

Language Contact, Areality, and History: the Songhay Question Revisited¹

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1. Historical background

The proposal that Songhay be included in Nilo-Saharan (Greenberg 1963, see appendix 1 below) was questioned by Lacroix (1969) and debated by Nicolai (1990). Large-scale studies of the internal subclassification of Nilo-Saharan (NS) conducted by Bender (1995) and Ehret (2001) nevertheless supported it. Both the latter scholars base their work on the genealogical tree model and share (in particular Ehret) the same assumption of the existence of a NS language family. Like Greenberg before them, they include the Songhay group of languages in the NS family, although each places it differently on his own genealogical tree. Their working methods are also different: Bender uses mass comparison and isoglosses while Ehret uses correspondence-based reconstruction. One might therefore assume that the question has been definitively settled, since major work by two independent scholars confirms the inclusion of Songhay in the NS family/phylum, even though subclassification varies. This is not however the case.

The latest study (Nicolai 2003) provides a detailed evaluation of the empirical proof adduced in support of the classification of Songhay as NS, and finds both Ehret's and Bender's results wanting. The analysis proceeds in three stages.

- *Impugning the NS hypothesis:* it can be shown that the data and reasoning on which the classification of Songhay as NS is based do not withstand critical examination and must be rejected in view of their unconvincing empirical validity and their theoretical insufficiency.
- *Unexpected developments in lexical research involving the Afroasiatic languages:* a Berber-Semitic origin can be postulated for a large number of terms invoked by both Bender and Ehret as proof of NS filiation and for many others as well. These terms are not always easily recognizable as they have undergone considerable phonetic erosion; nevertheless, they can be identified with some ease if we allow for a few elementary regularities in the transposition of Berber-Semitic-type phonetic structures to Mande ones.² Note that these terms are not from marginal vocabulary; they comprise basic terms

¹The hypotheses set forth in this paper were developed during a stay at the Max Planck Institute for Evolutionary Anthropology, where they were discussed for the first time. They profited greatly from the scientific rigor and the quality of the human and material environment I encountered there. I also express my particular gratitude to D. Lange though I must take full responsibility for whatever inconsistencies may result here from my reading of historical scholarship. But perhaps there was no other way forward.

²The following examples, chosen for their unambiguous relationship to Arabic cognates, show the effects of "deconsonantization" affecting consonants which are rare or non-existent in Songhay and their transformation into quite different typological structures: **dóolè** 'force, oblige' (**dwl**, **dł'**); **lăybù** 'be paralyzed' (**‘yb**); **kóosú** 'scrape, scratch; bail water from a canoe' (**ħsw**); **lóogó** 'lick' (**lğw**); **lútú** 'stop up, caulk, be deaf' (**lwt**); **sóotè** 'whip' (**swt**); **màasù** 'turn up (a garment), clean out (a sump) by scraping' (**msh**); **béerí** 'shovel, hoe; cut down' (**bhr**); **sòogà** 'fiancé' (**śwq**); **săy** 'broadcast, flow, pour' (**śy**).

of everyday communication and whole lexical domains³ (see appendix 2). At the same time, the discovery of other items with possible Ethio-Semitic, Cushitic, or Egyptian sources and no cognate in the contact languages requires some further attention.⁴ These data raise substantive questions regarding the cultural, political, and economic relationships which the original Songhay-speaking (or better, proto-Songhay-speaking) populations may have entertained with other near-eastern peoples.⁵

- *Attendance to the well-known typological resemblance between Mande and Songhay languages*⁶: this resemblance involves widespread isomorphism in both morphosyntax (word formation, phrase structure, utterance structure) and phonology (shared features such as the absence of /p/ and the absence of /r/). The Songhay-Mande isomorphism is actually even broader and embraces the overall systemic typology which regionally unites the so-called northwest Mande and Songhay languages over against the eastern Mande languages.

In sum, the development of an approach to language change applied to data of this kind could lead to the creation of an effective linguistic/lexical archeology grounded on documented evidence and capable of both refining its own analytical principles and *standing in the stead of philology*, barring which it is hard to imagine any outcome other than specious reasoning and the shakiest of conclusions.⁷

Comparative lexical research thus makes it possible to redirect attention to the possible connections between Songhay and the Afroasiatic family, *independently of any genealogical relationship*. At the same time, the phonological and morphosyntactic isomorphism between Songhay and Mande can be adduced to support the hypothesis that Songhay arose by genetic processes of another kind.

The new working hypothesis must be that Songhay has evolved in a complex way through contact of a variety of Mande (which both the historical evidence and morphological and structural comparison now suggest was close to the one which gave rise to modern Soninke) with an apparent language variety whose exact features (probably Arabic-Berber in nature) have yet to be determined. This Arabic-Berber lingua franca (trade language used in the contact but also 'prestige language') seems to have disappeared after having had a major impact on the lexicon of the Mande dialect in question. Songhay therefore came into being through *language mixing*.

The centuries-old trade-language status of Songhay, which it retains to some extent even today, the anthropological diversity of the Songhay-speaking populations, and the compatibility of these realities with what we can know of the medieval African world are all grounds of support for this hypothesis. The analytic work as such has, however, yet to be completed. All that concerns us here is the simple fact that the Songhay data must be reviewed in the light of other possibilities based on different theoretical foundations from those which assume direct genealogical descent. That is to say, the alternative which needs to be explored is that of a non-linear evolution involving the interference of more than one source language, thus giving new content to the traditional notion of "genealogical origin".

Another approach again will, however, be required to formulate hypotheses regarding historical periods prior to the High Middle Ages through a study of lexical stratification.

³Hence quite different from the stock of "cultural" loanwords from Arabic which can be found in many African languages in the region.

⁴The latest comparative surveys (Nicolai 2003) suggest that such exist. Likely candidates are the Songhay words for 'donkey' (related to Cushitic 'zebra'), 'ostrich', 'cow', and other animals; and the words for 'son of', 'sun', and others. Further investigation might show these terms to be evidence of still undetermined contacts and stratifications.

⁵These questions need simply to be asked in a way that avoids a presupposed answer. Only if the supposition of its NS origin is held in abeyance can the history of Songhay prior to the last millennium be meaningfully discussed. But we have not yet reached that stage.

⁶Cf. Greenberg (1963, SOV vs. SVO languages), Heine (1975, classification as "type B", etc.).

⁷Work in this direction could aim at a hypothetical ancient form of Songhay, doubtless Saharan in nature, though not in any genealogical sense, as when the so-called Saharan languages are conceived as genealogically related members of the NS family. This approach has been suggested by Kossmann (2005) in his review of Nicolai (2003). It intersects with suggestions by Lange and is not incompatible with my own work. All depends on a closer analysis of the data in terms of stratification and recomposition rather than linear genealogical descent.

2. The Songhay languages and language contact

The preceding remarks are, however, still too vague. The mere statement of the hypothesis does not suffice to give it form and content. The facts need to be examined in detail so that it can be evaluated in the light of data which either support or weaken it. To be promoted from the plausible to the convincing, our "aspirant hypothesis" will need to obtain support from three different standpoints:

- *The descriptive standpoint*: through detailed reanalysis of the Songhay lexicon in terms of the lexical stock of the surrounding Afroasiatic languages; until this has been done, no alternative to the NS hypothesis can do more than "aspire".
- *The typological standpoint*: through a worldwide survey of languages arising from contact and the linguistic and anthropo-social factors capable of bringing about a process such as the one I assume to have led to the rise of Songhay. There is no guarantee that the genetic processes will all be of the same kind, since it is unlikely that any sociopolitical and sociohistorical conditions can strictly determine the appearance of one given kind of language rather than another. Nevertheless, research of this kind will lead to the formulation and validation of likely series of events and orders of probability for diverse kinds of possible developments.
- *The historical standpoint*: through reference to work by historians of West and Central Africa, even though their work is not in itself sufficient to provide direct proof of a particular developmental process for Songhay. Indeed, historical research in this region rests on only a few (generally Arabic) sources whose reliability must remain under constant scrutiny; they need interpretation in the light of archeological and geographical data, and even oral tradition, however dubious the latter may (with good reason) seem at times to historians.

This paper is intended to be a step in this direction. Specifically, I will examine the typological and historical aspects of the problem and try to connect them to the linguistic conclusions of my earlier work. In fact, work on the linguistic side cannot proceed without a long-term commitment which is not currently feasible.⁸ Consideration of the typology of language mixing and the historical reality of medieval West Africa (which has never before been brought to bear on a linguistic discussion of Songhay) can, however, now be undertaken, further linguistic investigation being relegated to a later date. Below are the data required for a first approach to the problem.

2.1. The "model" of the *Media Lengua*

Languages arising through contact are as many and varied as the sociohistorical contact situations in which they were created. It is therefore doubtless far too early to try to set up a valid typology for them. The cases thus far reported are nevertheless quite suggestive: a small new South American language provides a particularly instructive example. This is the *Media Lengua*, which I present briefly here for formal comparison with the structural and sociolinguistic factors apparently involved in the rise of Songhay. This language is spoken in Ecuador, both as a mother tongue and as a second language, by semirural communities of acculturated peasants, weavers, and construction workers (around 1000 people) around San Miguel de Salcedo, a town of some 5000 inhabitants. The language, as described by Muysken (1996), is a recently created "mixed" language, i.e., a language whose origin cannot be explained by an ordinary genealogical process. It can be assumed to have arisen between 1920 and 1949. According to Muysken, its morphosyntactic structure is almost entirely Quechua (morphology and word order retained), its phonology is also Quechua (Spanish vocabulary phonologically adapted to Quechua), but its lexicon is constituted almost entirely of phonetic forms taken from Spanish. Given this situation, Muysken wonders why Quechua speakers reflexified their language to create this new one. Indeed, it seems that the appearance of the *Media Lengua* had nothing to do with pidginization, since:

⁸Note that such a program of linguistic research could lead to new and more accurate hypotheses, particularly in view of the terms with possible representatives in East African languages (Cushitic, Egyptian). Further study might reveal them to be evidence of contact requiring evaluation.

- this is a vernacular language unknown outside the community speaking it, and cannot be understood by either Spanish or Quechua speakers;
- it cannot be treated as a stage in learning Spanish because many *Media Lengua* speakers also speak fluent Spanish; furthermore, it can be shown that it is stable and quite unlike a Quechua-Spanish interlanguage in a learning process;
- the *Media Lengua* and the Spanish "foreigner talk" have practically no structural features in common.

Muysken, reasoning against the backdrop of Le Page and Tabouret-Keller (1985), deduces that the *Media Lengua* came into being simply because its acculturated Amerindian speakers could not completely identify either with traditional rural Quechua culture or with Spanish urban culture. In other words, there was no obstacle to communication grounding this process; the only determining factor was the speakers' need to provide themselves with an identity.

2.2. *The historical context*

Ancient sources and the work of modern historians, archeologists, and geographers give us a fairly clear picture of the social, political, and economic organization of medieval Saharan, Sahelian, and Sudanic Africa. This is information which cannot be ignored.

- The Ghanaian Empire arose around the 5th century A.D., probably in the Niger Lake Region (see Lange 2004 for the hypothesis regarding the Lake Region), then spread to southwest Mali and northern Senegal. It was based on trade (primarily in gold). It was invaded by the Almoravides in 1078 and disappeared at the beginning of the 13th century.
- The Almoravide expansion (by the Berber Sanhaja confederation) took place in the middle of the 11th century. Europeans know them as having been powerful enough to invade Spain, but their pressure on Ghana and Gao must also have been strong enough to explain the Berber influence on Mande and Songhay. Less than a century later, they were vanquished by the Almohades (another Arabic-Berber Muslim movement).
- The Mali Empire developed after the disappearance of the Ghana Empire and reached its apogee around 1300. This was the time of the rise of the large commercial cities (Jenne, Timbuktu) controlling trans-Saharan trade in gold, salt, slaves, etc. Mali dominance spread over Gao as far as the Takedda mines.
- Several vassal provinces, including the Songhay who were in their own process of empire-building, rebelled at the end of the 14th century.
- The Songhay populations which had settled well before the 8th century in the Gao region became independent from Mali at the end of the 14th. Their empire disappeared at the end of the 16th century under the advance of the Moroccan and Berber armies.

These facts are nevertheless too superficial to be of much help, and say next to nothing about inner Africa (Bornu, Kebbi, etc.). More attention needs to be paid to social, cultural, political, and economic developments in that region. Two modern scholars have addressed themselves to this subject. One is Mauny (1954), whose work provides a broad view of the importance of trans-Saharan trade in the Middle Ages: the caravan routes linking the kingdoms, empires, and cities on the edges of the Sahara which provided the impulse for the economics and politics of the region. He submits (1954:219) that :

la concentration d'éléments arabo-berbères, originaires du Maghreb en général, dans cette bande sahélienne relativement urbanisée "..." va permettre la formation d'une société lettrée qui implantera, au sud du Sahara, mœurs, coutumes, lettres et arts du monde arabe qui sont diffusés de là, par l'exemple et le contact, dans les autres sociétés soudanaises.

Another is Lange (2004), whose proposals based on historical sources, modern studies, and oral traditions can be usefully matched to possible explanations for the rise of Songhay. Drawing on the history of the easternmost regions (Bornu, Kebbi, etc.), Lange postulates a "proto-Songhay" presence, probably of Mande origin (the Qanda), far to the east of the position they are usually assumed to have occupied. These Qanda must have been present in Gao (see Lange 2004: 495-544 for further information). This leads him to conclude that the Mali inhabited by the Zarma, Soninke Wagadu, and

the Ghana mentioned by various Arab geographers must have been located in the Lake Region of the Niger which (unlike Kumbi Saleh, the region where the Ghana Empire has heretofore been situated) is very fertile, hence mostly independent of trans-Saharan trade. This view also validates the oral traditions regarding the emigration of the Zarma from the Lake Region towards Gao.

2.3. Back to Songhay

This compendium of the history, economy, settlement, and politics of the region lends credence to the idea of the emergence of Songhay as a linguistic unit in the eastern part of its current geographical extension, through contact of a Mande dialect (an ancestor of Soninke) with incoming Sanhaja Arabic-Berber populations. Subsequent political and economic developments allowed the language to expand westwards as a trade language.⁹ This hypothesis is subject to review in the light of future linguistic research.

The pertinence of comparison with the *Media Lengua* is manifest in the light of these considerations on the medieval history of the Sahel region. Assuming that future research continues to support the basically Afroasiatic nature of the Songhay lexical stock, we can discern a situation which formally resembles the one prevailing in the gestation of the *Media Lengua*. The nature and extent of the similarities observable today among Songhay, Mande, and the Berber and Semitic contact languages all support the idea that Songhay (specifically, the Songhay I have called Songhay A¹⁰) arose, not through stabilization over time of a commercial pidgin used along the edges of the Sahara (although such a situation must have existed at some later date, cf. the Songhay B hypothesis), but from a situation qualitatively identical with the Quechua-Spanish contact which gave rise to the *Media Lengua*. In both cases,

- relexification with phonological adaptation of the words of a contact language to a local language takes place in a multilingual context;
- the morphosyntactic features of the local language (morphology and word order) are retained;
- the source language of the relexification is politically and socially dominant, but the local population has practically no command of it;
- the local language is a regional vehicular;
- the source language of relexification is a widely spoken urban language;
- the local language, though clearly perceived to be a means for differentiation and self-identification, is not invested with any political or ethnic symbolism;
- for the outside observer, language creation appears as a means of differentiation and identity construction.

The differences are, however, as great as the similarities. Songhay is a major trade language which had a political function in the Songhay empire of the 16th century. It is spoken today by millions of people in three countries, while the *Media Lengua* is a tiny emerging *vernacular* with no past and an uncertain future, spoken by barely a thousand people.

All this is clear but needs to be considered in the light of another variable, namely, existence in time. There is little comparison between a language which originated half a century ago and one which has been in existence for at least a thousand years and been relatively stable for at least the last five

⁹ Lange (2004:449): « En suggérant que le grand royaume des soninké fut à l'époque almoravide non pas Koumbi-Salé mais le Wagadou et que celui-ci se trouvait dans la région lacustre du Niger, [notre hypothèse D. L.] s'accorde à la fois avec la tradition d'origine des Soninké et la grande épopee des Songhay occidentaux [...] En plus l'hypothèse tient compte de la tradition d'origine des Zarma. [...] Quand on adopte une perspective [...] qui tient compte des clivages existants à l'intérieur de la société négro-africaine de la boucle du Niger et de la diversité caractéristique du monde berbère, on aboutit à la conclusion que les principales initiatives qui durant l'époque almoravide conduisirent à un raz de marée de l'Islam vinrent du côté des Soninké. De même il apparaît que les instigateurs des grands bouleversements sociaux qui provoquèrent, au Wagadou, l'effondrement de la royauté sacrée furent également des Soninké. Quant aux Sanhaja, [...] ils étaient partie prenante du jeu, mais ils n'en étaient pas les maîtres ».

¹⁰ For the hypothesis of a distinction between two contemporaneous forms of Songhay (A, the vernacular, and B, the **vehicular**) and the supporting argumentation, see Nicolai (1987, 1990).

hundred. In this regard, however, we can usefully note examples of how some languages can grow quite rapidly in size and prestige. This happened to Quechua which developed into a trade language, primarily because the Incas chose it as their imperial language. There are also recent cases in Africa itself. Until the end of the 18th or the beginning of the 19th century, Swahili was used only by a fairly small number of coast dwellers on islands off East Africa (Nurse 1996). Today it is a vital trade language and one of the most widely spoken languages in Africa.

The passage from the status of an unassuming *vernacular* with a short history to that of a prestige language and tool of empire is thus a specific, independent process which may or may not intersect with that of the emergence of a new language, which itself may or may not become that tool. The intersection, like the development or decline of that language, is a matter of historical chance.

At the same time, the Songhay process is old enough for there to have been the kind of stratification, multiple contacts, overlapping, changes in sociolinguistic function, and so forth which is unavoidable in the course of a thousand-year shift from the status of *vernacular* for a small community to that of administrative language of a Sudanese empire spreading across the entire Sahara-Sahel region. This process must have involved change and restructuring which effaced part of the original isomorphism and, as with any language, altered part of the original lexical stock by introducing new strata of loanwords. All these factors require evaluation and a methodical search for evidence of stratification rather than the flattening of perspective into a single stratum.

In the case of Songhay, the support for this view comes not just from the linguistic data but from the full range of anthropological and historical knowledge.¹¹

3. The case of northern Songhay

I have raised the question of the origin of Songhay as a "mixed language", and proposed some answers to it. But this is not the only level at which non-linearity and contact phenomena have been at work in the Songhay-speaking area. There are also Songhay languages such as Tasawaq, Tadaksahak, Tagdalt, Tabarog, †Emghedeshe, and Korendje, spoken on the northern periphery, which have been so drastically reshaped that they have been referred to as "mixed Songhay-Tuareg languages" (Lacroix 1971; Nicolaï 1978, 1980a, b, c) and discussed in terms of non-linear descent (Wolff and Alidou 2001).

The Caucasoid and Black African populations which speak these languages are either nomadic tribes practicing as marabouts or sedentary oasis dwellers. They are thought to be of Berber ancestry; some may be offshoots of migrations dating back to the 11th century. They are all part of the same nomadic economic and cultural sphere and are bilingual in Tuareg. In other words, historical indications suggest that they may have given up their original language (assuming this to have been a non-Tuareg Berber dialect), only to replace it with another variety of Berber.

At the same time, they learned Songhay, or more likely an ancient Songhay vehicular (cf. Songhay B, Nicolai 1987, 1989) which they used as a trade language. Northern Songhay is today comprised of a number of separate dialect communities. The impression is that, over the centuries, these populations reversed the sociolinguistic roles of their linguistic codes, making Songhay their first language (Nicolaï 1987). Actually, this impression is likely to result from a flattened perspective since it takes no account of earlier relations among the nomads and the sedentary populations of the oases, and furnishes no convincing motivation for this appropriation of Songhay.

Modern linguistic surveys reveal a number of differences between the Tasawaq spoken at In-Gall and the nomadic dialects. The latter have changed some morphological features (e.g., pluralization) and have an accent system, probably deriving from Tuareg, instead of the Songhay tone system. From the lexical standpoint, there is a current trend to borrow from Hausa, particularly in Tasawaq. Otherwise, the lexicons of the northern dialects are mixtures: most basic vocabulary, generic terms, and function words are from the Songhay stock, but the Tuareg stock is abundant and often deviant with respect to the morphological rules of the source language. In general, there is, of course, neither borrowing in the

¹¹At the same time, adopting this "aspirant hypothesis" means raising new questions regarding the genesis of the Mande languages themselves and perhaps reconsidering some of their features from the standpoint of the history and the anthropology of this part of Africa.

strict sense from Tuareg nor relexification, since all the speakers seem to be bilingual and hence do not "borrow" Tuareg words. Rather, they use items from the linguistic codes at their disposal to operate normally within their own universe. The lexicon simply shows the way in which the language was "built up" and how the communities' repertory of codes was reorganized in sociolinguistic terms. At the same time, it is undeniable that there was a major break in linguistic tradition involving drastic modification of Songhay phonological structures in the course of appropriation.¹² And today, there is no longer any social linkage between these northern populations and the traditional southern Songhay-speaking populations, hence no reference to a common linguistic standard or forms of expression.

We may well wonder whether this second and indisputable case of contact in any way resembled the process I suggest can account for the original rise of Songhay (more precisely, of Songhay A). The three tables below list the similarities and differences between the two situations, though further elaboration and reevaluation of the various factors will doubtless be required.

3.1. Outline of possible differences in the process of appropriation

<i>Songhay</i>	<i>Northern languages</i>
A local language (Mande, L1) with geographically and socially determined dialect variation including vehicular varieties of Songhay encounters an outside prestige language (Arabic-Berber, L2).	A local language (Berber/Tuareg, L1) ¹³ with geographically and socially determined dialect variation coexists with a vehicular variety of Songhay (Songhay B, L2b) and encounters an outside prestige language (Arabic, L2a).
No real proficiency in the outside prestige language (Arabic-Berber, L2). Transformation of the first language (Mande, L1) through total or partial relexification from the outside source language (Arabic-Berber, L2).	Some proficiency in the outside prestige language (Arabic, L2a) within some tribes (practicing marabouts); fluency in the vehicular variety of Songhay (Songhay, L2b).
Appropriation of the relexified dialect as first language by a peripheral group or offshoot (creation of L3a, Songhay A), perhaps in the course of identity creation.	Appropriation of the vehicular variety of Songhay (L2b) as first language in unclear circumstances (identity creation?).
Total loss of stable bilingualism in the former first language (Mande, L1).	Retention of bilingualism in (a dialect of) the former first language (Berber/Tuareg, L1) for communication with the outside nomadic world.
Further development of L3b (Songhay B) in the course of the expansion of L3a.	Subsequent creation of L3 (the modern "mixed" languages) by normal development after splitting off from L2b.

¹²In Van Coetsem's (2000) terminology, the starting point must have been a phenomenon of "source language agentivity" (imposition), but the situation is likely to be somewhat more complicated insofar as the entire community is ultimately bilingual.

¹³The abbreviations L1, L2,... correspond to the situation described in each column. The L1 in the "Songhay" column is thus different from the L1 in the "Northern languages" column.

3.2. Outline of formal features of the emerging languages

Retention of the morphosyntactic structure of L1.	Partial retention of the structure of L2b (also formal simplification associated with vehicular function).
Retention of the phonological structure of L1.	Complex situation varying from nomadic to sedentary dialects; tendency to retain (or return to) Tuareg (L1) phonology after split.
Total or partial relexification from L2.	Retention of L2b lexicon and useful L1 items, partial relexification over time.

3.3. Outline of development processes of the new languages

Expansion of the new language (Songhay A, L3a) as administrative and vehicular language (Songhay B, L3b).	Restriction of the new language (L2b > L3) to the local level.
Subsequent modifications involving both localized pidginization and integration of features from various contact languages (Songhay B becomes a first language).	Modifications resulting from imposition of L1 standards with varying force and loss of contact with the southern Songhay groups.
Widespread stable dialectization (diversification into contemporary forms of Songhay).	Dialectization by social group and continual borrowing from Tuareg and Hausa.

3.4. Remark

A look at these tables shows that the processes involved in the creation of Songhay are quite different from the ones which gave rise to the northern Songhay "mixed languages". While Songhay A may have arisen through a genuine process of language creation (probably similar to the one which gave rise to the *Media Lengua*, as suggested above), northern Songhay (though paradoxically called a "mixed language" owing to its evident transformation under the influence of Tuareg) seems to have appeared in a much more "classic" way involving two stages:

- a specific process of language shift with bilingualism retained and change resulting from the contact situation (source language agentivity);
- subsequent differentiation of the new L1 within the adopting community, accompanied by loss of contact with the source community (differentiation after splitting in a new "ecological" environment).

In addition, while a process of identity creation with the consequent likelihood of separation was presumably involved in the appearance of Songhay A, no such process need be postulated for the development of northern Songhay from Songhay B. On the contrary, continuity of transmission may be assumed for the community which appropriated Songhay B as their first language. The subsequent integration of Berber patterns depended not on an intention on the part of these tribes to differentiate themselves or set themselves apart, but rather merely on the unavoidable consequences of their bilingualism and loss of contact with the traditional Songhay-speaking communities. In other words, northern Songhay is, from this standpoint, a "normal descendant" of Songhay B within the confines of a new ecological setting.

This process is thus "classic" insofar as the present-day languages, though clearly informed by bilingualism in Tuareg, can *also* be explained through the speakers' having lost contact with the principal Songhay-speaking communities from whom they learned their new vernacular. While it is true that there is, in Meillet's sense (1952), discontinuity in the transmission of the linguistic inheritance from the traditional Songhay-speaking populations to the new northern Songhay speakers, whereby the subsequent linguistic split in correlation with the interruption in the emanation of norms can be

"explained", it can nevertheless still be said that there was continuity in transmission during the stage when the new speakers of Songhay B developed their current "mixed" speech form.

We therefore have two explanatory vectors impinging at different angles:

- one of them non-linear (the interplay of Songhay and Tuareg),
- and the other linear (the separate development of the language after the loss of contact with its origins).

Clearly, the two vectors do not cancel each other out; they simply act in different directions.

4. From one hypothesis to the next

The preceding discussion of Songhay cannot be considered a statement of "results". It is no more than a set of working hypotheses suggesting fruitful avenues of research. By definition, none of these suggestions would be viable in any framework focussing on a strictly genealogical approach to language change. Rather, they constitute a means of breaking down barriers and interconnecting fields of research which have traditionally been kept apart, e.g., language contact and mixing phenomena. If, however, my hypotheses turn out to be correct, they will provide an excellent illustration of the fact that new languages do not invariably arise to meet the communicative needs of people who find themselves uprooted or placed in a contact situation. The populations who develop a new language can just as well be bilingual and their emerging language may or may not be a means of creating an identity, regardless of any communicative necessities.

Note also that, insofar as it is unrealistic to assume any one-to-one correspondence between a given linguistic process of development and a specific causative anthropo-social situation, I cannot without further ado transpose the *Media Lengua* situation directly to Songhay. This situation has only been invoked here as an example of a possible form of language development and change.¹⁴ We must not forget that we are comparing *an extremely complicated phenomenon*, flattened out over a thousand years of history and hence involving stratification which needs untangling, with *a process in its initial stages* and hardly any overlapping to cause misunderstanding. Our aim here can thus be viewed as "theoretical": the simple recognition of possible forms of evolution.

Ultimately, the only discussion here which seems to me to constitute a step forward is the evaluation of our working procedures, the warning not to read too much into the data, particularly when we operate on the limits of the descriptive power of our theoretical tools and our possibilities of grasping the empirical phenomena. Once again, our objective must be to readjust our theoretical framework so that awareness of language contact phenomena becomes not just possible, but "normal" and, if I am right, unavoidable.

5. Synthesis: conjectures and corroborations

The rise of Songhay: A phenomenon similar to the one invoked to account for the *Media Lengua* may have affected certain Mande (probably Soninke) groups in a complex political, economic, and religious power relationship with the Arabic-Berber populations of the Saharan region.

The essential linguistic points are these:

- With regard to the formation of the vernacular Songhay A:

¹⁴Cogent analysis nevertheless requires a degree of caution regarding one's own explanatory preferences. Can the "Songhay data" have any "other explanation" than the ones I have been suggesting? Could there be another equally valid "aspirant hypothesis"? One alternative would surely be the development of a convergence zone and, in this particular case, a large-scale application of metatypics. Accounting for the data by a process of this kind would require postulating a distinct ancient Songhay with a Berber-Semitic lexical base (or a vocabulary widely relexified by such languages) and a syntax which is no longer discernible today. Over the centuries, this language would have converged towards Mande structures under the effects of a metatypic process of a kind observable elsewhere. Ultimately, this hypothesis strikes me as far bolder and much less grounded on facts than the one I suggest here...at least for the time being!

- a. Songhay seems closest to the Soninke and Azer dialects; in particular, the very sparse documentation we have on Azer (see Monteil 1939) shows this language to be the closest morphologically to Songhay.
- b. The existence of Songhay lexical items which have apparent cognates in East African (Ethio-Semitic, Cushitic, or Egyptian) languages (Nicolaï 2003) may open the way for research into stratifications at a much greater depth, perhaps at the level of the ethnogenesis of Saharan and East African populations which would qualify as "proto-Songhay". Let us nevertheless stress once again that this is a purely speculative hypothesis.
- With regard to the formation of the vehicular Songhay B: Interesting explanations might be provided for the presence of Songhay in Tabelbala (near Sijilmasa, an ancient terminus for the medieval caravan trade on a par with Tunis or Tripoli); and likewise for the use of Songhay by tribes such as the Igdalen (who are marabouts of Sanhaja origin and seem to have arrived in the Aïr region around the 11th century). Nevertheless, the possibility of relationships between the eastern Berber tribes (cf. Massüfa) with what may have been Proto-Songhay populations in the premedieval Saharan area should not be ignored.

If this were the case, a situation somewhat like the following would be conceivable:

- emergence of Songhay A, probably around Gao prior to the 8th century AD through contact between the Arabic-Berber world and "Proto-Songhay" populations to the east of Ghana (Lange 2004 , also Levzion and Hopkins 1981);
- subsequent or concurrent development of the vehicular Songhay B throughout the Sahelo-Saharan region (vestiges are found in Tabelbala, Jenne, Timbuktu, Agadez...);
- it is currently impossible to say whether the Igdalen, Idaksahak, and Isawaghen populations became Songhay-speaking by learning Songhay A or Songhay B, but it is likely that the appropriation considerably preceded the Almoravide expansion (the Berber presence in the region dates from well before – perhaps even to antiquity, although this is obviously speculative);
- stabilization of Songhay in the region in the course of the development of the Songhay empire (14th-15th centuries).

Further analysis is now awaited.

Appendix 1: Data used by Greenberg (1963) to classify Songhay

Morphology

personal pronouns:
 (1) *ai*, (2) *ni*, (8) *wor*;
 relative and adjective formants:
 (12) *-ma*; (13) *ko*;
 plural: (27) *-an*;
 passive or intransitive:
 (41) *-a*, *-o*.

Lexicon

4 'anus, buttocks' *nkoro*
 5 'arm' *kamba*
 8 'to arrive' *dira*
 9 'ashes' *boron*
 10 'to ask' *ha*
 12 'behind' *kora*
 13 'bark' *kokosi*
 18 'bird' *kyiraw*
 20 'bitter' *hotta*
 22 'blood' *kuri*
 25 'to break' *keyri*
 26 'breast (animal)' *gani*
 28 'to bring' *kate*
 29 'brother, older' *bere*
 31 'to build' *tyin*
 34 'chin, beard' *kaba*
 37 'to come' *ka*
 39 'to cover (1)' *dabu*
 40 'to cover (2)' *gum*

46	'dog' <i>hansi</i>	107	'person (2)' <i>-koi</i>
49	'dry (2)' <i>ko</i> , <i>kogu</i>	108	'to put' <i>doy</i>
50	'dung' <i>moro</i>	109	'rain' <i>hari</i>
51	'earth, dust' <i>dau</i> , <i>dow</i>	112	'rope' <i>sillei</i>
53	'egg (2)' <i>guri</i> , <i>gunguri</i>	113	'run' <i>zuru</i>
55	'excrement, dung' <i>wiri</i>	117	'seed' <i>dumi</i>
56	'face, eye' <i>mo</i> , <i>moy</i>	121	'side' <i>kyeraw</i>
58	'to fall (2), go down towards the river' <i>do</i>	122	'sing (1)' <i>don(i)</i>
62	'flesh' <i>basi</i> ,	126	'smoke' <i>dullu</i>
64	'to give' <i>no</i>	130	'stick' <i>turi</i>
65	'to go' <i>koi</i> , <i>ko</i>	132	'sweat' <i>sungei</i>
66	'to go down, fall' <i>zeri</i>	134	'to taste' <i>taba</i>
67	'to go out' <i>farta</i>	135	'thick, be thick' <i>kom</i>
69	'green, (become) yellow' <i>kukurey</i> , <i>kara(nta)</i>	136	'thirst' <i>dyaw</i> , <i>go</i>
70	'hair' <i>hambiri</i> , <i>hamni</i>	137	'thorn' <i>kardyi</i>
75	'horn (1)' <i>(h)illi</i>	142	'two, twin' <i>kari</i>
77	'hot, warm' <i>dunga</i>	144	'to vomit' <i>yeri</i>
81	'to kill (2)' <i>wi</i>	145	'vulva' <i>buti</i>
83	'to knot, tie' <i>kuli</i>	148	'what ?' <i>de</i>
86	'to lie down, yawn, sleep' <i>haha:bu</i>	153	'wife (1)' <i>wanda</i>
87	'lightning' <i>meli</i>	156	'wing' <i>fata</i>
88	'lion, leopard' <i>mar</i>	158	'year (1)' <i>giri</i>
91	'male' <i>aru</i>	160	'yellow' <i>moni</i>
99	'navel (2)' <i>humo</i>		
101	'new' <i>taga</i> , <i>itegi</i>		
102	'night' <i>tyini</i>		
104	'to open' <i>feri</i>		
106	'person (1)' <i>boro</i>		

Lacroix (1971:91-92)

recognized only thirty-some
 valid lexical comparisons. Most
 morphological comparisons
 were accounted doubtful.

Appendix 2: Examples of terms with a possible Afroasiatic source

The human body and bodily waste; the animal body; descriptive terms.

{‘Term’ + Songhay form + [Berber and/or (Ethio)Semitic forms + meaning...]¹⁵}

- ‘head’ bòŋ [kbl: **abbay** head; top of the head]
- ‘goiter’ bókò soft part below the jaw, bokolo [kbl: **ffeqlej** be flabby, fat, soft]
- ‘palate’ dáanà (dayna) [kbl: **aney** / **iney**; amh: **sənag**, **tənag**, **lanqa** palate (anat.)]
- ‘gums’ díinì [hgr: **tăyne** gums; tmz: **taniwt** gums]
- ‘hair/feather’ hámní, himbiri [hgr: **éhafiilen** long hair; **téhafilt** short hair; wlm: **abəndal** hairy man; ar: **ħabl** rope; **aħbal** thick, strongly woven rope]
- ‘nerve, tendon’ linji [tmz: **leer** nerve, tendon, vein, artery; ar: **‘irq** root]
- ‘fontanel’ lòŋgò [hgr: **élengeou** thick neck (jeer); wlm: **talləka** sinciput // fontanel]
- ‘mouth’ mē [hgr: **émi** mouth; kbl, tmz, wlm: **imi** mouth, entry, orifice]
- ‘eye’ móy, mó; [hgr: **emmah** pupil (of the eye); kbl, tmz: **mummu** pupil, iris; mghb: **m-mm-w** iris (of the eye)]
- ‘face’ móydúmà [hgr: **ħudem** face; kbl, tmz: **udem** face]
- ‘cheekbone/smile’ múmúsú [tmz: **smummey** smile, pout; wlm: **ʃəmməʃməʃ** smile]
- ‘sweat’ súngéy [hgr: **enġi** stream, pour off; kbl: **ssengi** make flow; gz: **?ngy**, **sngy**, **sng**, **sgd(d)**, **gy** melt, flow, sweat]
- ‘sneeze’ tísôw [hgr: **tôusou** cough regularly; kbl: **tusut** whooping cough; **enṭez** sneeze; gz: **‘aṭasa** sneeze]
- ‘have diarrhea’ sóorú [kbl: **esrem** provoke diarrhea; tmz: **nmarsi** diarrhea; tms: **zarrat** diarrhea; ar: **ishāl** diarrhea; **‘aṣara** press (sth.); gz: **‘aṣara** press out, press, squeeze, wring out]
- ‘tear’ mündi [hgr: **ħaġi** tear; kbl: **imettı** tear; tmz: **amett** tear; ar: **damaħa** tear]
- ‘urinate’ tóosı [hgr: **ħaséas** bladder; tms: **tasəyast** bladder]
- ‘spit’ túfà [hgr: **soutef** spit; kbl: **tteftef** foam with rage; ar: **taffa (tff)** to spit; gz: **taf'a** spit, spit out]
- ‘defecate’ wá [gz: **ħabā** dung]
- ‘drool’ yólló [hgr: **ħidda** dribble; kbl: **aledda** dribble; arch: **rayyal** drool, foam, salivate]
- ‘bone, prick’ bírì [hgr: **ebed** pierce; **ebdu** separate; gz: **brr**, **barra** pierce, penetrate, go through; **bər** reed, reed pen, branch of a chandelier, stalk, stem of fruit, stubble; ar: **ibār**, **ibar**, **ibra** needle, sting, sharp iron shaft]
- ‘vulva’ bùtè [ar: **ħud** vulva]
- ‘chin’ danka [ar: **ħaqan** chin; **ħaqn** beard, whiskers]
- ‘breast’ fòfè [hgr: **éfef** teat, udder; kbl: **iff** nipple; ar: **ħubb** breast, front pocket]
- ‘arm/hand’ kàbè [ar: **kaff**, **kaffa** palm of the hand, **kħb** ankle, heel]
- ‘lung’ kùsfú [hgr: **ekef** swell, swollen; kbl: **ikuftan** foam]
- ‘liver’ tásà [hgr: **ħesa** (person's or animal's) belly; kbl, tmz: **tasa** liver]

¹⁵ Language abbreviations:

Abbr.	Language/Dialect	Family
kbl	Kabyle	Berber
amh	Amharic	Ethiosemitic
hgr	Tahaggart	Berber
tmz	Tamazight	Berber
ar	Arabic	Semitic
wlm	Tawellemmet	Berber
gz	Ge'ez	Ethiosemitic
tms	Tamasheq	Berber
arch	Chadian Arabic	Semitic
mghb	Moroccan Arabic	Semitic

‘tail’ sùmfèy [hgr: **tasbet** tuft of white hair at the end of the tail; kbl: **taseffat** cut-off tail; ar: šab hair, horsehair]

‘wing’ fátá [ar: ibt armpit]

‘(animal’s) hump’ zùñkà [ar: **znq** to tighten, constrict; to hobble (an animal); gz: **snk**, **znk**, **zng** hump (animal)]

‘big’ ber [kbl: **abarar** enormous; arch: **barbar** grow fat, gain weight, prosper]

‘long/tall’ kú [hgr: **agg** above (be above, higher than); **akk** higher (be one step higher); kbl: **ekk** surpass]

‘red’ ciréy [hgr: **iroual** brown; **gedew** dark brown, be dark red; tmz: **iywal** be brown; mghb: **ikry** red, ochre; gz: **?egure** red color]

‘white’ kàaréy [ar: **karra** (II) clean, purify; improve, refine; arch: **karr** pure white, all white; gz: **qadawa** be pure, be neat]

‘hot’ fúfúlé [kbl: **furr** be hot, cook; ar: **fwr** cook by steaming]

‘short’ dùngùrà [ar: **sağura** be short, small; **sağır** small, young]

‘clean, pure, faultless’ hènèn [ar: **hanna** tenderness (of heart); gz: **hannā** grace, charm, joy]

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