

THE LINGUISTIC RECONSTRUCTION OF PREHISTORIC PASTORALIST VOCABULARY

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ABSTRACT

The origin of livestock, especially cattle, is one of the central issues in the study of pastoralism in southern Africa. Current theories of these origins are based primarily on linguistic evidence. Accordingly, it is important that there is a clear understanding of the methodological status of this evidence. In the methodology of comparative historical linguistic reconstruction two major processes are conventionally recognized: genetic inheritance and borrowing. The origins of southern African livestock terms have been explained chiefly in terms of borrowing. In this paper we critically evaluate the status of this view and discuss the application of the genetic process to this linguistic evidence. We show that both processes must be recognized in the reconstruction of this livestock terminology.

Consideration of the vocabulary associated with livestock is an important aspect of the reconstruction of the prehistory of pastoralism in southern Africa. In fact, theories of the original sources of livestock in this region, and also in central and eastern Africa, have been based almost exclusively on this purely linguistic evidence.

The linguistic correlate of the transfer of livestock and associated concepts between peoples is vocabulary borrowing between their languages. Borrowing is one of the important processes which lead to the occurrence of the sound-meaning resemblances between languages which are the basic data of comparative historical linguistics — the other important processes are genetic inheritance and chance (Greenberg 1957:49). This paper is concerned primarily with borrowing. It will illustrate some of the problems of borrowing by referring to some proposals regarding the origins of terms for 'cattle' in the Bantu languages. The chance factor will be considered first before a discussion of the true historical factors.

Chance as an Explanation of Sound-meaning Resemblances

The probability of chance sound-meaning resemblances between languages is impossible to estimate with any precision but it is rather higher than those untrained in comparative historical linguistics may suspect. Taking just English, for example, one can cite the following chance sound-meaning resemblances: Luganda *egi* 'egg', Korean *man* 'man', Didinga (Sudan) *badh* 'bad', Latin *dies* 'day', !Kung *mi* 'me/I', Xhosa *ihagu* 'hog', Shona *rera* 'rear (child)', Shona *hate* 'head pad' (cp. Eng 'hat'), Shona *chiruvi* 'ridge of roof' (cp. Eng 'roof'). Comparing across all pairs of these languages would undoubtedly produce many more purely chance sound-meaning resemblances.

Considering that languages contain many thousands of vocabulary items each containing several phonemes and that the universal set of possible phonemes of a human language is quite restricted it is not surprising that chance sound-meaning resemblances occur. This problem becomes very much more insidious when sound-meaning resemblances are based not on the true phonemic representation but rather on the orthographic representation, especially where the orthography is complex or based upon unfamiliar linguistic conventions. In this respect the Khoisan languages pose particular problems for the non-linguist. The considerable phonetic and phonological complexity of these languages means that non-linguists are perforce generally obliged to rely on the written representations of dictionaries and grammars. But this very complexity also leads to a complex set of orthographic conventions, some of which are not always fully appreciated by the non-linguist. These observations are relevant because of the seemingly irresistible attraction of these languages to cult writers proposing bizarre theories of their origins and influence, some of which will be mentioned below.

In the practical orthography of Nama (Khoe), for example, the phoneme /k/ is represented as *k* or *g* before short and long vowels

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respectively. (A similar convention applies to *p/b* and *t/d*.) Thus /komas/ 'cow' is orthographically represented as *gomas* which Hromnik (1981:11) claims is "retained practically intact from the languages of the Indian gold-seekers, where *gomās* simply meant beef." It seems likely that there is an element of pure chance orthographic resemblance in this claim which will be discussed in greater detail below.

Language universals constrain not only the inventory of possible phonemes but also their combinational possibilities. Also the actual frequency distribution of phonemes in discourse varies from one language to another. This last factor is especially important because if the relatively higher frequency phonemes of two languages happen to be similar then the probability of chance resemblances is increased significantly. Here again the effect of this purely phonological factor may be exacerbated where purely orthographic representations are employed. In the practical orthographies of the Khoisan languages, for example, the various release types of click phonemes are represented with standard letters, such as *k* for voiceless, *g* for voiced, *h* for aspirated, *x* for affricated, and so on. Using this convention the dental click /!/, for example, appears in the orthography as *!* radical, *!k* voiceless, *!g* voiced, *!h* aspirated, *!x* affricated, and in several other forms. But these languages also have independent phonemes /k/, /g/, /h/, etc. represented with the same orthographic symbols. Since the frequency of click phonemes is very high it is obvious that the frequency of these click release symbols in the orthography significantly exaggerates the true frequency of the phonemes /k/, /g/, /h/, etc. There is insufficient awareness of this factor among linguistically untrained comparativists who tend to treat release symbols and independent phonemes identically simply because they have identical orthographic representations. Some examples of these will be discussed below.

Genetic Inheritance as an Explanation of Sound-meaning Resemblance

We turn now to consider the genetic factor as an explanation of sound-meaning resemblances. An explicit and rigorous methodology is available for determining genetic inheritance — the Comparative Method. This method exploits the fact that genetic sound-meaning resemblances generally recur throughout the vocabulary of the languages compared. This is a logical consequence of the way in which languages are seen to change — by the cumulative effect over time of slight systematic changes. As a result of these changes distinct dialects and eventually distinct languages develop. Because the changes are systematic rather than random, once sound changes have been initiated (by whatever cause), the vocabulary of these genetically related dialects or languages will be linked by systematic sound and meaning correspondences. Of course not all vocabulary items will behave in this orderly fashion and over time many items will be lost or replaced by borrowing in one or other or both related dialects or languages. It should also be realized that the recognition of regular sound correspondences is a highly specialized subject and in practice considerable training and application may be required to prove or disprove hypotheses of genetic relationship, especially between languages which are only remotely related.

The reconstruction of the linguistic prehistory of Africa in general and southern Africa in particular has relied primarily on the analysis of genetic historical relationships between languages using the comparative method. This method, together with the complementary methods of quantitative lexicostatistics and numerical classification theory provide the necessary methodological rigour required for explicit, complete and reliable reconstructions. These methods are described in considerable detail in the literature and will not be discussed further here (for discussion and references see Hoenigswald 1960; Heine 1972; Borland 1984).

Despite the general acceptance and accessibility of this body of formal theory there remains a steady undercurrent of cult writing purporting to demonstrate genetic relationships between languages without providing formal proof of regular sound-meaning correspondences through the use of the comparative method. An example is Stopa's (1972) theory of the common origin of Khoe, San and Indo-European. Although Stopa apparently has a strong background in Indo-European studies he fails to appreciate the need to cite some evidence of regular systematic correspondence between these languages in support of his strong claims. He offers only a number of scattered observations of what he considers revealing sound-meaning resemblances such as the following: San /*koa* 'bone' : Latin *costa* 'rib', San /*khoea* 'cow' : Latin *cornu* 'horn', San /*kal/ku* 'to tear' : Latin *caro* 'meat'. To obtain some perspective on the linguistic methodology of this work one should perhaps consider also the sound-meaning resemblances proposed between Khoe and San words and the calls of chimpanzees, such as: San /*ka:n* 'to eat raw meat' : Chimpanzee *ghak ghak* 'demanding food', Khoe *mu* 'to see' : Chimpanzee *m* 'greeting companion'. Many further examples are solemnly cited in support of Stopa's theory of language genesis which attaches particular significance to the 'primitive' click phonemes of the Khoisan languages.

The view that people with a 'primitive' material culture must speak a 'primitive' language is, of course, long discredited. Ironically the Khoisan languages have become the subject of intensive examination primarily because their extraordinary complexity provides significant insights into language universals, just as their 'primitive' culture is now seen as an extremely complex and successful accommodation to their hostile environment. There is no need to comment on the unacceptable racial assumptions involving the perceived primitiveness of Khoisan speakers which underpin this theory.

A recent congener of this school is Lorch's (1982) proposal that the Khoe, San and Hadza languages are the sole surviving members of a language family termed Qhuenasoke whose speakers were distributed from the Canaries to the Caucasus around 4000 BC and who amongst other accomplishments invented metal working. Although making no reference to it, this theory assumes many of the unacceptable aspects of Stopa's work, especially the idea that Khoe and San vocabulary represents a primitive form of the original Qhuenasoke roots (1982:155). Lorch makes no attempt to explain how just these languages survived unchanged over the 6 000 years which witnessed the virtual extinction of this language family. In this respect then Lorch's theory of historical linguistics is quite unhistorical. Even if we agree to overlook the invalidity of Lorch's 'reconstructed' Qhuenasoke roots (which are generally simply assumed to be the same as corresponding Khoe or San roots) it is quite clear that his method involves the observance of mere chance sound-meaning resemblances. Consider the following proposed derivations for example: Latin *electrum* 'electrum' from Qheuna /*ali-kei-to-lorin* 'shining pale yellow metal' or Latin *stagnum* 'tin' from Qheuna /*seta-lga-lnoa-m* 'moon-bright' grey metal'. The purely subjective component in the recognition of these apparent sound-meaning resemblances is obvious. It is also obvious that the click release symbols described earlier have been erroneously analysed as independent phonemes.

Borrowing as an Explanation of Sound-meaning Resemblance

The determination of borrowing as an explanation of sound-meaning resemblance is rather more problematical as no explicit and rigorous methodology is available. Borrowing is just one of the results of language contact. Depending upon the particular historical circumstances of the contact situation the results vary from the borrowing of a few culture words to a complete restructuring of the grammar of the language. In this paper we are concerned only with vocabulary borrowing and not with the latter processes of pidginization and creolization.

Since borrowing is a result of language contact it naturally occurs both between genetically related and between genetically unrelated languages. Obviously borrowings between unrelated languages, especially more recent borrowings, are generally more easily detected than those between related languages. There is, for example, little doubt about the status or origins of Shona *bhasikoro* 'bicycle' or Xhosa *ikofi* 'coffee' or Swahili *kipilefu* 'traffic island'. These items illustrate also some of the phonetic complexities involved in borrow-

ing and the need for a detailed knowledge of the social context in both the donor and acceptor language.

Since language contacts can generally be expected to be of fairly long duration we would expect to find a significant number of borrowings from the same source language. We would then also expect to find some sort of regular correspondence in sound and meaning in these borrowings rather than mere random variation. The observance of some sort of recurrent sound correspondence between languages in contact means that individual hypotheses of borrowing can be checked against some independent evidence. This is the strongest form of the borrowing method approaching the comparative method in explicitness and rigour. Ehret's (1973) analysis of Central Sudanic borrowings in eastern and southern Bantu languages is a promising example of this approach.

Notice that in the case of related languages we do not expect these borrowing correspondences to be the same as the genetic correspondences which link the cognate vocabulary. Consider, for example, the initial consonant only of some well known Latin borrowings in German: German *Pfeffer* 'pepper' from Latin *piper* and German *Pfund* 'pound' from Latin *pondo* (Bynon 1977:218). But this *pf:p* correspondence is distinct from the genetic correspondence of *f:p* of joint retentions in German and Latin of Proto Indo-European roots, such as German *Vater* and Latin *pater* from Proto Indo-European **pitar* 'father' (German orthographic *v* = /f/). These examples illustrate another important possibility, that of obtaining an approximate chronology of borrowings. Thus German has also borrowed *Pech* 'pitch' from Latin *pix* and *Palme* 'palm' from Latin *palma* which display a different borrowing correspondence of *p:p*. Now it is known on independent evidence that High German underwent a major sound shift around 1500 which involved a *p > pf* shift. This means, of course, that *Pfeffer* and *Pfund* must have been borrowed before this time because they were present when this shift occurred and *Pech* and *Palma* after it because they were not affected. Unfortunately our knowledge of the linguistic prehistory of unwritten African languages is generally insufficient to employ this technique. Notice that although English has also retained this Proto Indo-European root in the form *father*, it has also borrowed from Latin in the form *paternal*, a word with more learned connotations. This illustrates the important fact that the presence of joint retentions does not preclude the occurrence of later borrowings.

In some cases a borrowing is clearly indicated by the presence of an element of sound, grammatical structure or meaning which is foreign to the language. If the corresponding element is natural in the other contact language then, in addition, the direction of borrowing has been established. For example, Ehret (1967, 1968) suggests that the presence of non-Bantu sound correspondences linking genetically related variant forms of reconstructed roots for 'cattle' and 'sheep' respectively indicates the foreign origins of these roots. Partly on the grounds that the phonology implied by these roots is similar to the phonology of Central Sudanic languages he goes on to suggest this area as the original source of these roots and of the referent animals themselves. We will have reason to examine this argument in greater detail below.

A clearer case is the evidence of contact between Khoisan and southern Bantu languages, especially Nguni (Louw 1979). The presence of vocabulary containing exotic click consonants in just those Bantu languages which were in contact with the click-using Khoisan languages is clear evidence of this sort of borrowing. The fact that this exotic phonological element has become almost completely integrated into the phonology of the languages is evidence for intensive and long sustained language contact. Further, the presence in the dialects of these languages of genetically related vocabulary containing click consonants proves that this contact must have occurred at least since the time when the ancestral proto-southern Bantu languages were spoken.

In its weakest form the borrowing method involves merely the matching of suggestive orthographic representations. In this form it becomes an essentially informal, subjective and even arbitrary procedure. No attempt is made to extract any sort of recurrent correspondences in support of individual hypotheses of borrowing and the evaluation of valid relationships becomes a matter for persuasion and ingenuity rather than formal proof or logical disconfirmation. Understandably the operational simplicity of this weak form has great appeal to scholars essentially untrained in comparative historical

linguistics. Ironically it has been employed to support some of the strongest possible claims in African linguistic prehistory.

It is, for example, the method used by Hromník (1981) in support of his theory of the Indian origins of mining, metal working, stone building and livestock in eastern and southern Africa. Although this work provides an excellent example of the problems inherent in the absence of a rigorous methodology to account for borrowing it will not be considered in any detail here as our critique and Hromník's response are available elsewhere (Hall & Borland 1982; Hromník 1983; see also Ehret 1982a; Huffman 1983; Postma-Ownby 1982). Very briefly, from a very small data base of some 35 vocabulary items containing superficial sound-meaning resemblances Hromník argues for a Bantu prehistory involving borrowing on a massive scale from a wide variety of Indian and Indonesian languages. But, as we have shown in our review, most of these proposed borrowings are mere chance sound-meaning resemblances largely based on orthographic representations. Others are obvious genetic inheritances from Proto-Bantu that he is unable to recognize because of his lack of cognizance of the role of sound correspondences in linguistic prehistory.

Stopa (1972), mentioned above, employs exactly this weak form of the method in arguing for early contacts between African and Indo-European languages to account for what he claims is an African substratum in Indo-European.

The Problem of Distinguishing Borrowing from Genetic Inheritance

We have discussed the serious problems of evaluating arguments for borrowing as an explanation of sound-meaning resemblances which result from the informality of this methodology. We have mentioned also the greater reliance on the more formal methodology developed to account for genetic inheritance in the reconstruction of African linguistic prehistory. It remains to discuss some of the ways in which these two accounts of historical linguistic relationship are related.

Sound changes which occur after borrowings have entered the language affect both native and borrowed items similarly. As a result originally borrowed vocabulary will, over time, tend to be characterized by systematic sound correspondences. At later stages in the development of the language it then becomes impossible to distinguish true cognates from early borrowings. But if original borrowings become indistinguishable from genetic inheritance over time then linguistic reconstruction based upon the comparative method cannot be completely reliable because the estimate of the proportion of genetically related vocabulary includes an unknown proportion of original borrowings. From our perspective of linguistic reconstruction this then is the crucial problem posed by borrowing.

The effect of borrowing on genetic historical relationships was demonstrated very clearly in Henrici's (1973) analysis of Guthrie's (1967) comparative Bantu data. Using over 2 000 comparative series of vocabulary items containing only regular sound correspondences Guthrie showed that these languages are genetically related. But when Henrici analysed this same vocabulary using standard multi-dimensional scaling techniques he found that the distribution of these languages over classificatory linguistic 'space' was almost identical to their actual distribution in geographical space. Clearly these languages must have been borrowing between themselves to the extent that purely linguistic relationships have come to reflect geographical rather than purely genetic historical relationships. Further, these borrowings are sufficiently old to account for the fact that they are now indistinguishable from the stock of true cognate vocabulary.

One approach towards the elimination of these unknown borrowings is the use of only very widely distributed roots. Thus when Henrici repeated this analysis using Guthrie's 'general' roots, a subset of about 500 items with a particularly wide distribution over these languages, the resulting multidimensional scaling did not have the same recognizable geographical distribution. Greenberg (1957:40) employs similar distributional criteria when he stresses the importance of comparisons over groups of languages in the demonstration of valid historical relationships rather than *ad hoc* comparisons of scattered languages. Similarly, Ehret (1968:218) employs this distributional criterion in demonstrating the common origin of a number of variant forms of reconstructed roots for 'sheep' which could not in this case be related by regular sound correspondences.

The more generally accepted approach to this problem is the use of

special samples of basic or core vocabulary which contain, it is claimed, only items which are unlikely to be borrowed because of their universal non-cultural meanings — basic kinship terms, parts of the body, etc. The 200 and 100 item lists originally proposed by Swadesh (1952, 1955) are generally accepted as the standard basic vocabulary samples. Evaluation of the claims for the relative resistance to borrowing of these basic vocabulary items is a complex issue that we cannot go into in any detail here. General discussion and full references are available in Hymes (1960, 1971). A number of recent empirical studies are also available. Reviewing a number of classifications of African languages, Heine (1972:17) suggests that we can expect borrowing and chance together to account for some 5 — 6% of sound-meaning resemblances over basic vocabulary. Heath (1981:357) on the other hand reports a study of Australian languages in which up to 35% of basic vocabulary has been borrowed. The most thorough theoretical and empirical evaluation is probably the analysis by Kruskal *et al.* (1971) of retention rates of individual basic vocabulary items over several hundred languages. A different theoretical approach and a contrary finding are reported in Borland (1983).

The least reliable approach to the minimization of the effect of undetected borrowings is the *ad hoc* adjustment of quantitative estimates of genetic linguistic relationship, a technique employed extensively in Ehret & Kinsman's (1981) analysis of Shona linguistic prehistory. In that study estimates of the levels of genetic relationship between dialects measured over 50 items of basic vocabulary are lowered where Ehret & Kinsman claim that they are inflated by borrowings due to historical contacts. But despite their recognition of network-like relations between these dialects they do not apply this principle uniformly according to dialect proximity but rather arbitrarily to selected relationships. In our critique of this analysis (Borland 1984) we claim that this can lead to a logical circularity where prior assumptions about linguistic prehistory are introduced into the construction of the genetic classification from which linguistic prehistory is in turn inferred. Consequently we cannot agree with this classification nor with the very strong inference based upon it that proto-Shona speakers were present in Zimbabwe since Early Iron Age times. We should stress that our objection is not to the technique itself but rather to the informality and arbitrariness of its application. Applied uniformly and rigorously according to objective criteria of dialect proximity, the technique has very interesting possibilities.

The Terms for 'Cattle' in Bantu Languages

As a final illustration of the problems of borrowing in the reconstruction of African linguistic prehistory we turn to the proposed origins of the terms for 'cattle' in the Bantu languages.

Considering southern Africa first we find evidence of a classical contact situation where the term for 'cattle' in many Bantu languages is evidently borrowed from Khoe as in the following data: Nama /komas/ (orthographic *gomas*), Xhosa *inkomo*, Zulu *inkomo*, Tswana *kgomo*, S. Sotho *kgomo*, N. Sotho *kgomo*, E. Sotho *kgomu*, Thonga *homu* and Chopi *homu*. Ehret (1967) reconstructs the source of these Bantu roots as **komo*, which he later (1982b) assigns to Proto-Khoikhoi. He sees the Nama root as derived from the later variant **koma*. It is clear that this borrowing from Khoe must have occurred in proto-SE Bantu times before the development of these separate languages because these Bantu roots are genetically related by regular sound correspondences. The Venda root *kholomo* is difficult to account for as it does not share these regular correspondences although it bears some resemblance to the **komo* root.

In a series of studies Westphal considers the origins of this term in Khoe. He suggests (1963:253) that the unusual absence of click phonemes in this term implies that it may not be a native Khoe root but rather a borrowing. He later suggests Old Iranian *guw* 'cow' as the possible source (1971:400). But, as Schumaker (1975:57) correctly points out, this derivation is poorly formulated and reminiscent of Stopa's exploitation of mere chance sound-meaning resemblances between Khoisan and Indo-European. But Westphal (1981:xxiv) persists with this claim and cites the extralinguistic argument that since cattle were originally domesticated in the region of Old Iranian it is quite possible that the terms themselves could come from this language. But this argument can hardly be meant seriously given the antiquity of this original development and the absence of *prima facie* evidence of direct or indirect Khoe: Old Iranian contact. The genetic comparative method may have the methodological rigour and preci-

sion to extend linguistic reconstruction back towards this era but there is no chance at all of doing this using the borrowing method.

Considering the wider field of Bantu Africa the most influential theory remains Ehret's (1967) early proposal for a Central Sudanic origin of cattle and associated terminology. Although many of the specific proposals made there have been superseded in Ehret's later work this important paper merits close examination as an example of the use of a version of the borrowing method. Ehret observes firstly the occurrence of a relatively large number of unrelated roots for 'cattle' in the Sudanic languages. In contrast, over the far larger area of the Bantu languages he observes only three main roots, reconstructed as **gombe*, **umbe* and **komo*. On the now familiar distributional argument that greater linguistic diversity implies great antiquity (Greenberg 1972) Ehret reasons that the Sudanic roots must be older than the Bantu roots. On this evidence he argues that the Bantu terms were borrowed from the Sudanic terms at the same time as cattle themselves were being introduced to the Bantu speakers by Sudanic speakers. Now this argument for borrowing is quite different from the cases previously discussed in that it is based not on the direct linguistic evidence of sound-meaning relationships but on the more indirect evidence of differential distribution and inferred differential antiquity.

There is certainly independent linguistic and archaeological evidence for the correctness of this claim for the Central Sudanic origins of the Bantu cattle culture. But Ehret then goes on to argue that these three roots cannot be related by Bantu sound changes so they cannot be derivations of some original root borrowed by Proto-Bantu from Central Sudanic but rather must have been borrowed independently in three different locations where cattle and Central Sudanic speakers were already present when the Bantu speakers arrived. Further, he argues that these roots can be related by Sudanic sound shifts to the original form reconstructed as **(k)umbi*, so that the three independent introductions of the related terms were the work of a single Central Sudanic people.

Now this very strong claim for the presence of Central Sudanic speakers in eastern and southern Africa predating the arrival there of Bantu speakers which is repeated with minor modifications in Ehret (1973) has a number of significant weaknesses. Notice firstly that the evidence for the **(k)umbi* root is again indirect rather than being founded directly on sound-meaning resemblances with some Central Sudanic root. Secondly, the proposed sound shifts relate hypothetical reconstructed roots rather than natural language roots. This places a critical value on the accuracy and reliability of these reconstructions and it is unfortunate that Ehret does not describe their reconstruction in any detail. Thirdly, as Phillipson (1977:219) notes, the claim for a relatively recent Central Sudanic presence in eastern and southern Africa is not supported by archaeological evidence. Finally, the basic claim that the required sound shifts cannot be Bantu is itself very questionable on comparative linguistic grounds.

We agree that the concept of a possible Bantu sound change is indeed a reasonable constraint on the set of all possible sound changes because of the extensive knowledge and general similarities of the phonologies of these languages. But the Central Sudanic linguistic region is so heterogeneous that the corresponding constraint has far weaker empirical content. In fact the only specifically Central Sudanic sound change Ehret requires is the **k > Ø* shift required to account for the **(k)umbi > *umbe* derivation (as in, for example, Madi kari — ari 'blood'). But this shift is quite acceptable in Bantu provided one allows some intermediate forms, such as **k > *h > Ø*. (The first part of this shift is illustrated by Tsonga *homu* 'cattle' cited above or Shona singular/plural pairs such as *rukuni/huni* 'logs', *rukova/hova* 'river/s'.) The vowel shifts **u > *o* and **i > *e* and the consonant shift **k > *g* required to account for **gombe* and **umbe* are all common Bantu shifts (consider Shona *makombalgomba* 'holes', *makarwelgarwe* 'crocodiles'). Ehret makes a general reference to Beach (1938) in claiming that the **mb > *m* shift required to account for **(k)umbi > *komo* is a characteristically Khoe shift, but this is disputed by Westphal (1985:8). Given the naturalness of these shifts in comparative historical Bantu phonology we would argue from Ehret's own data that **(k)umbi* is an early Proto-Bantu borrowing from Central Sudanic which shifted to **gombe* and **umbe* in later internal Bantu linguistic developments. This removes the need to postulate the presence of Central Sudanic speakers in the areas into which the Bantu later moved. But the status of the **komo* root

remains problematical. The use of **komo* reflexes in southern Bantu can be accounted for in terms of independently verified intensive contact with Khoe speakers. But the possible source of this Khoe root in Ehret's Central Sudanic remains conjectural until stronger evidence of either genetic relationship or contact between east and southern African languages is produced (cf Ambrose 1982; Westphal 1971).

Since the remaining vocabulary of these southern Bantu languages with borrowings of **komo* is closely related to languages with **gombe* and **umbe* reflexes (Guthrie 1967: 1, 110; Heine 1973:175) we must assume that the Khoe borrowings displaced these original Bantu roots. This would explain the presence of archaic **gombe* reflexes in some of these languages. These reflexes occur, for example, in archaic praise names in Venda and in the *hlonipha* Xhosa women's avoidance language (Finlayson 1982:51). This linguistic evidence certainly implies that southern Bantu speakers had cattle and associated Bantu terminology when they first came into contact with Khoe speakers. Whether their cattle were displaced by Khoi types of cattle at the same time as the associated roots were displaced is an issue that cannot be settled on the available linguistic evidence alone.

We conclude our review of this subject with a brief consideration of Hromník's (1981) theory of the origins of cattle terms. This theory is based primarily in the evidence of two words: Sanskrit *gomās* 'beef' and Malayo-Indonesian *omb'y* 'cattle'. On the basis of the sound-meaning resemblances between Sanskrit *gomās* and Khoe *gomas* Hromník (1981:114) claims that the Khoikhoi obtained this term and their cattle from Indian gold-seekers. Despite the restricted distribution of this root to Khoe and southern Bantu contact languages Hromník goes on to claim that this root was spread to Central Sudanic by Khoe speakers. Hromník (1981:118) accounts for the general Bantu source of cattle with the claim that Bantu **gombe* is a borrowing of Malayo-Indonesian *omb'y* which occurred around the Great Lakes much later than the introduction of the Khoe term to Central Sudanic. But Hromník offers no independent evidence to support this claim of two separate introductions of cattle terms in this lacustrine region. If Central Sudanic speakers already had cattle and associated terms there is no good reason to propose this neighbouring source of cattle and cattle terms for early Bantu speakers. Quite clearly this elaborate hypothesis is required merely to accommodate the perceived sound-meaning resemblances, which on the basis of the unlikelihood of this historical linguistic hypothesis alone we would regard as mere chance occurrences. In our review of Hromník's work (Hall & Borland 1982:77) we stated that his proposed origins of livestock terms were the most plausible of his examples. Although this was faint praise indeed considering our evaluation of these other data this reconsideration of his claims convinces us that this conclusion was not correct and that his derivations of cattle terms are in fact quite as unlikely as the rest of his linguistic evidence.

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