MATRILINEAL DESCENT AND THE GENDERING OF AUTHORITY:
WHAT DOES AFRICAN HISTORY HAVE TO TELL US?

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There has long been a widespread historical and anthropological idea that, up till very recent times, women everywhere—whatever the kin structure of their society—were always, in the last analysis, under the authority of the men of their society. Whether in societies with matrilineal or patrilineal descent, women's position was the same. In the words of one anthropologist, matriliny and patriliny differ not with respect to male dominance, but in the "allocation of domestic authority over women"[1]—with respect to which category of males has authority over women. Under patriliny the husband has that authority; under matriliny, the mother's brother.

But is that universally true? The vast majority of historians come from and write on societies, from China and Japan in the east to Europe in the west, characterized by long histories of often outright patriarchy. Male dominance tends to be woven into the understandings that historians grow up with and confront in their personal lives. But what if we shift our historical attention to regions outside the long "middle belt" of the Eastern Hemisphere? Does matriliny equally entail male dominance over the course of time, or might matriliny have significantly different consequences for the roles of women in history? Two very long-term histories from widely separated parts of the African continent offer arresting perspectives on this issue. One of these histories involves the peoples of the southeastern regions of central Africa; the other, societies of the northern Middle Nile Basin.

Social history among the Sabi peoples of east-central Africa

For most of the past thousand years, the dominant populations of the central and eastern parts of the modern-day country of Zambia and the adjacent areas of the farther southeastern Congo spoke languages of the Sabi subgroup of the far-flung Bantu family. At least since the seventeenth century, the typical Sabi political unit was a territorial chiefdom comprised of a number of villages. Matrilineal descent and inheritance everywhere governed the social relations of the village and the chiefdom and the inheritance of office as well as possessions. Evidence from the nineteenth and early twentieth centuries reveal that the usual core social unit of the village was a sororal group of close matrilineally-related women—consisting of sisters of post-menopausal age and their adult daughters with children. The sororal group formed a named, recognized institution, *-bumba, of village life.[2]

The *-bumba exerted authority over the core social nexus in the village. A young man who sought to marry had to gain the approval of the prospective mother-in-law and, through her, of her *-bumba. To gain that approval he had to undertake a prolonged period of bride service to the prospective brides's maternal relatives, often lasting over several years, showing that he

[1] Alice Schlegel, *Male Dominance and Female Autonomy: Domestic Authority in Matrilineal Societies* (New Haven: HRAF Press, 1972).

[2] C. Saidi, *Women's Authority and Society in Early East-Central Africa* (Rochester: University of Rochester Press, 2010). The discussion that follows draws on Saidi's findings, as well as on other sources to be cited.

could work and be dependable and responsible. One or more such sororal coalitions formed the core units around which the rest of the community coalesced. Social authority flowed from this institution, and political authority had to accommodate and take account of its functional centrality to village life as a whole.

Two factors backed up this female authority. On the one hand, a man's attainment of full adulthood depended on his production of offspring. A childless man would always be viewed in a Sabi community as, in some sense, still a child. The sororal coalition, as the final authority over whether a young man could marry one of their daughters, were the gatekeepers of the attainment of adult status by men.

The second factor invoked an accepted ritual power. Mother-in-law avoidance rules governed the relations of the groom to his wife's mother. There has been a tendency in past anthropological thought to treat in-law avoidance rules as having to do with incest prohibitions. Saidi argues that this idea is a Western cultural projection imposed on a very different conceptual world. Mother-in-law avoidance instead provided the means by which adult women who had borne children exerted their authority in the social sphere. The dictum that the past is another country applies very strongly here. In all regions of the world down to very recent centuries, all people operated from a basis of what we would call today "magical thinking." In this kind of world, words could bring on physical ills, and words could kill. The power of the mother-in-law avoidance rules rested in part on the accepted expectation that violation brought numinous harm to the violator, and in part on the active power of the mother-in-law to curse and so herself impose harmful consequences on the son-in-law.[3]

At the same time, the sororal group wielded ceremonial power over their daughters. In most Sabi societies as late as the early twentieth century, young women passed through two separate rites of passage to reach adulthood, both controlled by their close matrilineal female relatives. The first and most elaborate rite took place following a girl's first menstruation. It involved an extended seclusion of the girl from the community, along with special teaching and ritual observances. The second, less elaborate and public rite took place usually several years later. It celebrated the girl's first pregnancy and lasted only a single day. During the period between the two rites of passage, the girl was called *mwali, an intermediate life stage when she was no longer a girl but not yet a full adult woman. As for the young man, so for the young woman only the demonstration of child-bearing ability conveyed full adult status. Even after the second rite of passage, the members of a *-bumba might not immediately bestow the culminating recognitions of a woman's adulthood—her right to her own hearth and fire and her right to grind her own grain from her own fields—if they felt she were not truly ready for it.

The reader will note no mention of marriage as a factor in changing a female's status or life stage. The marriage could, and might well, take place in the *mwali stage of life, but the woman remained a *mwali. What changed her status from young woman to adult, and moved her to a stage of life at which her mother, mother's sisters, and grandmother would allow her to set up her own home, was not the marriage but the fact of her becoming pregnant. Young women were socialized to invest their emotions and material wealth not in their husbands but in the interests of their matriline.[4] Sabi societies were, to use Saidi's term, highly "matrifocal."

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[3] Saidi, *op. cit.*, especially pp. 77-78.

[4] Karla Poewe, *Matrilineal Ideology: Male and Female Dynamics in the Luapula Valley* (London: International African Institute, 1981), p. 69, makes this point specifically about the

The *-bumba institution claimed and sustained an expansive sphere of women's authority on which men could not easily encroach, and a sphere of authority that young man had to recognize if they were to produce children and gain authority and status in the male spheres of activity.

Most telling historically, Saidi shows that the term *-bumba itself, and thus the sororal coalition it named, reconstructs directly back to the proto-Sabi society of the era around 500 CE. This word can be provisionally reconstructed a further 1500 years back in time, to the proto-Eastern Savanna Bantu society (also called proto-Eastern Bantu) of around the later second millennium BCE.[5] In accord with the proposed antiquity of the institution, to this early period can be traced also a number of the ritual and social features through which the *-bumba of more recent centuries exerted its social authority—notably, the office of the female sponsor who oversaw the first rite of passage at puberty, the key ritual objects used in those rites, and the root word *mwali for the life stage between the two initiations.[6] Matrilineal descent characterized each of these earlier periods in the historical background of the Sabi peoples and can be traced back still earlier to the earliest Bantu societies of the third millennium BCE.[7]

Does matriliny accompany a more equitable distribution of authority in society than has been typical of the many well-known patrilineal societies of the ancient and medieval historical periods across the middle belt of the Eastern Hemisphere? In central Africa, with respect to early Sabi history, and possibly extending back to the proto-Eastern Savanna Bantu era, the answer would be, Yes. Women through the institution of the *-bumba, and through the associated ritual powers and a suite of customary beliefs, governed the key links in the social relations of the village. Their authority spilled over into other spheres as well, especially in giving mature women a role in political matters. An early twentieth-century observer recorded that, in Sabi chiefdoms ruled by members of the Nyendwa chiefly clan, the approval of the women elders of the chiefdom was necessary before a new chief could take office.[8] Saidi found in the colonial archives in Lubumbashi, Congo, that among the Sabi peoples of southeastern

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Sabi peoples who had belonged to the Kazembe kingdom in the eighteenth and nineteenth centuries, but her findings appear to apply more generally to Sabi peoples.

[5] The dates rest on systematic, strong multiple correlations of language communities with archaeologically attested communities. Saidi, *op. cit.*, pp. 40-44, lays out the detailed evidence for the chronology of the Sabi societies. C. Ehret, *An African Classical Age* (Charlottesville, VA: University Press of Virginia), chapter 2, and "Subclassifying Bantu: The Evidence of Stem Morpheme Innovation," in L. Hyman and J.-M. Hombert (eds.), *Bantu Historical Linguistics: Theoretical and Empirical Perspectives* (Stanford, CA: Center for the Study of Language and Information, 1999), pp. 43-147, set out the more indirect arguments for dating the earlier proto-Eastern Savanna society to somewhere in the broad range of the later second millennium BCE.

[6] Saidi, *op. cit.*, chapter 5.

[7] Per Hage and Jeff Marck, 'Proto-Bantu Descent Groups," in Doug Jones and Boyka Milicic (eds.), *Kinship, Language, and Prehistory* (Salt Lake City: University of Utah Press, 2011); also Ehret, *An African Classical Age*, chapter 5; Kairn Klieman, *'The Pygmies Were Our Compass': Bantu and Batwa in the History of West Central Africa* (Portsmouth, NH: Heinemann, 2003), pp. 70-72.

[8] Thomas Munday, "Some Traditions of the Nyendwa Clan of Northern Rhodesia," *Bantu Studies* 14 (1940): 435-454.

Zaire, a large number of the chiefs themselves were in fact women.[9] Men may more often have become chiefs, but sex was not a hard and fast barrier to a ruling position.

Two historical departures from the more general political pattern of territorial chiefdoms took place in recent centuries in the regions inhabited by Sabi peoples. The Bemba kingdom arose in the eighteenth and nineteenth century in the central plateau areas of what is today eastern Zambia. To the north of the Bemba kingdom, in the Luapula Valley, immigrants with historical connections to the Lunda empire far to the west established the kingdom of the Kazembe around the 1740s. The ruling strata in the two kingdoms followed contrasting paths in their relations to the existing matrifocal customs of their respective regions.

The Kazembe kingdom was characterized by a two-sector political order. The ruling family and the court society followed a patrilineal rule of descent, brought in by the founders of the kingdom in the eighteenth century. But outside the central areas of the state, the founding kings left in place all the older Sabi customary practices—matriliny, the access of women to political roles, and the position of the sororal groups as the arbiters of social relations at the village level. As late as the second half of the twentieth century, the anthropologist Karla Poewe found, young women were still being raised by their female maternal kin to give their first loyalties to their matrilineage rather than to husbands.[10] The old ethic persisted even after a seven decades of a colonial period in which the British rulers had put in place educational and employment systems that presumed men to be in authority over women and privileged men's access to the means of upward economic mobility.

In the Bemba kingdom a trend evident by the later nineteenth century was toward the intrusion of male influence and also royal authority into the female sphere. In the core areas of the Bemba kingdom, but not in the outlying areas, wealthy men began to take on the role of paying for the celebrations of the puberty initiations of their maternal nieces, inserting themselves into what had previously been—and still was in the areas outside the center of the kingdom—an entirely female-organized affair. Another kind of departure from the past is also evident by this period. The general evidence from Sabi societies shows that the sponsor and supervisor of female puberty initiation through most of Sabi history would have been a woman who was also a respected midwife. In the central areas of the Bemba state by the early twentieth century, princesses of the royal family often took on this role of sponsor and supervisor. Moreover, during the ceremonies themselves some of the proverbs and symbolic representations that had previous been used to inculcate the primary allegiance of young women to their matrilineal kin began to be reinterpreted as relating instead to a woman's relations with her husband.[11]

The development of larger more complex polities, the Bemba example suggests, may create historical environments in which changes that lessen the scope of women's authority can take hold. The tenuousness of Bemba royal power outside the central areas of the state, as well as the greater concentration of wealth at the center, meant, however, that this impact was little felt in the outlying areas. The history of the Kazembe kingdom, on the other hand, provides an example of a moderately centralized political regime coexisting with strongly matrifocal social relations in all the areas outside the court itself, without necessarily upending or reshaping those customs.

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[9] Saidi, *op. cit.*, p. 91 (and footnote 57 on that page).
[10] Poewe, *loc. cit.*
[11] Saidi, *op. cit.*, pp. 107-111.

Matriliny in ancient African history: the Nilo-Saharans

A second striking example of the compatibility of matriliny with female authority comes from the history of Nilo-Saharan-speaking peoples. The Nilo-Saharan languages form a very deep-time family, and through the thousands of years of its history, most Nilo-Saharans, it appears, followed matrilineal rules of descent and inheritance. Pursuing this history back in time before around 700 BCE rests entirely on linguistic reconstruction, and even after this period linguistics remains an essential resource. Pursuing this topic requires introducing, in very simplified fashion, how one builds a historical periodization from linguistic findings and how one uses the semantic histories of kinship terminologies to uncover aspects of earlier social orders. With these preliminaries in place, it becomes possible to outline the multiple, very *longue durée* histories of matriliny among peoples of the diverse branches of the family. One can then return to the question, raised by the examples of the Bemba and Kazembe kingdoms, of how the existence of matriliny might have intersected with the status of women over the long term among Nilo-Saharan-speaking societies.

Through most of human history, a language could persist in use only if there also existed a society for which the language served as the self-identifying communicatory system. When we reconstruct the past existence of a language, we necessarily reconstruct the fact that there existed a society, or at the very least a collection of closely interacting and culturally closely related communities, that spoke the language. This axiom has an important historical implication. If we say that a set of languages, spoken today or attested in earlier written documentation, form a family of related languages, this statement signifies that each language descends in unbroken line from a common mother language, or protolanguage. For a daughter language to persist in use from the time of the initial breakup of the mother language and society down to a later period in history, societal continuities of one sort or another must extend across the eras from the protosociety to the various daughter societies.[12]

By no means does linguistic continuity imply social or ethnic stasis. Over the ages, societies diverge and people reconfigure their social loyalties and ethnic identifications, with each diverging group preserving its own version of the language of the earlier society. Societies and their languages diverge because people move away to settle new areas; they diverge in situ because of conflicts within the society; or they develop new and divergent social identifications because of processes of cultural adaptation set in motion by their encounters with, and the assimilation into the society, of peoples of other historical and cultural backgrounds. Over a long span of centuries, as these varied historical processes play out, many different societies, each speaking a different daughter language, take shape out of what had once been a single protolanguage and society.

Nilo-Saharan is such a language family. The lines of language descent in the family radiate out in a complex family tree (fig. 1a and1b), too complex for all its details to be represented here. The chronological scale along the right-hand side of the figures rests on certain detailed correlations between linguistic and archaeological findings. Recognizing the correlations, however, requires first understanding how a linguistic family tree contributes to building a historical chronology.

[12] C. Ehret, *History and the Testimony of Language* (Berkeley, Los Angeles: University of California Press, 2011, offers a recent detailed introduction for historians to the methods and applications only briefly surveyed here.

Reconstructing the lexical documents of history

A language family-tree diagram in its structure takes the form of a stratigraphy of the language divergences, and thus societal divergences, that have taken place among the speakers of the languages of that family. To construct the Nilo-Saharan tree is to diagram the relative chronology of the successive stages in Nilo-Saharan language and societal history. Historians put flesh on the chronological skeleton by tracking back, along each line of descent, the histories of the ancient lexicons of knowledge, belief, social relations, and material culture. If, for instance, a word for 'cow' traces back to a particular node in the stratigraphy, then the people who spoke the language at that node must, at the least, have known of cows. If as well they possessed breeding or life-stage terms, such as 'heifer,' then we know that they did not just know about the animal, but raised it. This kind of information enables one to seek out archaeological correlations with the linguistic record, and the archaeological correlations in turn allow the assigning of broad absolute dates to the relative timescale of the language family tree.

Reconstructing and historically situating an ancient root word in the linguistic stratigraphy has two requirements. First, the modern-day or earlier written versions of the reflexes of an old root must show regular sound correspondences throughout. Only then can we argue that the later reflexes are regularly inherited forms of the same ancient root word. English *father* and Latin *pater*, for example, show the regular consonant outcomes expected of the ancient Indo-European root *pater 'father' in the two languages: English /f/ where Latin retained /p/, English /th/ where Latin maintained /t/, and English glide written as *r* where Latin had a flapped /r/. In both languages this is an inherited item, separately passed down through the line of linguistic descent leading, via proto-Germanic, to English and down through the line of descent leading through ancient Italic to Latin. On the other hand, English *paternal*, although clearly derived from the same root word, fails the test of regular sound correspondence: most salient, it evinces /p/ instead of the regular English correspondent /f/, and /t/ in place of /th/. These stigmata tell us that, unlike *father*, it is not a retained English inheritance from its distant proto-Indo-European mother language, but instead, reached English by a lateral route: its sound correspondences reveal it to be a loanword from Latin, in which those consonant outcomes were regular.

The second essential consideration in turning lexical reconstructions into historical evidence is the distribution of the inherited reflexes of a root in the languages of later times. If the reflexes occur in languages belong to just one branch of the family, then it can be traced back to the intermediate protolanguage ancestral to that branch. In the Nilo-Saharan case some of the reconstructed ancient root words occur in languages of the deepest lines of descent in the family and so trace back to proto-Nilo-Saharan itself. Many other words appear only in the languages a particular branch of the family and so reveal history and culture in eras subsequent to the proto-Nilo-Saharan period.

Linguistic and archaeological periodization

In the Nilo-Saharan tree one particular sequence of three nodes, proto-Northern Sudanic, proto-Saharo-Sahelian, and proto-Sahelian, has a strong set of correlations in the archaeology of Saharan Africa (fig. 2).[13] The linguistic testimony reveals that the first of these periods, proto-

[13] C. Ehret, "Reconstructing Ancient Kinship: Practice and Theory in an African Case Study," in Jones and Milicic, *op. cit.*, pp. 46-74.

Northern Sudanic, was a time when notable new subsistence lexicon, relating to looking after cows and to the making of pottery, came into use. In the second period, proto-Saharo-Sahelian, additional cattle terms came into use, along with new vocabulary indicative for the first time of the building of large homesteads with round houses and the deliberate tending of grains for food. Then at the proto-Sahelian stage, breeding terminologies for goats and sheep first appeared. Finally, following the close of that era, the proto-Sahelian language passed through a relatively quick succession of divergences into a large number of languages, whose speakers spread widely across the Sahara and Sahel regions of Africa.[14]

A parallel succession of developments characterizes the archaeology of the Sahara and Sahel between 8500 and 4500 BCE. First, the tending of cattle took hold in areas of the southern eastern Sahara, 8500-7500 BCE, among people who practiced one of the earliest ceramic technologies in World history. In the second half of the eighth millennium, the inhabitants of these areas began to build larger homesteads with granaries. At a third stage, between 6500 and 6000 BCE, sheep and goats first reached this region and became part of the already existing cattle raising economy. Finally between 6000 and 4500 BCE, the bearers of this economy spread out across most of then habitable southern half of the Sahara and southward into the Sahel as well (fig. 2).[15]

Two other strong correlations relate to a later time, the period 1000-500 BCE. One long-standing archaeological correlation connects peoples of the Southern Nilotic subgroup of Nilo-Saharan with the Elmenteitan archaeological culture in western and west-central Kenya in the early first millennium BCE and allows the proto-Southern Nilotic node of the family tree to be dated to roughly 800-600 BCE (fig. 1).[16] Another set of absolute dates, from scattered early written references, places the movement of Nubian speakers from the western desert into the northern areas of the Meroitic empire along the Nile—and thus the development of the distinct Nile Nubian languages—at around 200 BCE or somewhat earlier.[17] The period represented by the proto-Nubian node of the Nilo-Saharan tree (fig. 1) must therefore date earlier, possibly to early in the first millennium BCE.[18]

Reconstructing the evolution of the lexicon of food production and ceramics in Nilo-Saharan history brings to light many elements of material culture that can be expected to turn up in archaeological sites. The extended body of culture in any society also contains myriad elements either invisible archaeologically and, at best, only indirectly inferable from the material record. Kinship and descent, although prime shapers of social history, are among the elements we might from time to time catch inklings of in burial patterns or in the layout or symbols at a ritual site, but otherwise are generally beyond our reach.

Kinship and social history

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[14] C. Ehret, *History and Testimony of Language*, chapter 6.
[15] *Ibid.*
[16] Stanley H. Ambrose, "Archaeology and Linguistic Reconstructions of History in East Africa," in C. Ehret and Merrick Posnansky (eds.), *The Archaeological and Linguistic Reconstruction of African History* (Berkeley, Los Angeles: University of California Press, 1982), pp. 104-157.
[17] W. Y. Adams, "The Coming of Nubian Speakers to the Nile Valley," in Ehret and Posnansky (eds.), *op. cit.*, pp. 11-38.
[18] Robin Thelwall, "Linguistic Aspects of Greater Nubian History," in Ehret and Posnansky (eds.), *op. cit.*, pp. 39-52.

The linguistic reconstruction of earlier kinship and descent patterns, on the other hand, can be highly productive, more productive than almost any other kind of linguistics-based social historical reconstruction. The reason is that kinship systems conform to a relatively small number of patterns, and these patterns channel and constrain the allowed meaning shifts that can take place in individual kin terms. In general, three normative directionalities govern historical shifts in the meanings of such terms.[19]

First, meaning shifts involving the speaker's own generation, the first ascending generation (father, mother, aunt, and uncle), and the first descending generation (son, daughter, nephew, and niece) proceed from elder to younger. A term for the paternal aunt, one's father's sister, can expand its meaning, for example, to include the father's sister's child as well as the paternal aunt; but an opposite meaning shift, from 'father's sister's child' to 'father's sister,' does not happen. Similarly, the term for a man's sister may expand its scope to include the niece or the niece and nephew, the sister's children. This directionality does not necessarily hold, however, for second-ascending generations (grandfather, grandmother) and second-descending generations (grandson, grand-daughter, grand-nephew, grand-niece). For instance, in Crow kinship systems, to be discussed below, a term originally meaning 'grandmother' sometimes can take on the meaning 'father's sister,' while in other cases the opposite shift, 'father's sister' to 'grandmother,' may take place.

A second normative directionality in kin term semantic histories proceeds from primary to secondary relations. If an old root word has reflexes with the meaning 'father' in some languages and 'father's brother' in others, 'father' is always historically the original application. Father is the primary relationship, and the extension of the term to the father's brother is a secondary outcome. Similarly, brother and sister are primary relationships. When a language applies the same terms to a category of cousins as it applies to the brother and the sister, the sibling meanings in such cases must be considered original, and the application to the cousins, as a historically secondary meaning extension.

The third normative directionality is from blood relationship to marriage relationship—from consanguineal to affinal meaning. One might, for example, extend the term for 'father' to include one's father-in-law, as often occurs in American kin usage. But the opposite shift never occurs. The practice of preferential cross-cousin marriage, found widely in the world's societies, has generated many instructive cases of this principle. In a society with cross-cousin marriage, the parent of one's cross cousins—that is to say, one's maternal uncle or paternal aunt—is a potential or actual parent-in-law. Because of this fact, in the languages of such societies a term originally meaning 'mother's brother' often takes on the meaning 'father-in-law.' In like manner, a word for father's sister may become the new word for mother-in-law. Cross-cousin marriage means as well that one's cross cousins—the child of a paternal aunt or a maternal uncle—is, either notionally or in actuality, one's spouse or else the sibling of one's spouse. So a recurrent historical outcome in this kind of social context is for the terms for cross cousin to undergo meaning shifts to 'brother-in-law,' 'sister-in-law,' 'wife,' or 'husband.' Universally the opposite directions of meaning shift do not occur.

[19] For more extended discussions of these directionalities, see C. Ehret, "Reconstructing Ancient Kinship in Africa," in Nicholas J. Allen, Hilary Callan, Robin Dunbar, and Wendy James (eds.), *Early Human Kinship: From Sex to Social Reproduction* (Oxford: Blackwell, 2008), pp. 200-231, 259-269, and C. Ehret, "Reconstructing Ancient Kinship."

Of further historical import, the different kin terminological systems tend consistently to go with particular kinds of descent systems. Knowing the terminological system allows inference therefore of the associated rules of descent and inheritance in the society in question. By discovering the particular meaning changes that took place in the past in the individual kin terms of a system, we can then reconstruct the different social orders of past times out of which the more recent systems evolved.

Among the speakers of Nilo-Saharan languages today, three kin naming systems occur widely: Iroquois, Sudanese, and Hawaiian. A number of peoples of the Nilotic sub-branch of the family follow a fourth system, Omaha. A fifth system, Crow, is today exceedingly rare among Nilo-Saharans but was far more common in past historical ages.[20]

In Iroquois systems, the parallel cousins—the father's brother's and mother's sister's children—are called 'brother' and 'sister.' A distinctive cousin term is applied to the cross cousins—the father's sister's and mother's brother's children. Iroquois systems occur very widely in the world with both matrilineal and patrilineal systems of descent.

Sudanese and Omaha systems, on the other hand, consistently occur in societies with patrilineal descent, while Hawaiian systems go along with either patrilineal or bilateral descent, but not with matriliny. In a Sudanese system a separate term, often descriptive, exists for each kind of cousin—father's sister's child, father's brother's child, mother's sister's child, and mother's brother's child. A Hawaiian system, in contradistinction, extends the terms for brothers and sisters to all first cousins. An Omaha system is characterized by a particular kind of skewing of the cousin terms: the defining feature is to call the mother's brother's son by the same term as the mother's brother. Omaha terminologies consistently accompany strongly patrilineal systems of descent.

Crow kinship systems, in contrast, are universally associated with matrilineal descent. Societies that follow this kin naming pattern are either currently matrilineal or have only recently ceased to be matrilineal. The defining characteristic of a Crow system is an opposite skewing of the cousin terminology from that found with Omaha systems. In Crow a single term covers both 'father's sister' and 'father's sister's daughter' or sometimes 'father's sister's child' more generally. In the ascending generation of the speaker, a different cross-generational equation, of the father's mother with the father's sister, is often a feature of this system. In the speaker's descending generation, a further cross-generational skewing—the identification of one's sister's child by the same term as one's sister—may be present.

Matriliny in Nilo-Saharan history

The recognition of Crow systems or the discovery of the residual elements of such a system is crucial to uncovering early matrilineal descent among Nilo-Saharan peoples. If we can reconstruct a history in which a kin term—at an earlier period along a particular line of linguistic and societal descent—passed through a meaning shift indicative of Crow kinship, then we also reconstruct the former presence of matriliny at that period.

The Songay language provides a striking example of how the constraints of the systematic semantics of kin terminologies and the normative directionalities of kin semantic shift unveil past matrilineal descent and inheritance rules. At the proto-Saharo-Sahelian node of the

[20] C. Ehret, "Deep-Time Historical Contexts of Crow and Omaha Systems: Perspectives from Africa," in Thomas R. Trautmann and Peter M. Whiteley (eds.), *Crow-Omaha: New Light on a Classic Problem of Kinship Analysis* (Tucson: University of Arizona press, forthcoming).

Nilo-Saharan stratigraphy (fig. 1), the term for 'father's sister' was *b□□s.[21] The modern-day, phonologically regular Songay reflex of this root is *baasa*, the meaning of which is, however, not 'father's sister,' but 'cross cousin'—that is to say, the child of a father's sister or of a mother's brother. How did this change in meaning come about?

The first directionality rule requires that semantic shift in instances like this one, involving the first ascending generation and the speaker's own generation, must proceed from higher generation to lower. In other words, the earlier meaning in this instance does indeed have to have been first-ascending generation application to 'father's sister.' The term could shift its meaning downward to encompass a the father's sister's child (the speaker's generation), but the opposite direction of meaning shift would not be possible.

The systematic semantics of kin terminologies require a two-step history in this instance. The characteristic feature of a Crow system, the extension of the term for 'father's sister' to include 'father's sister's daughter,' constituted the first step in this history. Then, at an undetermined later period, the ancestors of the Songay generalized their reflex *baasa* to include not just the father's sister's children, but all of the cross cousins, while dropping the original meaning 'father's sister.' By extending this term to all cross cousins, they exchanged the earlier Crow system for the modern-day Songay Iroquois type of cousin terminology. The Songay today are patrilineal, but the inferred former Crow system reveals their ancestors to have been matrilineal an uncertain number of centuries back in the past.

The presence of a particular niece-nephew term in Songay suggests, moreover, that the era of matriliny may not have been all that far back into the past. In the Songay language a man calls his sister's children *tubey*. This word is a transparent noun derivative of the Songay verb *tubu* 'to inherit': in other words, once upon a time the heirs of a man were his nephews and nieces—his sister's children, rather than his own. Inheritance from one's mother's brother is a defining matrilineal feature.

The linguistic indicators of earlier matrilineal descent in the histories of Nilo-Saharan societies abound, and they crop up in nearly all the deep lines of linguistic descent leading from ancient down to more recent societies. A variety of indicators have been preserved in modern-day languages or can be shown to have been present earlier along the various descent lines.[22]

One recurrent marker of former Crow systems is the retention today, or the reconstruction to an earlier period, of the ascending-generation Crow equation, 'father's sister' = 'father's mother.' Uduk of the Koman primary branch directly maintains this equation in its term *dithi'*, which today means both 'father's sister' and 'father's mother.' More commonly, the former existence of this relation is revealed indirectly. A frequent indicator of earlier Crow-type kinship is the retention in a language of an ancient term for the father's sister, but with the meaning shifted, via an earlier intermediate extension to 'father's mother,' to 'grandmother' more generally. This shift took place separately at several periods of time in languages of the Central Sudanic branch:

> in the Yulu language's reapplication of the proto-Central Sudanic term *dada 'father's sister' to 'grandmother';

[21] C. Ehret, "Deep-time Historical Contexts."

[22] The reader can access a fuller explication of these materials at http://www.history.ucla.edu/people/faculty?lid=472

in the proto-East Central Sudanic term, *mama ‘grandmother,’ originally the proto-Nilo-Saharan vocative term for ‘father’s sister’;

in the assignment at the proto-West Central Sudanic node of the meaning ‘grandmother’ to the phonologically regular proto-West Central Sudanic reflex *t□ of the proto-Nilo-Saharan non-vocative, *tayt^{h}a ‘father’s sister.’

The same linkage, but via an opposite direction of semantic shift, is evident in the assignment of the meaning ‘father’s sister’ to the proto-Northern Sudanic root *ap’o ‘grandmother’ in the Sungor language of the Taman subgroup of Eastern Sahelian.

At least one example of a relict descending-generation Crow equation occurs in the data for the Nilo-Saharan family. In the For language a term that earlier meant ‘sister (male speaking)’ has become the term for ‘sister’s child (male speaking).’

In a number of instances, the semantic history revelatory of earlier Crow-type kinship is preserved only indirectly today in terms for relatives by marriage. The motivating factor in the particular meaning shifts in these cases has been the existence in past eras of the custom of preferential cross-cousin marriage.

The Bari language of the Nilotic group provides a prime example. Bari *//itanit* ‘husband’s sister’ is the regularly corresponding reflex of a root word *diis for ‘father’s sister’ dating back to the proto-Saharo-Sahelian node in the family tree (fig. 1). The rule of higher-to-lower generation directionality and the rule of consanguineal-to-affinal directionality governed the outcome in this instance. First, a period of Crow kinship ensued, defined by extension of the term for ‘father’s sister’ to the descending-generation relationship, ‘father’s sister’s daughter.’ A consanguineal-to-affinal shift from ‘father’s sister’s daughter’ to ‘husband’s sister’ then took place. This shift is an infallible indicator of the former existence of cross-cousin marriage, for the simple reason that, with cross-cousin marriage, the daughter of one’s paternal aunt is either a potential wife for a man or the sister of one’s husband if one is female.

The very same sequence of semantic shifts turns up in the evolution of the proto-Luo language, although involving a different root word. The term *way- for ‘father’s sister,’ innovated at the proto-Jii-Luo node (fig. 1), came to apply in the later descendant language, proto-Luo, to both ‘father’s sister’ and ‘husband’s sister.’ The directionalities of kin semantic shift require a two-stage history. First, between the proto-Jii-Luo and proto-Luo periods, *way- underwent the descending-generation extension to the ‘father’s sister’s daughter,’ the defining feature of a Crow system. The contemporaneous existence of cross-cousin marriage then allowed for a further meaning shift, “father’s sister’s daughter’ to ‘husband’s sister.’ These meaning shifts took place over roughly the course of the first millennium CE.[23] A third shift in kin terminology then eventuated in the early second millennium, when the proto-Luo society

[23] Evidence from both oral tradition and linguistics date the proto-Luo era to the first half of the second millennium (Ben G. Blount and Richard T. Curley, “The Southern Luo languages: a Glottochronological Reconstruction,” *Journal of African Languages,* 9 (1970): 10-18; B. A. Ogot, *The History of the Southern Luo* (Nairobi: East African Publishing House, 1967)). The preceding proto-Jii-Luo period, in which this root word bore only the meaning ‘father’s sister,’ belongs roughly to the time span of the first millennium BCE. The requisite meaning shifts therefore took place in the intervening centuries, most probably in the first millennium CE.

replaced Crow with Iroquois cousin nomenclature, by applying a new term *keyo to all cross cousins, including the father's sister's daughter. The root *way-, however, continued to retain its other two meanings, 'father's sister' and 'husband's sister.'

A similar sequence of semantic shifts confirms Crow kinship, as well as cross-cousin marriage, earlier in the history of the Didinga society of the Surmic subgroup of Nilo-Saharan. Didinga *ŋerenni* 'father's sister's son; husband's brother' is the regular reflex of *ŋwel□, still another root word for 'father's sister,' in this case dating back to the proto-Kir node on the family tree (fig. 1). In the Didinga language the term for 'father's sister' expanded its application to include not just the father's sister's daughters, but apparently her sons as well. Again a historical context of cross-cousin marriage explains the further extension of the term to an affinal relationship, in this instance 'husband's brother.' Didinga's closely related sister language, Murle, has preserved a partial Crow terminology down to the present. In these two societies the extent to which Crow elements persist suggests that the shift to patriliny took place in just the last few centuries and, in the Murle case, may still be underway.

Crow kinship can also be provisionally reconstructed for the speakers of the proto-Eastern Nilotic language, although on a different basis. The proto-Eastern Nilotic language, spoken probably around 4,000 years ago, borrowed its word *ŋwor- 'father's sister's child' from an early Surmic language. This borrowed word is a reflex of the same proto-Kir root *ŋwel□ seen in the Didinga *ŋerenni* 'father's sister's child; husband's brother.' We can identify it as a Surmic loanword because the Eastern Nilotic form of the root attests the regular, uniquely Surmic outcome of the last consonant of the root, Surmic *r for proto-Kir *l□. In Surmic and only in Surmic did this shift take place, whereas in proto-Eastern Nilotic proto-Kir *l□ regularly yielded *j. In early Eastern Nilotic this term took on a descending-generation Crow application to 'father's sister's child' and to 'sister's child (male speaking).' A further semantic development in the line of descent leading to Maasai (fig. 1) confirms the indications from the Bari language of the early presence of cross-cousin marriage among the Eastern Nilotes. The phonologically regular reflex, *-ŋor-, of this root in Maasai and its close relative Ongamo shifted its meaning to 'wife,' in keeping with the fact that, in a context of preferential cross-cousin marriage, a father's sister's child is a potential spouse as well as a potential sibling of a spouse.

A different kind of marker is double descent, which occurred along at least two further lines of societal descent in Nilo-Saharan (fig. 3). In a double-descent system a person belongs to both the mother's and the father's clans and thus traces descent both matrilineally and patrilineally at the same time. Double descent has normally arisen in history as an intermediate stage in a shift toward patriliny from an earlier purely matrilineal reckoning of descent, and so the presence of this feature is thus still another indicator of former matriliny.

Above and beyond the inferential evidence, both historical and ethnographic documentation also attest to the former wide presence of matrilineal descent among Nilo-Saharan-speaking peoples. Several societies of the Western (Uduk) branch of the Koman primary branch (fig. 1) were still matrilineal in the twentieth century, and a mid-twentieth-century report attributed matriliny to the Gumuz as well,[24] although the Gumuz today are

[24] H. Hilke and D. Plester, "Forschungsreise in das Land der Präniloten," *Zeitschrift für Eingeborenen-Sprachen* 80 (1955): 178-186

patrilineal.[25] The Kunama and Nara peoples, as well as the Midob society of the Nubian group, were also matrilineal in the twentieth century. In addition, written records from as far back as the sixth or seventh century BCE reveal matrilineal descent and inheritance rules in the Meroitic and Nubian societies of the northern Middle Nile Basin.

Figure 3 depicts two aspects of the evidence. First, it marks all the instances along the different lines of descent in the family in which the historical, ethnographic, or linguistic records reveal or imply the presence of matrilineal descent. Differently marked lines identify the different types of evidence from which matrilineal descent is inferred. Second, when evidence revelatory of matriliny, either former or current, appears on two or more lines of societal descent emanating from the next higher node on the tree, the more parsimonious explanation is that this shared fundamental organization of society existed already in the common ancestor society. When this pattern repeats on descent line after descent line in the family, independent invention becomes an ever more improbable explanation. In figure 3 dotted lines mark the inferred extrapolations of matriliny back in time in the family. Matriliny, it appears, was characteristic of the earliest Nilo-Saharan societies, and a matrilineal basis of descent and inheritance continued to exist among most Nilo-Saharan societies down into the past 3000 years of history and, in a number of cases, down to the present.

Women and authority in the Nile kingdoms

Did the widespread matriliny of Nilo-Saharan societies in earlier periods have historical consequences for women's roles in society? Matriliny has been so widely replaced by patriliny over the past three millennia among the speakers of Nilo-Saharan languages that the kinds of evidence Christine Saidi discovered for the still-matrilineal Sabi peoples of east-central Africa are hard to come by. In the one instance, however, where historians possess written evidence from a succession of early historical periods, a quite striking empowering of at least some women emerges from the record.

The empire of Napata-Meroe, or Kush, in existence for more than a thousand years, from before the eighth century BCE to the fourth century CE, followed matrilineal rules of descent and inheritance from the beginning. The choice of the word *empire* is deliberate, by the way, not only because of the often unrecognized extent of Napata-Meroe's domains and trade hegemony, but because its domains to the south of the Sahara appear to have encompassed subordinate kingdoms.[26] Matrilineal descent continued to prevail in the successor Nubian kingdoms of the middle Nile in the medieval period, from the fifth to the fourteenth century, and beyond that time, in the Sinnar kingdom as well, from 1504 till as late as the eighteenth century.

We possess a single determinative statement in the written record of early Napata-Meroe, the geneology of the late seventh- or early sixth-century ruler Aspelta. His inscription traces his ancestors back seven generations through the maternal line, with no mention of his paternal descent.[27] Rulers recite their genealogies for just one reason—genealogies legitimize their

[25] Wendy James, "Lifelines: Exchange Marriage among the Gumuz," in D. L. Donham and W. James (eds.), *The Southern Marches of Imperial Ethiopia: Essays in History and Social Anthropology* (Cambridge: Cambridge University Press, 1986), pp. 119-147.

[26] This understanding is not unique to this essay. The standard work, Derek A. Welsby, *The Kingdom of Kush: The Napatan and Meroitic Empires* (Princeton: Markus Wiener Publishers, 1998), takes the same position.

[27] Welsby, *The Kingdom of Kush*, p. 26.

claims to rule. One can hardly imagine a clearer affirmation of the matrilineal legitimization of the inheritance of office.

Brother-to-brother succession, which seems present in the Meroitic record as well, is entirely compatible with matrilineal rules. Differently from a patrilineal system, what makes a brother a legitimate successor to his brother is not that he has the same father, but that he has the same mother. Moreover, the term for 'brother' likely defined a wider category than it does in most Western languages. If Meroitic culture followed an Iroquois cousin nomenclature, as seems probable from the wider Nilo-Saharan evidence, or alternatively a Crow system, the word for 'brother' would have been the term also for the 'mother's sister's son.' In that situation the 'brother' who succeeds to office need not be an actual brother, but could just as well be the son of the maternal aunt of the previous king or queen.[28]

An arresting feature of Napatan and Meroitic history was the prominence of the queen, the *Kandake*. The queen often held the position of co-ruler, accorded equal status with the king. Some queens became of the sole rulers as successors to their husbands. Others appear to have been rulers in their own right. There is every indication that the authority of the Kandakes was accepted and expected. Their monuments were valued and preserved and not defaced after their deaths. The contrast with what Hatshepsut faced at an earlier period, in fifteenth-century-BCE Egypt, could hardly be sharper. Echoes of the prominence of the queens of Meroe resounded far outside the Meroitic empire itself. In the lore of the Classical Age around the Mediterranean, as the story of the apostle Philip and the "Ethiopian" in Acts 18: 26-40 reveals, the Kandake *was* the ruler of Meroe.

In the Nubian kingdoms, which took power along the northern Middle Nile in the fifth and sixth centuries, after the decline of Meroe, matrilineal inheritance of office remained the rule. The most northerly kingdom in the sixth century CE, Nobadia, recognized this kind of succession.[29] Although Nobadia was subsumed into the Makuria kingdom sometime in the seventh century, and Makuria became the name of the combined kingdom, the rulers of this state most likely descended from the old Nobadian royality.[30] Matriliny continued to be the primary rule of descent in Makuria,[31] apparently down to the end of the kingdom in the early fourteenth century. The evidence we possess on the southern Nubian kingdom, Alwa with its capital at Soba on the Blue Nile, indicates matrilineal succession to office in that state as well.[32] The

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[28] The discussion in Welsby, *Kingdom of Kush*, pp. 26-27, of known examples of royal relationships does not take either of these factors into account.

[29] Derek A. Welsby, *The Medieval Kingdoms of Nubia* (London: British Museum, 2002), p. 88.

[30] Marianne Bechhaus-Gerst, *Sprachwandel durch Sprachkontakt am Beispiel des Nubischen im Niltal: Moglichkeiten und Grenzen einer diachronen Soziolinguistik* (Köln: Rüdiger Köppe, 1996), sets out a strong case, not yet taken into account by most historians, that it was the Nobadians who conquered and subjugated Makuria, even though keeping the name Makuria for the combined bigger state. Her findings suggest the earlier inhabitants of Makuria were treated as a subjugated population, with a narrow ruling elite dominating a large enserfed peasant majority, whereas the Nobadian provinces had a more varied society, with a merchant class as well as the governing and farming strata.

[31] Severus, translated in Giovanni Vantini, *Oriental Sources Concerning Nubia* (Heidelberg: Heidelberger Akademie der Wissenschaften, 1975), p. 205-207.

[32] Ibn-Hawqal, translated in Vantini, *op. cit.*, p. 163.

favored line of succession in the kingdoms originally appears to have been from mother's brother to sister's son.

But the Makurian kingdom appears at some point to have instituted an additional pathway of matrilineal succession. A twelfth-century observer noted that the preferred successor in the kingdom was a maternal nephew, but that if a nephew was not available, then a son could succeed.[33] But how does filial succession to the kingship accord with matrilineal descent? The far-better documented history of the Sinnar kingdom reconciles this seeming conflict.

As Jay Spaulding has shown, the Sinnar kingdom, founded at the beginning of the sixteenth century by Nubian speakers, had both matriliny and filial succession to office. The social mechanism that reconciled these seemingly conflicting principles was the practice of parallel-cousin marriage. In a matrilineal system parallel-cousin marriage privileges the marriage of one's son to one's sister's daughter. (In contrast, in a patrilineal context such as that of Arab society, the parallel-cousin marriage privileges the espousing of one's daughter to one's brother's son.) With matrilineal parallel-cousin marriage, the son can succeed the father in office because the mother's matrilineal descent group is the same as the father's. In the royal stratum of Sinnar society this rule was fully in place on through the seventeenth century, until a shift to patrilineal descent rules in the mid-eighteenth century obviated it.

Abu Salih's observation that the maternal nephew was the preferred successor in Makuria, but that a son could succeed if a suitable nephew was not available, now makes sense. The shift toward matrilineal parallel-cousin marriage must already have been underway by the twelfth century in Makuria.[34] The obverse implication of Abu Salih's testimony is that, although parallel-cousin marriage probably existed, it was not yet the preferred royal practice. By time of the rise of the Sinnar kingdom in the sixteenth century, however, the rule was fully in place and systematically observed. The evidence of linguistic reconstruction shows that the proto-Nubians of the early first millennium BCE both were matrilineal and practiced preferential *cross-cousin* marriage,[35] so the shift to parallel-cousin marriage marked a sharp departure from their deeper historical past.

What does this history reveal about the consequences of matriliny for the gendering of authority over time? Meroitic society accepted female authority at the apex of society. We do not know that this empowering of women reached down through lower strata in the society, but it is hard to imagine that the acceptance of female authority at the highest levels did not have its foundations in a more general expectation that women had their own spheres of authority. Sabi women for many centuries operated with an institution, the sororal coalition, and a set of supporting social norms and ritual sanctions that legitimated their authority over a crucial social nexus. Did institutions of similar import exist in Napata and Meroe?

The presence of matrilineal rules of descent, on the other hand, did not guarantee the perpetuation of the earlier modes of women's authority in either African region. The history of

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[33] Abu Salih, translated in Vantini, *op. cit.*, p. 333; also Jay Spaulding, "Medieval Nubian Dynastic Succession," in Melvin E. Page, Stefanie Beswick, and Timothy Carmichael (eds.), *Personality and Political Culture in Modern Africa* (Boston: African Studies Center, Boston University, 1998), pp. 7-14.

[34] As Jay Spaulding, *The Heroic Age in Sinnar* (Trenton, Asmara: Red Sea Press, 2007), p. 20, also argues with additional evidence for the presence already of parallel-cousin marriage in later Nubian societies.

[35] C. Ehret, "Reconstructing Ancient Kinship."

the Nubian kingdoms and Sinnar shows that the rules actuating and giving social and material expression to matrilineal descent and inheritance could be reformulated in ways that, in the end, undercut female authority while still preserving of positional inheritance through the matriline. Among Sabi peoples in east-central Africa, something similar may have been evolving in the central areas of the Bemba kingdom by the later nineteenth century, as well-to-do and politically well-connected men began to sponsor female puberty initiations, and royal women appropriated the role of favored overseers of these observances.

Implications and issues

If patriarchy is not a human given, then why have patriliny and more male-dominated modes of social operation so often come to prevail over the course of time? The adoption of male wealth-enhancing activities, such as cattle raising, does not necessarily shift the balance. As thousands of years of Nilo-Saharan history show, extensive cattle raising can long coexist with matrilineal descent. The rise of states, with warfare and other male-empowering activities, may also set in motion processes that relegate women to second-class status. The example of Meroe suggests, though, that a powerful state does not by its mere existence contract women's authority, or at least does not immediately lead to that consequence. The history of the Nubian kingdoms implicates the implementation of a particular custom, matrilineal parallel-cousin marriage, as the determinative factor in assuring male succession to rule within an otherwise matrilineal system.

One can look at these issues of causation from two sides: On the one hand, certain broad developments, such as growth in movable wealth and in the disparities of wealth and/or the emergence of state institutions, may enhance the conditions that work against female agency and authority in society. On the other hand, different historically specific changes in ideas and cultural practices, and not general conditions, were the likely shapers in different world regions of the particular outcomes for women, and the drivers of the historical timing of those outcomes. Anthropologists, for example, have proposed that the shift to patriliny among the Bantu peoples of the southernmost tier of Africa and also in northern and central East Africa in the past 2000 years correlates strongly with the adoption of cattle raising.[36] A historian, who seeks cause in particular historical contexts, would see a very different correlation: namely, that the incoming Bantu societies separately shifted to patrilineal descent in just those regions where the previous populations had already long been patrilineal. Conversely, wherever the prior populations had been hunter-gatherers, who were neither patrilineal nor matrilineal, the incoming Bantu-speaking societies of 2,000 years ago, such as the early Sabi, maintained the older Bantu matriliny.[37]

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[36] Claire Holden and Ruth Mace, "Spread of cattle led to the loss of matrilineal descent in Africa: a coevolutionary hypothesis," *Proceedings of the Royal Society, Biological Sciences* 270 (2003): 2425-2433.

[37] The ancestral societies of nearly all of the southern African Bantu groups that are today patrilineal had close cross-cultural interactions between the first and tenth centuries CE with patrilineal Khoekhoe societies; see C. Ehret, "The Early Livestock Raisers of Southern Africa," *Southern African Humanities* 20 (2008): 30-75. In nearly all regions of East Africa in which Bantu-speaking societies shifted to patriliny during the past 2000 years, they were preceded by Southern Cushitic populations, among whom patrilineal descent was the ancient rule; see C.

Matrilineal descent, it can be proposed from the African examples, is compatible with female autonomy in social and political history and with societal acceptance of female expressions of authority. Societies may change the applications of matrilineal rules in ways that shift power and authority away from women and vitiate the advantages of matrilineal descent. But that does not lessen the implications for historians. The presumption of male dominance as a human constant of earlier history needs rethinking. Matrilineal descent was once far more common all over the world, and not only in Africa, but in southern Asia, Oceania, and the Americas. Africa provides examples in which matriliny existed in tandem over very long periods with significant female agency and authority in society. For many other places in the world, it may be worth revisiting and rethinking the issues of just what kinds and how much authority women may have wielded in past eras.

Ehret, *An African Classical Age*, chapters 2-4 and also the supporting tables of evidence for these cultural interactions, pp. 299-332.

FIGURE 1a. NILO-SAHARAN STRATIGRAPHY

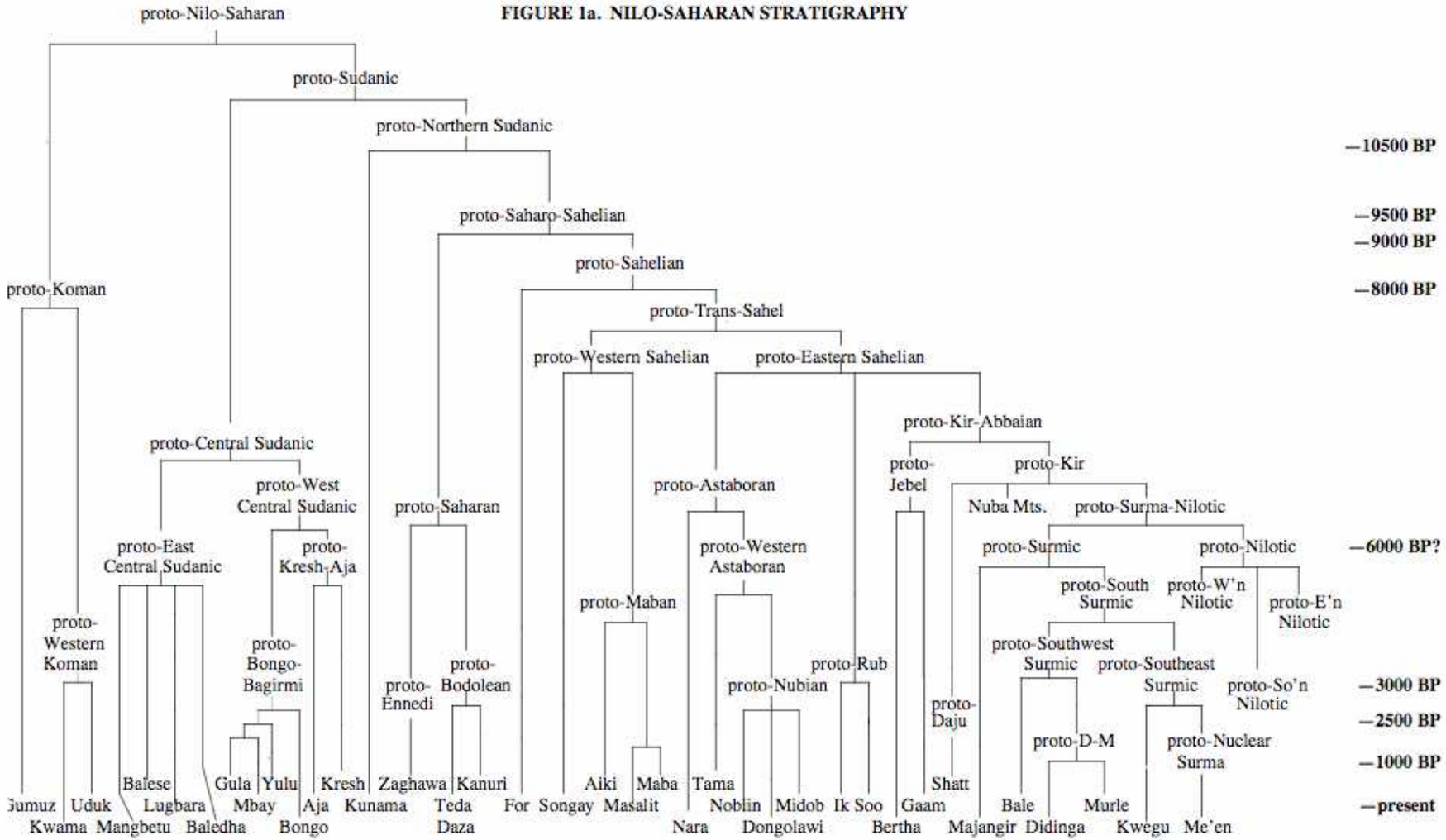
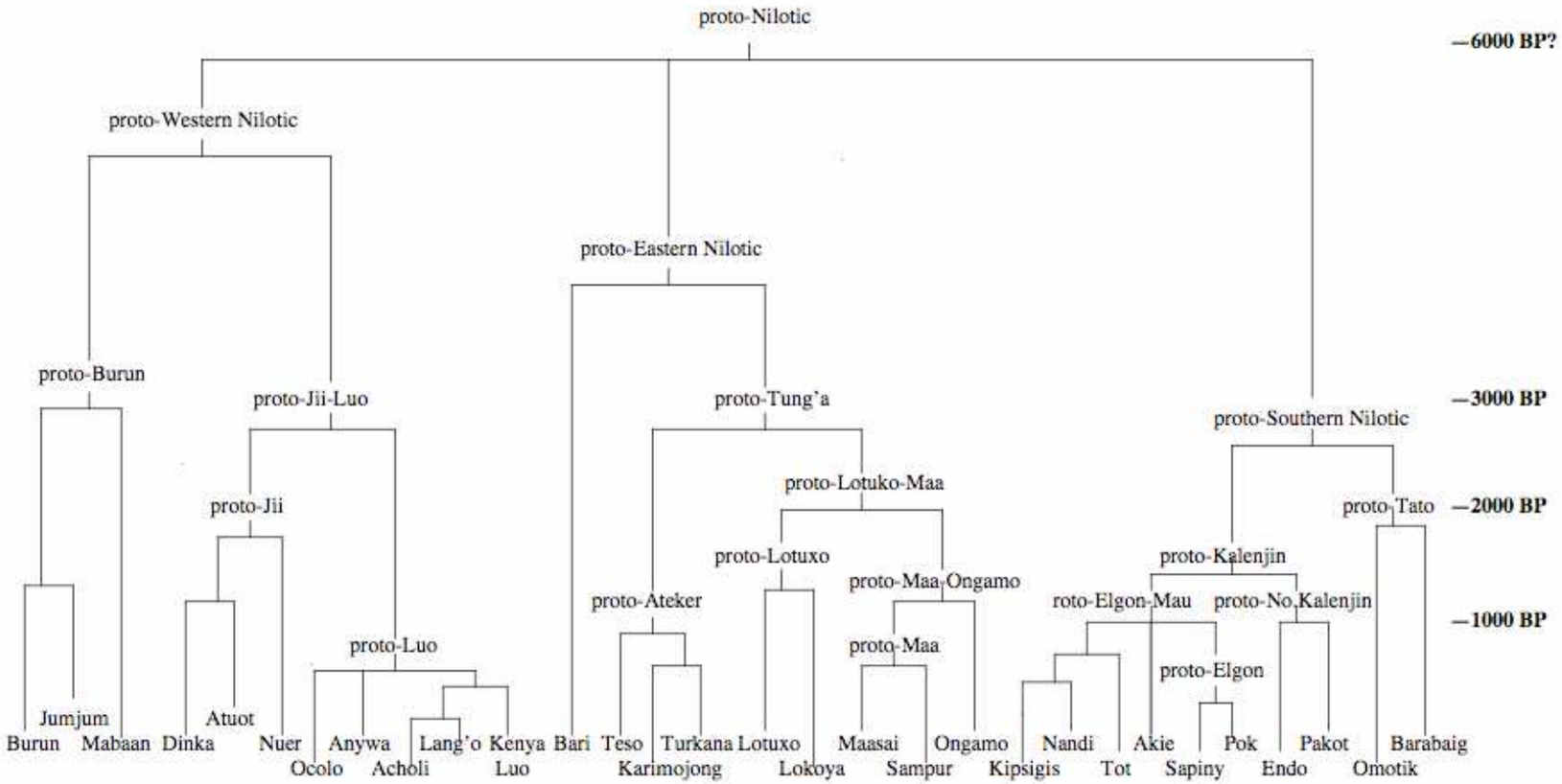
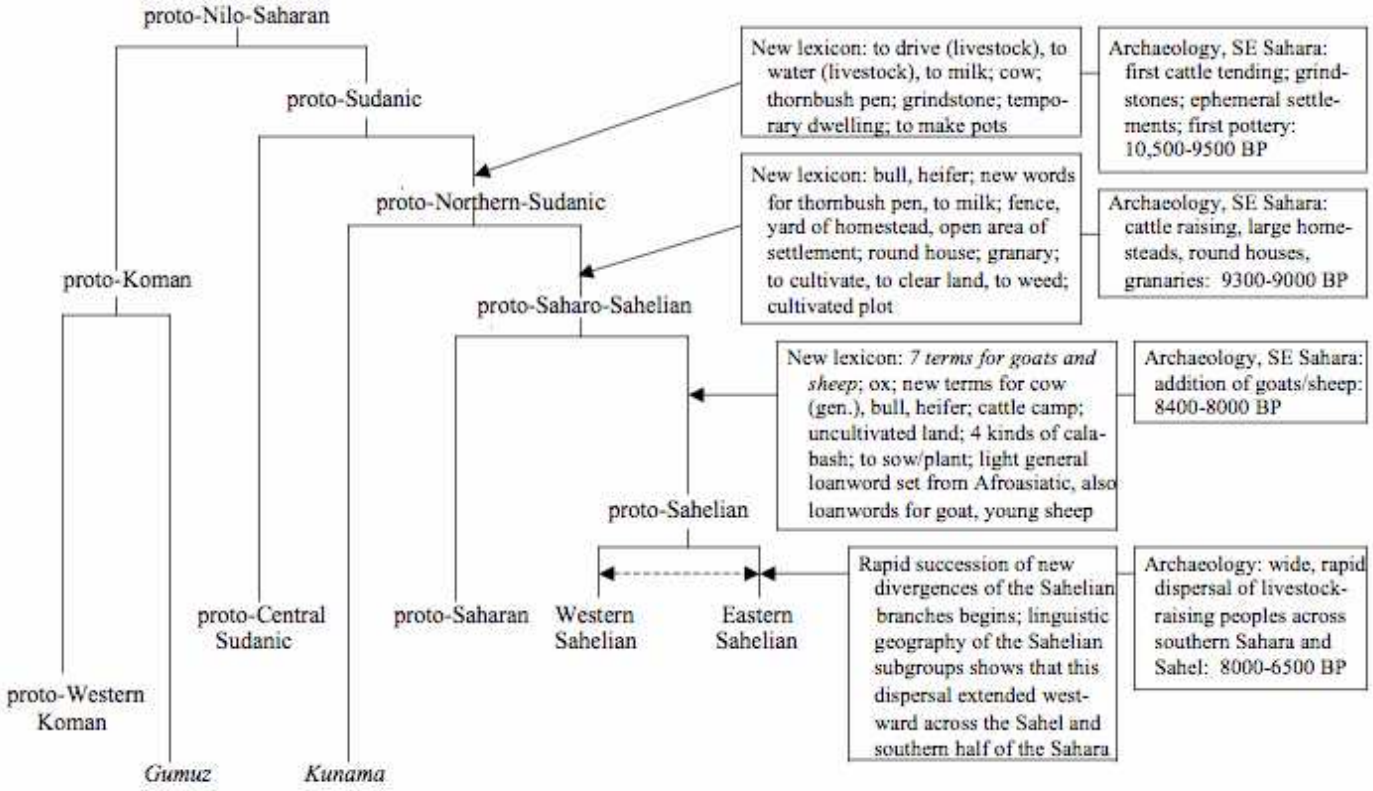
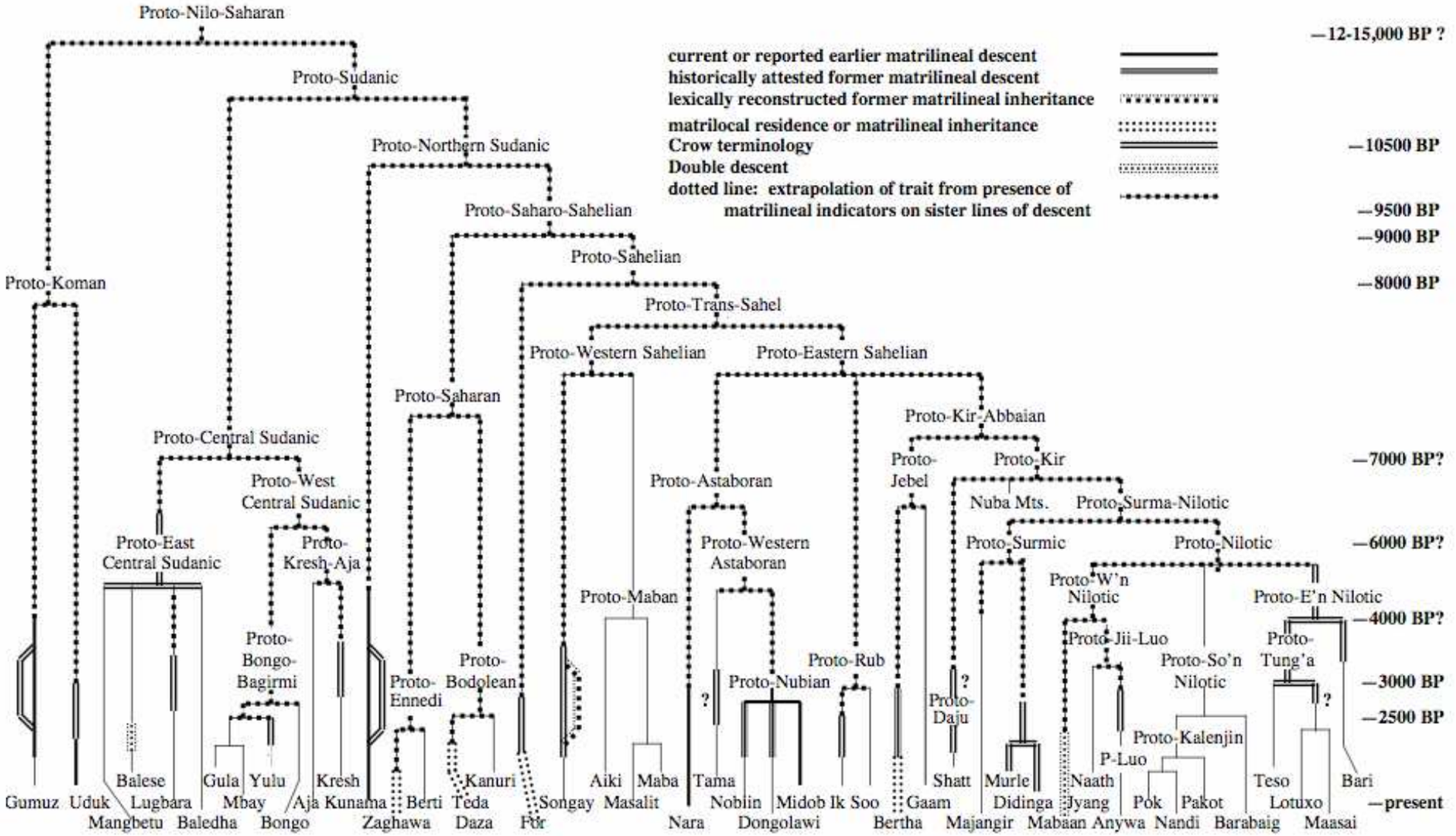


Figure 1b. Stratigraphy of Nilotic subgroup of Nilo-Saharan




proto-Nilo-Saharan
proto-Sudanic
proto-Northern-Sudanic
proto-Koman
proto-Saharo-Sahelian
proto-Sahelian
proto-Central Sudanic
proto-Saharan
Western Sahelian
Eastern Sahelian
proto-Western Koman
Gumuz
Kunama
New lexicon: to drive (livestock), to water (livestock), to milk; cow; thornbush pen; grindstone; temporary dwelling; to make pots
Archaeology, SE Sahara: first cattle tending; grindstones; ephemeral settlements; first pottery: 10,500-9500 BP
New lexicon: bull, heifer; new words for thornbush pen, to milk; fence, yard of homestead, open area of settlement; round house; granary; to cultivate, to clear land, to weed; cultivated plot
Archaeology, SE Sahara: cattle raising, large homesteads, round houses, granaries: 9300-9000 BP
New lexicon: *7 terms for goats and sheep*; ox; new terms for cow (gen.), bull, heifer; cattle camp; uncultivated land; 4 kinds of calabash; to sow/plant; light general loanword set from Afroasiatic, also loanwords for goat, young sheep
Archaeology, SE Sahara: addition of goats/sheep: 8400-8000 BP
Rapid succession of new divergences of the Sahelian branches begins; linguistic geography of the Sahelian subgroups shows that this dispersal extended westward across the Sahel and southern half of the Sahara
Archaeology: wide, rapid dispersal of livestock-raising peoples across southern Sahara and Sahel: 8000-6500 BP

1


Proto-Nilo-Saharan
Proto-Sudanic
Proto-Northern Sudanic
Proto-Saharo-Sahelian
Proto-Sahelian
Proto-Trans-Sahel
Proto-Western Sahelian
Proto-Eastern Sahelian
Proto-Koman
Proto-Saharan
Proto-Central Sudanic
Proto-West Central Sudanic
Proto-Kir-Abbaian
Proto-Jebel
Proto-Kir
Proto-Astaboran
Proto-East Central Sudanic
Proto-Kresh-Aja
Nuba Mts.
Proto-Surma-Nilotic
Proto-Western Astaboran
Proto-Surmic
Proto-Nilotic
Proto-Maban
Proto-W'n Nilotic
Proto-E'n Nilotic
Proto-Bongo-Bagirmi
Proto-Ennedi
Proto-Bodolean
Proto-Rub
Proto-Nubian
Proto-Jii-Luo
Proto-So'n Nilotic
Proto-Tung'a
Proto-Daju
Proto-Kalenjin
P-Luo
Gumuz
Uduk
Balese
Lugbara
Mangbetu
Baledha
Gula
Yulu
Mbay
Bongo
Aja
Kresh
Kunama
Zaghawa
Berti
Teda
Daza
Kanuri
For
Songay
Aiki
Maba
Masalit
Tama
Nara
Noblin
Dongolawi
Midob
Ik
Soo
Bertha
Gaam
Shatt
Majangir
Murle
Didinga
Mabaan
Naath
Jyang
Anywa
Pok
Nandi
Pakot
Barabaig
Teso
Lotuxo
Maasai
Bari
current or reported earlier matrilineal descent
historically attested former matrilineal descent
lexically reconstructed former matrilineal inheritance
matrilocal residence or matrilineal inheritance
Crow terminology
Double descent
dotted line: extrapolation of trait from presence of matrilineal indicators on sister lines of descent
—12-15,000 BP ?
—10500 BP
—9500 BP
—9000 BP
—8000 BP
—7000 BP?
—6000 BP?
—4000 BP?
—3000 BP
—2500 BP
—present