THE ORIGIN OF HAUSA /h/

Paul Hummel
Rijksuniversiteit te Leiden

1. The problem

The sound /h/ occurs in Hausa in three different phonological environments. Before /u/ and /o/ it occurs as an allophone of /f/, e.g. hadda (=/tudu/) 'four', tahoo (=/tuxoo/) 'come'. In loanwords, primarily from Arabic, it also occurs before /a/, /i/ and, less often, /e/, where it must be considered a separate phoneme /h/, e.g. hama 'fifty', ha'in, 'wind', jihaka 'region'. Finally, in the specific environment of initial position followed by short /a/, it occurs as the phoneme /h/ in native words as well, e.g. ha'sha 'dig', hano 'nose', ha'sha 'tongue'. From a historical point of view, the first two cases are straightforward and pose no problem. The problem concerns the third case, in which the phoneme /h/ is distributionally very restricted but nevertheless occurs in a number of very common, very basic words. The question to be asked is: what is the historical origin of this presumably native phoneme and to what does it correspond in related languages? It has generally been assumed that the source or sources of Hausa /h/ would be some consonant(s) belonging to the phonemic inventory of Old Hausa and ultimately to that of Proto-Chadic.\(^1\)

\(^1\)In the examples, long vowels are indicated by double letters, low tone by a grave accent (unmarked vowels being high), glottal stop by \(\ddot{a}\) and the glottalized trill (orthographically 'ts') by \(\ddot{a}\)' (although historically derived from \(\ddot{c}\)'). Tone and vowel length are not indicated in starred forms, nor is tone indicated in examples from languages other than Hausa. For northern and western dialects of Hausa, the distributional statements would have to be amended to account for the innovation by which /f/ has been replaced by /h/ before other vowels as well, e.g. thi 'go', hendi 'fall', cf. standard Hausa thi 'i and hendi 'ki'.

\(^2\)The sound /h/ also occurs before /u/ and /o/ in loanwords where it etymologically corresponds to /h/ rather than to /f/.

\(^3\)I am using the term "Old Hausa" as a convenient way of referring to some earlier stage in the history of Hausa directly ancestral to Modern Hausa. The exact period of Old Hausa is yet to be defined but it would be some time after the separation of Hausa as a distinct language and before the modern historical period marked by Arabic/Islamic influence.
the possibility of /h/ being a recent loan-phoneme or a result of recent
linguistic realignments: "The contrast fa, ha in native Hausa words
established f and h as distinct phonemes in Hausa before the introduc-
tion of Arabic loan..." Accepting the nativeness and antiquity of Hausa
/h/, scholars using Hausa materials for Afroasiatic comparisons (e.g.
Gouré 1963/701, Hodgson 1963, Filippini 1975) felt free to re-
late Hausa /h/ to h-like sounds in other languages on the assumption
that etymological work on Hausa would justify these comparisons. Although
Bowern and Haie's (1966) comparative Chadic paper failed to establish Hausa /h/
as a reflex of any reconstructed phoneme, this seemed no cause for concern.
In the first place, the Proto-Chadic consonantal inventory presented there
was acknowledged to be incomplete, velar fricatives in particular not hav-
ing been incorporated. Secondly, the question of Hausa /h/ hadn't been
given any special attention. Ten years later a study devoted explic-ic
the problem (Skinner 1975) was still unable to relate Hausa /h/ to other
sounds in Chadic on a systematic basis, it suggested that there must have
been something different about the history and development of Hausa /h/
than we had been assuming all along. If we haven't been asking the wrong
questions, then it is obvious that we have been looking in the wrong place
for the answer.

2. The solution

The mistake has been in looking for the source of /h/ in another con-
sonant. The fact is that /h/ came from nothing! More precisely /h/ developed
from a non-distinctive feature of word onset is exactly the same way that
initial glottal was achieved phonemes status, i.e. ḥabba 'chin' < *Adobe
(phonetically 'hābb'), ḥanji 'intestines' < *Hanji (phonetically
('hanji')), cf. ẖabb 'thing' < *Abu (phonetically 'ābù), ḥābo 'eye'
< *Abu (phonetically 'ābbù). Prior to this relatively recent develop-
ment, Hausa had words that were vowel initial, some pronounced with glottal

4Although-speaking strictly synchronically, Parasnis (1955:385) had the
answer to the historical problem on the tip of his tongue twenty years
ago: "h and k...are the realizations of zero consonant with voiceless
and glottalized vowels respectively."
attack, some with voiceless/inspired attack, some perhaps allowing either. The origin of /h/ lay in the upgrading of this phonetic feature [h] to the status of a full phoneme. This was probably due to the influence of Arabic loanwords containing the consonant /h/ (or phonetically related sounds) and to the restructuring of Hausa phonotactics such that vowel-initial words were no longer admissible. In short, the answer to the mystery of /h/ in native Hausa words is \( h < *g \).

3. The Internal Evidence

3.1. The key to the solution came out of an attempt to account for an inconsistency between a synchronic restriction on word structure in present-day Hausa and the form of words possible in Old Hausa. A strict rule of Hausa phonotactics is that a word cannot contain more than one glottalised (\( \text{ng} \)) consonant (apart from repetitions of the same segment). Words of the form \( \text{AVY} \) or \( \text{AYV} \) are thus impossible. Since /h/ counts as a glottalised consonant it follows that words of the shape \( \text{VC^\text{ng}} Y \) also do not occur. However, it is well-known—although often ignored—that the phonemic status of initial /h/ is very recent, dating only from the period of extensive Arabic loanwords (Shrenkeweg 1947) and that before that time Hausa must have had vowel-initial words, e.g. \( \text{\`abu} 't'ing' \) (now \( \text{\`ab} \)), \( \text{\`anu} 'three' \) (now \( \text{\`an} \)). While the restriction against \( \text{VC^\text{ng}} Y \) words is understandable in modern Hausa, given the phonemic status of initial glottal stop, there is to reason on internal or comparative grounds why the intervocalic consonant of VCV words couldn't have been glottalised. But if Old Hausa had \( \text{VC^\text{ng}} Y \) words and if all vowel-initial words subsequently added a glottal stop in front, then the result should have been words of the form \( \text{VC^\text{ng}} Y \), none of which exists. What then happened to the \( \text{VC^\text{ng}} Y \) words that we can be sure did exist at an earlier stage in Hausa? One possibility is that \( \text{VC^\text{ng}} Y > \text{VC}^Y \), i.e. the

5Other Chadic languages that share the restriction against having more than one \( \text{ng} \) consonant per word (e.g. Wanim) do allow the medial consonant of VCV words to be glottalised. To simplify the discussion I am phrasing everything in terms of the pattern (C)VCV. The same arguments would apply equally to words of other shapes such as (C)VCV or (C)V(C)V.
phoneticization of /h/ was accompanied by compensatory loss of the glottal feature in the medial consonant. While this process seems reasonable there is no evidence to show that it actually took place. A second possibility is that the Cj added in the change NGCV -> CjVCjV could have been something other than /h/ in those cases where Cj was (eg i). Perhaps we had oversaturated the generality of the presumed NGCV -> YCV rule. If /h/ was prevented by phonotactic restrictions from being added to a vowel-initial word already containing a [-gl] consonant, some other "minimal" consonants must have done the job. For words beginning with i or u, the semivowels y and w could be expected to have served as the necessary Cj, and for words beginning with a. — /h/ of course. Given a rule "NGCV > YCV," words such as "bba," "bbaa," "bbaa!" or "bbaa" should show h in present-day Hausa not as "bbaa" or "bbaa," for example, but rather as "bbaa," "bbaa," "bbaa!" and "bbaa." This second possibility is in fact what happened, thereby explaining both the apparent disappearance of NGCV words with a [-gl] consonant and the appearance of /h/ as a Hausa phoneme.

3.1.1. Initial /h/ and /h/ both developed from /h/ by the phoneticization of a pronomic feature of word onset. For phonotactic reasons, the Cj added in the development "NGCV > CjVCjV" had to be /h/ and not /h/. The converse, however, was not true, i.e. there was no inherent reason why the Cj added in the context of a non-glottalised medial consonant couldn't also have been /h/. The non-automatic nature of the choice of /h/ or /h/ is evidenced by the existence of a small number of doublings or dialect variants, e.g. hantasa/hantasa 'litter', hantasa/hantasa 'small shrub', hantasa/hantasa 'beehive'. The determination of whether /h/ went to /h/ or to /h/ in the environment of a [-gl] consonant is thus an empirical/historical question still to be investigated rather than a structural one. On the whole, /h/ was probably the normal replacement for /h/. However, /h/ may have been the phonologically favored Cj in the specific environment NGCV (e.g. hanch 'nose', hanch 'arm/hand'), although morphological considerations may have been operative here (see section 5).

6 Add tone and vowel length and one has the Modern Hausa words for 'chin', 'to swallow' (here usually haddye), 'corn', and 'dig'.
3.2. The discovery that initial /h/ « *θ just like initial /θ/ explains another hitherto peculiar distributional restriction, namely the fact that in native words the a following /h/ and /θ/ is always short (Parma 1935:1583). If θ came from *θ or some other obstructant, one would expect to find h plus long a just as one finds long a after f, s, sh, c, k, etc. The fact that this restriction applies not only to /h/ but also to /θ/—and only to these two consonants—follows naturally from the fact that words that now begin with he or /θ/ were originally vowel initial, a position in which all vowels were automatically short. The θ in haθe "to swallow", for example, is necessarily short not because of some synchronic peculiarity of the consonant /θ/, but because the word is derived from *eθe where the vowel was in initial position.5

4. The external evidence

The origin of /h/ from *θ was discovered originally on internal grounds. The solution is confirmed by comparative evidence of two sorts: (a) direct evidence of cognates, and (b) indirect evidence of parallel development.

4.1. If豪言 /h/ developed from *θ by phonemization of a phonetic feature or word onset, it should correspond in cognate forms to θ or to some phoneme recently derived from θ, and not to x or k or any other consonant. The following is a list of seven highly probable cognate sets illustrating the correspondence θ - θ. The examples are all drawn from languages in the same branch of Chadic as Hausa (West Chadic branch), thereby minimizing the distance between the languages involved and maximizing the likelihood that one is dealing with true cognation and not accidental resemblance.

5This straightforward historical explanation for the restriction can be contrasted with Parma's tortuous synchronic analysis (1970:271-73), which requires, among other things, that *θ be analyzed synchronically as /θ/.
4.2. Contrary to the usual Nostratic pattern that requires every syllable to begin with a consonant,1 Proto-Chadic had vowel-initial words (e.g. in present, e.g. 'to eat', 'to swallow', 'to speak', 'to eat'). This was also true of Hausa until recently and still holds for many present-day Chadic languages. This fact has been obscured, however, because of the widespread practice of candidates of inserting glottal stops indiscriminately in front of all words beginning with a vowel in whatever language they happen to be studying. Influenced by the awareness that Hausa words that are written with initial vowels in standard orthography really begin with /h/, and should be so indicated in scientific works, they have carried this practice over to languages in which there is no phonological justification for doing so. The result is a kind of linguistic hypoverification that falsifies synchronic descriptions and precludes the comparativists, who is unable so

1Citations from Ogbodo (1972) are not relevant since initial /h/ in Ogbodo (a recent offshoot of Hausa) is the result of most cases of a dropping of /h/ subsequent to its separation from Modern Hausa.
2This etymology, which requires that one extract the underlying root, was first suggested by Ogbodo (1969), 355.
3Jung (1970) transcribes Ms Bon examples with a glottal stop before the vowel. However, even if this initial glottal stop does not appear to be phonemic, I have omitted it whenever I have had occasion to cite Bon examples (see discussion in section 4.2).
4According to rules common to Semito-Hamitic, not excepting the Tchor languages, no syllable can begin...with a vowel' (Dixon 1963:25). Proto-Chadic is also an exception to Dixon's statement that glottal stop is a phoneme that is 'common to [or, at least, can be easily reconstructed in] the phonological system of all Semito-Hamitic languages' (p. 19).
tell from the transcription system employed whether a language really has initial glotal stop or whether, as is usually the case, its appearance is a gratuitous embellishment by the linguist.

It is only by recognizing the existence and pervasiveness of vowel-initial words in Chadic that one can appreciate the historical changes to which such words have been subjected. Although Proto-Chadic deviated from the characteristic Afroasiatic pattern, a number of Chadic languages since have independently rejected the heresy and have reestablished the rule that all words should begin with a consonant. The general mechanism for achieving this has been the insertion of a consonant, usually a semi-vowel (as in the case of Zaar) or less often a glottal stop (as seems to be the case with hole [Inkhwa 1966]). What is particularly interesting is that languages other than Hausa have also made use of /h/ to replace initial /g/ followed by /a/. Compare the following two cases where the /g/ > /h/ change has taken place independently of Hausa and of each other.

<table>
<thead>
<tr>
<th>Gere (Kole Group)</th>
<th>Other Kole languages</th>
</tr>
</thead>
<tbody>
<tr>
<td>'bite' bath</td>
<td>af (Gerema)</td>
</tr>
<tr>
<td>'intestines' hazi</td>
<td>esh! (Gamuho)</td>
</tr>
<tr>
<td>'throat' harm</td>
<td>ara (Gamuho)</td>
</tr>
<tr>
<td>'water' hen</td>
<td>ama (Gerema)</td>
</tr>
<tr>
<td>Non-Kere</td>
<td>Other Non-languages</td>
</tr>
<tr>
<td>'give birth' hali</td>
<td>al (Non-Bozama)</td>
</tr>
<tr>
<td>'tooth' hangor</td>
<td>angur (Non-Bozama)</td>
</tr>
<tr>
<td>'water' hen</td>
<td>aam (Non-Kelbere)</td>
</tr>
</tbody>
</table>

5. The -ba prefix

Many native Hausa words beginning with ba are terms for parts of the body, e.g. baba 'chin', babbakari 'ribs', babbavi 'tooth', baba 'udder', babbasi 'homaypa', babbali 'nose', babbaji 'intestines', babbakox 'arm/hand', babbakox 'lower', babbakox 'tongue'. Following Leslie's (1962) suggestion of a possible connection between the initial

---

12Information on Gere and related languages—including the specific sound law described here—has been taken from unpublished materials of Russell G. Schuh, to whom I am most grateful.
h in these words and a prefix not found elsewhere in Afroasiatic (in Mehir (south Arabia) and Egyptian). It has become normal to speak in terms of a ha body-part prefix in Hausa. Nevertheless, from a Hausa/Chadic point of view the idea that ha might be a survival of an archaic Afroasiatic prefix seems unlikely. In the first place, the corresponding prefix in Hausa and in Mehir and Egyptian look too much alike given the presumed time depth involved. Second, the putative prefix involves a Hausa consonant that is extra-systemic and poorly integrated in the Hausa phonological system, which should not be the case if an archaic consonant were involved. Finally, the prefix seems to be limited to Hausa, no traces of it having been reported elsewhere in the Chadic family.

Now that we know where Hausa /h/ came from, we can re-open the question of the body-part prefix and perhaps throw some light on the subject. Since /h/ is a Hausa body-part prefix—if it exists at all—concerns initial a not ha. With this simple adjustment we now find, contrary to what was just said above, that other Chadic languages do evidence a similar phenomenon. In Danila (an East Chadic language) words with initial a are very often body-part terms, e.g. adi ‘stomach’, adiha ‘liver’, adiha ‘intestine’, adiwa ‘back’, adiwa ‘tail’, adiwa ‘leg’.13 Similarly in Hausa (a language spoken in the Cameroon/Chad border area) one finds that the words for ‘nose’, ‘lower arm’, ‘leg’, ‘cheek’, ‘bone’, ‘shoulder’, and ‘elbow’ all begin with a (Lucas 1977). Turning to Non-Bokkos, a more closely related language belonging to the same branch as Hausa, we also find body-part terms appearing with initial a, in this case explicitly described as a prefix (Jungwirth 1970:991), e.g. afor ‘thigh’, afor ‘foot’; angur ‘tooth’, angur ‘jaw’; allis ‘tongue’, allis ‘nose’, allis ‘nose’, allis. Among Hausa to the list we have four clear-cut cases where initial a to Chadic is associated with body-part terms. Whether this a is or was a prefix in the true sense of the term is hard to say. It is possible that it was felt to be a prefix in Old Hausa and that this explains why all the body-part terms with initial a ‘go change to ha rather than

13Jungwirth (1971) explicitly states that there is no glottal stop in Danila and that vowel-initial words are truly vowel initial.
some changing to ha and some to ba, as would have been expected on strictly phonological grounds. The fact that the initial ha in body-part terms always has the same tone (high) would argue in favor of its having had some kind of prefixal status.

In Proto-Chadic, on the other hand, the initial a looks like an integral part of the lexical item rather than a prefix. Words reconstructed with initial a are not all body-part terms, nor do most body-part terms have an initial vowel (Newman, in press). Nevertheless, Proto-Chadic probably had considerably more a-initial body-part terms than we have been able to reconstruct up to this point, and this inventory, plus secondary analogic developments, could account for the high incidence of a-initial body-part terms in various languages throughout the family. Whether the word initial a in Proto-Chadic is ultimately related to the a prefix in Mehri and Egyptian is an open question. All one can say here is that the possibility is in no way lessened by the greater phonological and morphological differences that exist as compared with the earlier direct identification of a and Hausa ha.

6. Summary

Since the phoneme /b/ occurs in a number of basic native words, scholars had assumed that its origin would lie in some previously-existing consonant(s). It was shown, however, that /b/ developed from /n/ by the phonemization of a phonetic feature of word onset along the same lines described by Greenberg (1973) for the origin of /j/. This solution, discovered in the course of investigating internal anomalies in Hausa structure, was confirmed by comparative evidence illustrating a regular correspondence between /b/ in Hausa and n in closely related Chadic languages. Having demonstrated that n < /b/, the similarity of initial ha in Hausa body-part terms to an /b/ prefix found in Mehri and Egyptian (Leelan 1962) could be seen to be accidental. The real connection of Hausa ha was shown to be with an initial a commonly occurring in body-part terms in various Chadic languages and reconstructable for Proto-Chadic. Although in Proto-Chadic this a was almost certainly an inseparable part of individual lexical items and not a prefix, it may have functioned as a prefix in Old Hausa, at least to the extent of keeping body-part terms together as a set.
for purposes of the analysis change. Finally, the paper taken as a whole illustrates once again the need in historical research to combine comparative work with in-depth internal analyses, the need to treat languages as dynamic systems rather than collections of traits, and the danger of drawing conclusions from surface similarities no matter how numerous or how striking they might appear.

REFERENCES


