: Helmut Buske.

Good, Jeff. 2012. How to become a "Kwa" noun. *Morphology* 22. 293–335.

Good, Jeff. 2013. A (micro-)accretion zone in a remnant zone? Lower Fungom in areal-historical perspective. In Balthasar Bickel, Lenore A. Grenoble, David A. Peterson & Alan Timberlake (eds.), *Language typology and historical contingency: In honor of Johanna Nichols*, 265–282. Amsterdam: Benjamins.

Greenberg, Joseph H. 1949. Studies in African linguistic classification: III. The position of Bantu. *Southwestern Journal of Anthropology* 5. 309–317.

Greenberg, Joseph H. 1978. Diachrony, synchrony, and language universals. In Joseph H. Greenberg (ed.), *Universals of human language*, 61–91. Stanford: Stanford University Press.

Greenberg, Joseph H. 1983. Some areal characteristics of African languages. In Ivan R. Dihoff (ed.), *Current approaches to African linguistics, volume 1*, 3–21. Dordrecht: Foris.

Greenberg, Joseph H. 1995. The diachronic typological approach to language. In Masayoshi Shibatani & Theodora Bynon (eds.), *Approaches to language typology*, 145–166. Oxford: OUP.

Grégoire, Claire. 2003. The Bantu languages of the forest. In Derek Nurse & Gérard Philippson (eds.), *The Bantu languages*, 349–370. London: Routledge.

Güldemann, Tom. 1999a. The genesis of verbal negation in Bantu and its dependency on functional features of clause types. In Jean-Marie Hombert & Larry M. Hyman (eds.), *Bantu historical linguistics: Theoretical and empirical perspectives*, 545–587. Stanford: CSLI.

Güldemann, Tom. 1999b. Head-initial meets head-final: Nominal suffixes in eastern and southern Bantu from a historical perspective. *Studies in African Linguistics* 28. 49–91.

Güldemann, Tom. 2003. Logophoricity in Africa: An attempt to explain and evaluate the significance of its modern distribution. *Sprachtypologie und Universalienforschung* 56. 366–387.

Güldemann, Tom. 2007. Preverbal objects and information structure in Benue-Congo. In Enoch O. Aboh, Katharina Harmann & Malte Zimmerman (eds.), *Focus strategies in African languages: The interaction of focus and grammar in Niger-Congo and Afro-Asiatic*, 83–112. Berlin: Mouton de Gruyter.

Güldemann, Tom. 2008. The Macro-Sudan belt: Towards identifying a linguistic area in northern Sub-Saharan Africa. In Bernd Heine & Derek Nurse (eds.), *A linguistic geography of Africa*, 151–185. Cambridge: CUP.

Güldemann, Tom. 2010. Sprachraum and geography: Linguistic macro-areas in Africa. In Alfred Lameli, Roland Kehrein & Stefan Rabanus (eds.), *Language and space: An international handbook of linguistic variation: Volume 2: Language mapping*, 561–585. Berlin: De Gruyter Mouton.

Güldemann, Tom. 2011. Proto-Bantu and Proto-Niger-Congo: Macro-areal typology and linguistic reconstruction. In Osamu Hieda, Christa König & Hirosi Nakagawa (eds.), *Geographical typology and linguistic areas: With special reference to Africa*, 109–141. Amsterdam: Benjamins.

Güldemann, Tom & Mark Stoneking. 2008. A historical appraisal of clicks: A linguistic and genetic population perspective. *Annual Review of Anthropology* 37. 93–109.

Hajek, John. 2013. Vowel nasalization. In Matthew S. Dryer & Martin Haspelmath (eds.), *The World Atlas of Language Structures online*. Leipzig: Max Planck Institute for Evolutionary Anthropology. http://wals.info/chapter/10.

Harries, Lyndon. 1958. Kụmu: A sub-Bantu language. *Kongo-Overzee* 265–296.

Heath, Jeffrey. 2008. *A grammar of Jamsay*. Berlin: Mouton.

Heggarty, Paul, Warren Maguire & April McMahon. 2010. Splits or waves? Trees or webs? How divergence measures and network analysis can unravel language histories. *Philosophical Transactions of the Royal Society B: Biological Sciences* 365. 3829–3843.

Heine, Bernd. 1968. *Die Verbreitung und Gliederung der Togorestsprachen*. Berlin: Dietrich Reimer.

Heine, Bernd. 1975. Language typology and convergence areas in Africa. *Linguistics* 144. 27–47.

Heine, Bernd. 1976. *A typology of African languages: Based on the order of meaningful elements*. Berlin: D. Riemer.

Heine, Bernd. 1980. Methods in comparative Bantu linguistics (the problem of Bantu linguistic classification). In Luc Bouquiaux (ed.), *L'expansion bantoue: Actes du colloque international du CNRS, Viviers (France) 4–16 avril 1977. Volume II*, 295–308. Paris: SELAF.

Heine, Bernd & Tania Kuteva. 2005. *Language contact and grammatical change*. Cambridge: CUP.

Heine, Bernd & Zelealem Leyew. 2008. Is Africa a linguistic area? In Bernd Heine & Derek Nurse (eds.), *A linguistic geography of Africa*, vol. 15–35. Cambridge: CUP.

Herbert, Robert K. 1990. The sociohistory of clicks in southern Bantu. *Anthropological Linguistics* 3/4. 295–315.

Holden, Clare J. & Russell D. Gray. 2006. Rapid radiation, borrowing and dialect continua in the Bantu languages. In Peter Forster & Colin Renfrew (eds.), *Phylogenetic methods and the prehistory of languages*, 19–31. Cambridge: McDonald Institute for Archaeological Research.

Hyman, Larry M. 2004. How to become a "Kwa" verb. *Journal of West African Languages* 30. 69–88.

Hyman, Larry M. 2007a. Niger-Congo verb extensions: Overview and discussion. In Doris L. Payne & Jaime Peña (eds.), *Selected proceedings of the 37th Annual Conference on African Linguistics*, 149–163. Somerville, MA: Cascadilla.

Hyman, Larry M. 2007b. Reconstructing the Proto-Bantu verbal unit: Internal evidence. In Nancy C. Kula & Lutz Marten (eds.), *SOAS Working Papers in Linguistics, volume 15*, 201–211. London: SOAS.

Hyman, Larry M. 2011. The Macro-Sudan Belt and Niger-Congo reconstruction. *Language Dynamics and Change* 1. 3–49.

Hymes, Dell H. 1968. Linguistic problems in defining the concept of "tribe". In June Helm (ed.), *Essays on the problem of tribe: Proceedings of the 1967 Annual Spring Meeting of the American Ethnological Society*, 65–90. Seattle: University of Washington Press.

Hymes, Dell H. 1972. Linguistic aspects of comparative political research. In Robert T. Holt & John E. Turner (eds.), *The methodology of comparative research*, 295–341. New York: Free Press.

Irvine, Judith T. 1978. Wolof noun classification: The social setting of divergent change. *Language in Society* 7. 37–64.

Irvine, Judith T. & Susan Gal. 2000. Language ideology and linguistic differentiation. In Paul V. Kroskrity (ed.), *Regimes of language: Ideologies, polities, and identities*, 35–83. Santa Fe, New Mexico: School of American Research Press.

Katamba, Francis. 2003. Bantu nominal morphology. In Derek Nurse & Gérard Philippson (eds.), *The Bantu languages*, 103–120. London: Routledge.

Kiessling, Roland & Maarten Mous. 2004. Urban youth languages in Africa. *Anthropological Linguistics* 46. 303–341.

König, Christa. 2008. *Case in Africa*. Oxford: OUP.

Kopytoff, Igor. 1987. The internal African frontier: The making of African political culture. In Igor Kopytoff (ed.), *The African frontier: The reproduction of traditional African societies*, 3–84. Bloomington: Indiana University Press.

Kropp Dakubu, M. E. 1997. *Korle meets the sea: A sociolinguistic history of Accra*. Oxford: OUP.

Louw, J. A. 1986. Some linguistic influence of Khoi and San in the prehistory of the Nguni. In Rainer Vossen & Klaus Keuthmann (eds.), *Contemporary studies on Khoisan: In honour of Oswin Köhler on the occasion of his 75th birthday*, 141–168. Hamburg: Helmut Buske.

Louw, J. A. 2013. The impact of Khoesan on Southern Bantu. In Rainer Vossen (ed.), *The Khoesan languages*, 435–444. Abingdon, UK: Routledge.

Lüpke, Friederike & Anne Storch. 2013. *Repertoires and choices in African languages*. Berlin: De Gruyter Mouton.

Maddieson, Ian. 2013a. Glottalized consonants. In Matthew S. Dryer & Martin Haspelmath (eds.), *The World Atlas of Language Structures online*. Leipzig: Max Planck Institute for Evolutionary Anthropology. http://wals.info/chapter/7.

Maddieson, Ian. 2013b. Presence of uncommon consonants. In Matthew S. Dryer & Martin Haspelmath (eds.), *The World Atlas of Language Structures online*. Leipzig: Max Planck Institute for Evolutionary Anthropology. http://wals.info/chapter/19.

Maddieson, Ian. 2013c. Tone. In Matthew S. Dryer & Martin Haspelmath (eds.), *The World Atlas of Language Structures online*. Leipzig: Max Planck Institute for Evolutionary Anthropology. http://wals.info/chapter/13.

Maho, Jouni. 1999. *A comparative study of Bantu noun classes*. Göteburg: Acta Universitatis Gothoburgensis.

Mazrui, Alamin M. 1995. Slang and code-switching: The case of Sheng in Kenya. *Afrikanistische Arbeitspapiere* 42. 168–179.

Mc Laughlin, Fiona. 2008. The ascent of Wolof as an urban vernacular and national lingua franca in Senegal. In *Globalization and language vitality: Perspective from Africa*, 142–170. London: Continuum.

Mc Laughlin, Fiona (ed.). 2009a. *The languages of urban Africa*. London: Continuum.

Mc Laughlin, Fiona. 2009b. Senegal's early cities and the making of an urban language. In Fiona Mc Laughlin (ed.), *The languages of urban Africa*, 71–85. London: Continuum.

Meeussen, A.E. 1967. Bantu grammatical reconstructions. *Africana Linguistica* 3. 79–121.

Miehe, Gudrun & Kerstin Winkelmann (eds.). 2007. *Noun class systems in Gur languages, volume 1: Southwestern Gur languages (without Gurunsi)*. Köln: Rüdiger Köppe.

Mous, Maarten. 1994. Ma'a or Mbugu. In Peter Bakker & Maarten Mous (eds.), *Mixed languages: 15 case studies in language intertwining*, 175–200. Amsterdam: IFOTT.

Mous, Maarten. 2003a. The linguistic properties of lexical manipulation and its relevance for Ma'á. In Yaron Matras & Peter Bakker (eds.), *The mixed language debate: Theoretical and empirical advances*, 209–235. Berlin: Mouton.

Mous, Maarten. 2003b. *The making of a mixed language: The case of Ma'a/Mbugu*. Amsterdam: Benjamins.

Mufwene, Salikoko S. 2003. Contact languages in the Bantu area. In Derek Nurse & Gérard Philippson (eds.), *The Bantu languages*, 195–208. London: Routledge.

Nichols, Johanna. 1992. *Linguistic diversity in space and time*. Chicago: University of Chicago Press.

Nichols, Johanna. 1997. Modeling ancient population structures and movement in linguistics. *Annual Review of Anthropology* 26. 359–384.

Nurse, Derek. 2007. Did the Proto-Bantu verb have a synthetic or an analytic structure? In Nancy C. Kula & Lutz Marten (eds.), *SOAS Working Papers in Linguistics, volume 15*, 239–256. London: SOAS.

Nurse, Derek & Gérard Philippson. 2003. Introduction. In Derek Nurse & Gérard Philippson (eds.), *The Bantu languages*, 1–12. London: Routledge.

Olson, Kenneth S. & John Hajek. 2003. Cross-linguistic insights on the labial flap. *Linguistic Typology* 7. 157–186.

Pakendorf, Brigitte, Koen Bostoen & Cesare de Filippo. 2011. Molecular perspectives on the Bantu expansion: A synthesis. *Language Dynamics and Change* 1. 50–88.

Polinsky, Maria. 2013. Applicative constructions. In Matthew S. Dryer & Martin Haspelmath (eds.), *The World Atlas of Language Structures online*. Leipzig: Max Planck Institute for Evolutionary Anthropology. http://wals.info/chapter/109.

Redden, James E. 1979. *A descriptive grammar of Ewondo*. Carbondale, IL: Department of Linguistics, Southern Illinois University.

Rudd, Philip W. 2008. *Sheng: The mixed language of Nairobi*. Muncie, IN: Ball State University Ph.D. dissertation.

Schadeberg, Thilo. 1981. Das Kordofanische. In Bernd Heine, Thilo C. Schadeberg & Ekkehard Wolff (eds.), *Die Sprachen Afrikas*, 117–128. Hamburg: Helmut Buske.

Schadeberg, Thilo C. 2003. Historical linguistics. In Derek Nurse & Gérard Philippson (eds.), *The Bantu languages*, 143–163. London: Routledge.

Schuh, Russell G. 1995. Avatime noun classes and concord. *Studies in African Linguistics* 24. 123–149.

Segerer, Guillaume. 2000. *Description de la langue bijogo (Guinée Bissau)*. Paris: Université de la Sorbonne Nouvelle, Paris III, Ph.D. thesis.

Segerer, Guillaume. 2002. *La langue bijogo de Babaque (Guinée Bissau)*. Louvain-Paris: Peeters.

Storch, Anne. 2004. Traces of a secret language—Circumfixes in Hone (Jukun) plurals. In Akinbiyi Akinlabi & Oluseye Adesola (eds.), *Proceedings of the fourth World Congress of African Linguistics*, 337–349. Köln: Köppe.

Storch, Anne. 2009. Cultured contact—Ritualisation and semantics in Jukun. In Wilhelm J.G. Möhlig, Frank Seidel & Marc Seifert (eds.), *Language contact, language change and history based on language sources in Africa* (SUGIA 20), 297–319. Köln: Köppe.

Storch, Anne. 2011. *Secret manipulations: Language and context in Africa*. Oxford: OUP.

Thomas, John Paul. 2011. *A morphophonology of Komo: Non-tonal phenomena*. SIL Electronic Working Papers 2011-006.

Thomason, Sarah G. 1997. Ma'a (Mbugu). In Sarah G. Thomason (ed.), *Contact languages: A wider perspective*, 469–487. Amsterdam: Benjamins.

Thomason, Sarah G. & Terrence Kaufman. 1988. *Language contact, creolization, and genetic linguistics*. Berkeley: UC Press.

Vansina, Jan. 1995. New linguistic evidence and "the Bantu expansion". *The Journal of African History* 36. 173–195.

Voeltz, Erhard Friedrich Karl. 1977. *Proto Niger-Congo verb extensions*. Los Angeles: UCLA Ph.D. dissertation.

Vossen, Rainer. 1997. What click sounds got to do in Bantu: Reconstructing the history of language contacts in southern Africa. In Birgit Smieja & Meike Tasch (eds.), *Human contact through language and linguistics*, 353–366. Frankfurt: Peter Lang.

Wallis, Barry M. 1978. *Diedrich Westermann's* Die westlichen Sudansprachen *and the classification of the languages of West Africa*. Evanston, IL: Northwestern University Ph.D. dissertation.

Wedekind, Klaus. 1985. Thoughts when drawing a map of tone languages. *Afrikanistische Arbeitspapiere* 1. 105–124.

Westermann, Diedrich. 1911. *Die Sudansprachen: Eine sprachvergleichende Studie*. Hamburg: L. Friedrichsen.

Williamson, Kay. 1985. How to become a Kwa language. In Adam Makkai & Alan K. Melby (eds.), *Linguistics and philosophy: Essays in honor of Rulon S. Wells*, 427–443. Amsterdam: Benjamins.

Williamson, Kay. 1989a. Benue-Congo overview. In John Bendor-Samuel (ed.), *The Niger-Congo languages: A classification and description of Africa's largest language family*, 247–274. Lanham, MD: University Press of America.

Williamson, Kay. 1989b. Niger-Congo overview. In John Bendor-Samuel (ed.), *The Niger-Congo languages: A classification and description of Africa's largest language family*, 3–45. Lanham, MD: University Press of America.

Williamson, Kay & Roger M. Blench. 2000. Niger-Congo. In Bernd Heine & Derek Nurse (eds.), *African languages: An introduction*, 11–42. Cambridge: CUP.

Wolff, Ekkehard & Ludwig Gerhardt. 1977. Interferenzen zwischen Benue-Kongo- und Tschad-Sprachen. In Wolfgang Voigt (ed.), *XIX. deutscher Orientalistentag*, 1518–1543. Wiesbaden: F. Steiner.

Zeitlyn, David & Bruce Connell. 2003. Ethnogenesis and fractal history on an African frontier: Mambila–Njerep–Mandulu. *Journal of African History* 44. 117–138.