

**THE BORROWING OF ASPECTS AS LEXICAL TONE CLASSES:
Y-INITIAL TUAREG VERBS IN TASAWAQ (NORTHERN SONGHAY)***

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In Tasawaq, a Northern Songhay language of Niger, there exists a lexical tone class distinction between stative and active verbs. This tone class distinction only exists in one class of verbs borrowed from Tuareg, verbs with an initial *y*-. In this article, I argue that the tone class distinction reflects the Tuareg difference between a Short Perfective aspect, used in active contexts, and a Long Perfective aspect, which is mainly found in stative contexts. In Tasawaq, this aspectual distinction has been reinterpreted as a difference in lexical class.

Tasawaq¹ is a Northern Songhay language spoken by around 10,000 people in the oasis In-Gall in the desert of Niger, about 100 kilometers west of Agadez. Like all

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¹ There exist a few studies on Tasawaq: Nicolai (1979), Nicolai (1979-84), Nicolai (1980), Alidou (1988), Wolff & Alidou (2001). Most transcriptions follow general Africanist usage. One may note the use of a dot beneath a consonant in order to signal pharyngealisation. Superscript *n* is used in order to write the nasalisation of the preceding vowel — while in the speech of Mrs. Ibrahim nasalisation is mostly predictable from the phonetic context as an allophone of a *Vn* sequence, there are a few cases in word-final position where there seems to be an opposition. Because of this the distinction between the two will be written. Forms from Zarma have been cited from Bernard & White-Kaba (1994). If not specified otherwise, Tu-

other Northern Songhay languages, Tasawaq has undergone massive lexical and grammatical influence from the neighbouring nomadic language, Tuareg. Songhay is a language group considered part of the Nilo-Saharan language phylum by many specialists (e.g. Bender 1997, Ehret 2001), although this is far from generally accepted (cf. Nicolăi 2003, Kossmann 2005). Tuareg, on the other hand, is part of the Berber language family, which constitutes a branch of Afro-Asiatic.

In this article, the way in which Tuareg loan verbs are integrated into Tasawaq is studied. I shall show that Tasawaq loan verbs of a certain type exhibit a tone class distinction between active and stative verbs, which is not present in verbs of Songhay origin. This distinction is related to an aspectual opposition in Tuareg, which is reflected as a difference in lexical tone classes in Tasawaq.

All my data were provided to me in Fall 2003 by one language consultant, Mrs. Ibrahim, born Nana Mariama Aweïssou, a school teacher in her twenties, originally from In-Gall, now resident in Agadez. She is a native speaker of Tasawaq, and is trilingual in Tasawaq, Hausa and French. She does not speak Tuareg, nor does she speak Tagdal, the other Northern Songhay language spoken in the region. Her dialect of Tasawaq is to some extent different from that of the consultants who provided the data for earlier work (e.g. Nicolăi 1979, Alidou 1988). The most conspicuous difference from these speakers is the presence of pharyngealized consonants in her speech. As far as the patterns described here are concerned, the few relevant data from earlier literature do not contradict my generalisations.

1. Tone in Tasawaq Verbs of Songhay Origin.

Different from the other Northern Songhay languages and Tuareg, Tasawaq is a tone language. From the old Songhay system (Nicolăi 1981: 207ff.), it preserves three tones, Low, High, and Falling. The Falling tone has only restricted oppositional value, as it can only occur in CVV syllables and in CVC syllables with a final sonorant. In most cases it goes back to an initial Low tone in an all-Low contour. In all-Low contours with an initial syllable of another type, the initial Low tone is realised as a High tone. The all-Low contour reappears in a number

areg forms have been cited from Prasse et al. (2003). The following abbreviations are used: C = consonant, D = Burkina Faso Tadghaq Tuareg, F = feminine, F = Falling tone, GEN = genitive marker, H = High tone, IMPF = Imperfective, IO = Indirect Object, L = Low tone, LoP = Long Perfective, M = masculine, PL = plural, PTC = participle, SG = singular, ShP = Short Perfective, Tsq = Tasawaq, V = short vowel, VV = long vowel, Y = Ayer Tuareg (Niger).

of contexts; for example when a verb is followed by a direct object. Tasawaq verbs of Songhay origin with one or two syllables show all combinations of High and Low tones which are logically possible. In verbs with more than two syllables, only the underlying LLL contour (realized FLL) is attested in my corpus in more than one verb. A few other patterns occur as hapaxes. Examples:

- (1) H dáⁿ ‘do’, fík ‘plant, bury’, gús ‘be deep’, hár ‘say’, hář ‘play’, kár ‘beat’
 L dàⁿ ‘sing’, gàr ‘find’, kàr ‘go up’, kùt ‘herd’, tùm ‘prick’
 HH dúmbú ‘slaughter’, fúmbú ‘stink’, káání ‘sleep’
 HL đínkày ‘chase away’, góódày ‘heal’, hímày ‘take a bath, bathe’
 LH bìbí ‘be red’, fàřá ‘be tired’, fùniř ‘inflate, light’, zàaná ‘churn’
 FL háⁿg^wày ‘think of’, gáànì ‘dance’, háⁿdà ‘ask’
 FH dáⁿřáy ‘be silent’, kùnkún ‘roll up’
 FLL dùngùrà ‘be low’. hâmbìrì ‘fear’, hândìrì ‘dream’
 LLH nìgìrà ‘understand’
 LHL fiřìzì ‘be green’

In the Songhay part of the lexicon, tone is independent of semantics. The classes of High and of Low monosyllabic verbs contain both action verbs and state verbs.

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|-----|-----|---------------|-----|---------------------|
| (2) | báw | ‘be numerous’ | màn | ‘be near, get near’ |
| | gús | ‘be deep’ | dàk | ‘hang’ |
| | mář | ‘be sour’ | đàw | ‘send’ |
| | máw | ‘hear’ | gàr | ‘find’ |
| | nás | ‘measure’ | gàw | ‘help’ |
| | kár | ‘beat’ | kàr | ‘go up’ |
| | dút | ‘grind’ | mày | ‘have’ |
| | gáw | ‘work’ | tùm | ‘prick’ |

The same is true for HL and LH verbs, e.g.

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|-----|----------------------|-------------------|------|------------|
| (3) | bàrà | ‘be (locational)’ | bìsá | ‘be more’ |
| | đínkày | ‘hunt’ | fàřá | ‘be tired’ |
| | gúrg ^w ày | ‘fight’ | gìsì | ‘leave’ |

2. Tone in Y-Initial Loan Verbs.

Verbs borrowed from Tuareg can roughly be divided into two classes. In about half of the borrowed verbs, a form without any reflex of Tuareg person/number affixes is used. In the other half, the 3SG:M prefix *y(ə)-* is taken over as *y(i)-* preceding the verb form. This prefix has no personal reference in Tasawaq, e.g.

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|-----|---------------------|-------------------|
| (4) | à yígmàm | ‘he chew tobacco’ |
| | ǵáy yígmàm | ‘I chew tobacco’ |
| | yígmàm | ‘chew tobacco!’ |
| | cf. Tuareg 'y-əgmām | ‘he chew tobacco’ |

In *yi*-initial verbs the *y-* is dropped after a monoconsonantal aspectual marker, e.g. *ǵá bb-ílmàq* ‘I am swimming’ and *â mm-ílmàq* ‘may he swim’ from *yílmàq*. An alternative analysis, according to which the initial *y* would be epenthetic in intervocalic and phrase-initial position, cannot be maintained. First, Tasawaq has regular vowel coalescence rules, which almost invariably imply the loss of the first vowel. Second, verbs with initial *y* followed by an other vowel than *i* do not lose the initial glide, e.g. *à b-yóókây* ‘he is passing’.

In Tasawaq, *y*-initial verbs borrowed from Tuareg² — all of which are disyllabic — have a number of characteristics, which set them apart from the other verbs. First, they mostly have a vocalic scheme *i-a*, as in:

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|-----|--------|---------------------|
| (5) | yígmàm | ‘chew tobacco’ |
| | yílmàq | ‘swim’ |
| | yìgdá | ‘be right’ |
| | yìwál | ‘be sharp, sharpen’ |

While there is some variation as to the first vowel, only one borrowed *y*-initial verb has a vowel other than *a* in the second syllable, *yààzúm* ‘fast’.

² In the following, when referring to *y*-initial verbs, only those verbs which were borrowed from Tuareg are implied. *y*-initial verbs with a Songhay background have different characteristics. For the matter of completeness, all such verbs in the corpus will be enumerated here: *yá*ⁿ ‘anoint’ (cf. Zarma *yóónú* ‘id.’); *yá*ⁿ*gù* ‘refuse’ (maybe an incorrect transcription of *yá*ⁿ*gù* cf. Zarma *yànjé* ‘quarrel’); *yár* ‘vomit’ (cf. Zarma *yééri* ‘id.’); *yàrdá* ‘believe’ (cf. Zarma *yàddá* ‘accept’ < Arabic); *yát* ‘return’ (cf. Zarma *yèèú* ‘put back’); *yáy* ‘be cold’ (cf. Zarma *yáy* ‘id.’); *yèèzi* ‘give back, answer’; *yúkkùm* ‘beat on the head’ (cf. Kaado *húkù* ‘slap one’s head/foot/knee against’, Ducroz & Charles 1978).

Second, and different from other verbs borrowed from Tuareg, *y*-initial verbs show a clear division into two classes:

- HL verbs: - active and processive verbs
 - verbal nouns mainly of the type àCáCàC, with absence of the initial *y*.
- LH verbs: - stative verbs
 - mostly irregular verbal nouns, or no verbal noun at all

In the great majority of disyllabic *y*-initial verbs, the semantic distinction stative (Class 2) vs. non-stative (Class 1) is obvious, see also the lists under (12) and (13) below. There are a few less obvious cases, which from a logical point of view could be considered either stative or processive. Thus the verb *yìlkám*, translatable into English as ‘follow’, can also be interpreted in a stative fashion as ‘be behind’. A more sophisticated syntactic investigation may reveal to what extent such interpretations are justified. Another problem is posed by one LH verb, which has both a stative and an active interpretation, *yìwál* ‘be sharp, sharpen’, as shown by the following phrases:

- (6) a. séélàx á yìwál
 knife 3SG be.sharp/sharpen
 ‘the knife is sharp / has been sharpened’ [Tsq]
- b. γáy yìwál séélàx
 1SG be.sharp/sharpen knife
 ‘I have sharpened the knife’ [Tsq]

3. The Tuareg Basis of the Tasawaq Tone Class Distinction.

The fact that the tonal distinction between stative and active has no parallel in the Songhay part of the lexicon, and is restricted to loanwords from Tuareg, suggests that it is based on Tuareg patterns. As shown above, Tasawaq *y*-initial verbs are based on finite Tuareg verb forms. In Tuareg, verbs have different TAM forms, mainly distinguished by differences in vocalic pattern and accentuation. Therefore it is necessary to investigate which verb form in Tuareg provided the basis of the Tasawaq *y*-initial loan verbs. This will be done by examining first the vowel pattern and then the accentuation of the Tuareg forms. Tuareg verbs distinguish four positive TAM forms.

| | | | |
|-----|------------------|------------|------------------------|
| (7) | Aorist | 'y-əgməm | 'chew tobacco (3SG:M)' |
| | Imperfective | y-ə'gammäm | |
| | Short Perfective | 'y-əgmäm | |
| | Long Perfective | y-əg'mam | |

In Tasawaq, the verb stem carries no aspectual information, i.e. it remains the same in all aspects. The vowel scheme *i-a*, which is found in the large majority of *y*-initial Tasawaq loan verbs, corresponds to the vowel scheme which marks the two perfective aspects of Tuareg, the Short Perfective and the Long Perfective,³ e.g. Tasawaq *yígmàm* 'chew tobacco'.

The interpretation of the Tasawaq vowel schemes of *y*-initial verbs as based on a perfective aspectual vowel pattern is strengthened by the fact that those *y*-initial verbs which have vowel schemes different from *i-a* correspond to Tuareg verbs with similar vowel schemes in the perfective (ShP = Short Perfective, LoP = Long Perfective), e.g.

| (8) | <i>Tasawaq</i> | <i>Tasawaq gloss</i> | <i>Tuareg ShP</i> | <i>Tuareg LoP</i> |
|-----|----------------|----------------------|-------------------|-------------------|
| | yārāq | 'be yellow' | 'āray | ǎ'ray |
| | yāàzúm | 'fast' | 'yəzum | yə'zum |
| | yóófār | 'start' | 'yofār | yo'far |
| | yóókày | 'pass' | 'yokäy | yo'kay |

This leaves us with the question which of the perfective aspects is at the basis of the Tasawaq forms. The Long Perfective aspect in Tuareg is morphologically derived from the Short Perfective. The distinction lies in the lengthening of a short central vowel (ə or ǎ) to a long peripheral vowel (i/u or a) and the insertion of a fixed accent on the lengthened vowel. In the 3SG:M forms of the types of verbs which lie behind the Tasawaq *y*-initial verbs this means that in Short Perfective forms the accent is on the first syllable, while in Long Perfective forms it is on the last syllable.

³ There exist a large number of terms referring to the different perfectives: What will be called here Short Perfective (ShoP) is also known as *indicatif passé* (Foucauld 1951), *prétérit* (Basset 1952), *parfait* (Prasse 1972-4), *accompli* (Galand 1974), *thème III* (Galand 1977, Leguil 1979-1984), *perfective* (Sudlow 2001, Heath 2006). What is referred to here as Long Perfective (LoP) has been known as *indicatif présent* (Foucauld), *prétérit intensif* (Basset), *parfait intensif* (Prasse), *stative* (Sudlow), *accompli résultatif* (Galand), *thème III'* (Leguil) and *resultative* (Heath).

In borrowings in Tasawaq, Tuareg *ǎ* and *a* are mostly conflated into one single *a*. Sometimes, in originally stressed syllables, a vowel length distinction may be considered a reflex of the Tuareg distinction between short central vowels and long peripheral vowels. However, in Tasawaq vowel length is neutralised in closed syllables and in word-final position. As in the relevant Tuareg Long Perfective forms the accent is on the last syllable — which is either closed, or a vowel in final position — there is no possibility of tracing the difference between Short Perfective and Long Perfective input forms on the basis of vowel length.

In addition to the difference in vowel length and quality, there is also an accentual difference between Short Perfective and Long Perfective in Tuareg (for a description of the intricate accent system of Tuareg, see Heath 2006). In Tasawaq borrowings from Tuareg, the accent is regularly reinterpreted as a High tone, while Tuareg unaccentuated syllables receive a Low tone. This can be shown from nouns:

- (9) ááfàžò < Tuareg 'afǎžò 'grass sp. (*Panicum turgidum*)'
 ágàlà < Tuareg 'agǎla 'south'
 àfàràğ < Tuareg a'fǎrag 'garden'
 àbáqqo < Tuareg ǎ'boqqa 'dust'

Formally, therefore, HL *y*-initial verbs in Tasawaq would correspond to verbs with an initial accent in Tuareg — i.e. Short Perfectives — while LH verb of this type would correspond to verbs with ultimate accent in Tuareg, i.e. Long Perfectives.

As shown above, the distinction between an active HL and a stative LH verb class has no parallel in the Songhay part of the Tasawaq lexicon. It has no immediate basis in Tuareg either — there are no lexical accentual verb classes in Tuareg. Therefore, it is tempting to consider it a reflex of the distinction between the two Perfective aspects of Tuareg. The question is, to what extent can such an analysis explain the semantic difference between HL and LH *y*-initial verbs in Tasawaq? Therefore it is relevant to give a short overview of the main usages of the two perfective aspects in Tuareg.

The Short Perfective is used for active perfective events; it is mainly (but not exclusively) used for the expression of past events, e.g.

- (10) 'ənçār-ǎn medďǎn 'əgmǎy-ǎn azgǎr
 rise:ShP-3PL:M people search:ShP-3PL:M ox
 'some people rose [ShP] and looked [ShP] for an ox' [Y; Mohamed 2004]

The Long Perfective, on the other hand, is mainly used for states, including resultant states, and simultaneous events presented as a whole. Compare the following phrases featuring a Long Perfective, and showing stativity (11a) and simultaneity (11b).

- (11) a. əššəγəl ǎm'minda
 work [3SG:M-]be.finished:LoP
 ‘the work is finished [LoP]’ [D; Sudlow 2001:93]
- b. ək'ke-γ hebu
 pass:LoP-1SG market
 ‘I’m going [LoP] to market’ [D; Sudlow 2001:93]

Simultaneity is normally presented as having internal temporal structure by using the Imperfective aspect. Therefore by far the most frequent use of the Long Perfective is in the expression of states and resultant states.

Of course, verbs which are mainly used to express actions or processes are prone to be used in contexts where the Short Perfective is required, while verbs which have more stative connotations are prone to appear in stative contexts, where the Long Perfective is obligatory.

While in Tuareg this is only a question of preferred context — both aspects being possible with all verbs of the language — when borrowing Tuareg verb forms, Tasawaq seems to have relied on this preferred context. That is to say, when a Tuareg verb was interpreted as basically active, it was taken over in the Short Perfective form, with a HL contour, but when the verb was interpreted as basically stative, it was taken over in the Long Perfective form, with a LH contour. This is shown in the following tables, which list all instances I recorded of *y*-initial verbs of Tuareg origin in Tasawaq (3SG:M. forms, Tuareg forms cited according to the Ayer dialect). The first table lists all *y*-initial HL verbs of Tuareg origin.

| | | | | |
|------|---------------------|----------------------|-------------------|-------------------|
| (12) | <i>Tasawaq</i> | <i>Tasawaq gloss</i> | <i>Tuareg ShP</i> | <i>Tuareg LoP</i> |
| | yígmàm | ‘chew tobacco’ | 'yəgməm | yəg'mam |
| | yílmàq | ‘swim’ | 'yəlməy | yəl'may |
| | yinqàb | ‘shoot’ | 'yəndəb | yən'qab |
| | yí ⁿ fār | ‘splash’ | 'yənfār | yən'far |
| | yíqqàs | ‘slap (the face)’ | 'yəqqəs | yəq'qas |
| | yírkàb | ‘pull’ | 'yərəkəb | yər'kab |

| | | | |
|--------|---------------|---------|---------|
| yíržàm | ‘pay’ | ‘yəržəm | yər'žam |
| yíškàt | ‘chop’ | ‘yəškət | yəs'kət |
| yístàb | ‘winnow’ | ‘yəstəb | yəs'tab |
| yístàl | ‘pour’ | ‘yəstəl | yəs'tal |
| yittàb | ‘drip, drain’ | ‘yəttəb | yət'tab |
| yízmàm | ‘press’ | ‘yəzməm | yəz'mam |
| yóófàr | ‘start’ | ‘yofər | yo'far |
| yóókày | ‘pass’ | ‘yokəy | yo'kay |
| yóóràm | ‘taste sth.’ | ‘yorəm | yo'ram |
| yóózàm | ‘whisper’ | ‘yožəm | yo'zam |

One can add to this table *yíngìs* ‘limp’, for which no convincing source in Tuareg was found.

The following table lists all *y*-initial LH verbs of Tuareg origin:

| | | | | |
|------|----------------|----------------------|-------------------|-------------------|
| (13) | <i>Tasawaq</i> | <i>Tasawaq gloss</i> | <i>Tuareg ShP</i> | <i>Tuareg LoP</i> |
| | yàràq | ‘be yellow’ | ‘ərəq | ǎ'raq |
| | yàázúm | ‘fast’ | ‘yəzum | yə'zum |
| | yìgdá | ‘be right’ | ‘yəgda | yəg'da |
| | yìggád | ‘be shy’ | ‘yəggäd | yəg'gad |
| | yíláz | ‘be ugly’ | ‘yələz | yə'laz |
| | yìlkám | ‘follow’ | ‘yəlkəm | yəl'kam |
| | yínáy | ‘be raw’ | ‘yənay | ye'nay |
| | yismád | ‘be sharp’ | ‘yəsmäd | yəs'mad |
| | yìwál | ‘be sharp, sharpen’ | ‘yəwəl | yə'wal |
| | yìzzár | ‘be first’ | ‘yəzzar | yəz'zar |

One should probably add to this table the verb *yìgdáz*, ‘be narrow’, for which I have not been able to find a Tuareg parallel.

The great majority of Tasawaq *y*-initial verbs correspond to Tuareg verbs of a specific apophonic type, the class of verbs called type I.A by Prasse (1972-4). This is the only class of borrowed verbs where both the Short Perfective and the Long Perfective can be shown to appear in the borrowings. One other class of verbs, the so-called stative verbs (mainly Prasse’s class IV), appears to follow borrowing patterns which are similar to the *y*-initial verbs. In Tuareg, the verbs in this class are characterised by a special set of person/number affixes in the perfective forms. One difference from normal verbs is that in the 3SG:M no affix is added to the verb stem. Vocalisation in Tasawaq strongly suggests that verbs of

this type have been taken over in a perfective form. All loans of this type of verb have a LH tone contour, which corresponds to the Long Perfective. Since in Tuareg this verb type is only used with stative verbs, the fact that there are no HL forms (which would correspond to a Short Perfective) is expected.

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|------|--------------------|-----------------------|-------------------|-------------------|
| (14) | <i>Tasawaq</i> | <i>Tasawaq gloss</i> | <i>Tuareg ShP</i> | <i>Tuareg LoP</i> |
| | fùsús | ‘be light’ | ʼfəsus | fəʼsus |
| | hùşşáy | ‘be good’ | ʼhossäy | hosʼsäy |
| | rìyış | ‘be cheep’ (< Arabic) | ʼrəyis | rəʼyis |
| | sùlúf | ‘be soft’ | ʼsəluf | səʼluf |
| | zìrgí ⁿ | ‘be dirty’ | ʼžərgən | žəʼrgən |

One should probably add *kirzíz*, ‘be rude’, for which I have not been able to find a Tuareg source. There are two more LH disyllabic verbs, which do not belong to the classes defined above, and whose exact borrowing history is difficult to trace.

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|------|----------------|----------------------|-------------------|-------------------|
| (15) | <i>Tasawaq</i> | <i>Tasawaq gloss</i> | <i>Tuareg ShP</i> | <i>Tuareg LoP</i> |
| | dàqqár | ‘be stuck’ | ʼyədyār | yədʼyar |
| | dùwál | ‘grow up’ | ʼyədwāl | yədʼwāl |

In the case of *dàqqár*, the Tasawaq verb does not seem to reflect the I.A verb, but rather a verbal form belonging to an other type (e.g. Prasse’s conjugation VI.1 or a stative form). In Niger Tuareg, forms with gemination are found in the Middle derivation *mədəqqər*.

4. Other Types of Loan Verbs in Tasawaq.

The situation is different with borrowed verbs which neither have initial *y-* in Tasawaq, nor reflect the Tuareg stative conjugation. In Tasawaq, these “other” verbs all have initial High tone. Most such verbs are active in meaning, but it is difficult to maintain on this ground that they reflect the Short Perfective. In the first place, distinct from the two classes mentioned before, it is not at all evident that the vocalisation of these “other” verbs reflects perfective forms. Rather, many forms seem to reflect the Aorist vocalisation (which is used, amongst others, in the Imperative). This is illustrated in example (16) by means of the Tasawaq verb *gífillit* ‘be round’ (all Tuareg examples 3SG:M except for the Imperative).

| | | | | |
|------|---------|------------------|--------------|------------|
| (16) | Tasawaq | | gílílít | ‘be round’ |
| | Tuareg | Imperative (SG) | ʼgələlłət | ‘be round’ |
| | | Aorist | ʼyəgləlłət | |
| | | Short Perfective | ʼyəgləlłāt | |
| | | Long Perfective | yəʼgiləlłāt | |
| | | Imperfective | yəʼtigləlłit | |
| | | Verbal noun | egləlłi | |

Moreover, in many Tuareg correspondents of these verb types the accentuation in Long Perfectives and in Short Perfectives are the same, at least in 3SG:M forms. Thus the tone pattern in the apparently exceptional stative HL verb *záyḍār* ‘be patient’ would be regular from the point of view of Tuareg aspectual patterns, the Long Perfective being *yəz ziyḍār*.

5. Tasawaq Y-Initial Verbs and the Typology of Borrowing.

From a cross-linguistic perspective, the borrowing of verbs on the basis of verbal stems is not extremely common, it seems. Moravcsik (1978) explicitly states that verbs are never borrowed as such, and always pass into the recipient language by means of nominalisation strategies. As shown, among others, by Wichmann & Wohlgemuth (forthcoming), this generalisation cannot be maintained. Among the many counter-examples, Tasawaq *y*-initial verbs provide very good counter-evidence, as it can be ruled out that they passed through a stage of nominalisation before (or whilst) entering the language. This is evident from the fact that both finite verb forms (3SG:M Perfective) and verbal nouns have been taken over in the language, e.g.

| | | | | |
|------|--------|-------------------|----------------------|---------|
| (17) | yílmàq | ‘swim (verb)’ | < Tuareg 3SG:M:ShP | ʼyəlmăy |
| | àlámàq | ‘the swim (noun)’ | < Tuareg verbal noun | aʼlămay |

Therefore it is impossible to maintain that the Tuareg 3SG:M forms were first re-interpreted as nominalisations: *yílmàq* cannot have been interpreted as a verbal noun, as the language also took over a specialised form for the verbal noun, which has a different form. Thus, *yílmàq* must always have functioned as a verb during the process of borrowing.

From the point of view of Tasawaq, this is quite remarkable, as with verbs of Songhay origin the verbal noun is mostly formed by zero nominalisation, as

shown in the following example using the verb *hândîrî* ‘to dream’ and its verbal noun *hândîrî* (‘dream’):

- (18) a. $\gamma\acute{a}y$ *hândîrî* $\gamma\acute{a}$ -nn *ízè*
 1SG dream 1SG-GEN child
 ‘I dreamed of my son’ (verb *hândîrî*)⁴ [Tsq]
- b. $\gamma\acute{a}$ -nn *hândîrî*
 1SG-GEN dream
 ‘my dream’ (verbal noun *hândîrî*) [Tsq]

The reinterpretation of Tuareg nouns as verbal nouns, and the subsequent introduction of a formally identical verb is attested with a number of verbs expressing uncontrolled body motions, e.g.

- (19) *Tasawaq* *Tasawaq gloss* *Tuareg noun*
 $\acute{t}\acute{a}gr\grave{e}k$ ‘to burp, a burp’ $\acute{t}agr\grave{e}k$ ‘a burp’ (verb: $\acute{a}gr\grave{e}k$)
 $\acute{t}\acute{a}sr\grave{e}g$ ‘to sneeze’ $\acute{t}\acute{a}sr\grave{e}k$ ‘a sneeze’ (verb: $\acute{a}sr\grave{e}k$)
- (20) a. \grave{a} b - $\acute{t}\acute{a}gr\grave{e}k$ ‘he burps’ [Tsq]
 3SG IMPF-burp
- (20) b. $b\acute{e}i$ \grave{a} $\acute{t}\acute{a}gr\grave{e}k$ ‘he burped yesterday’ [Tsq]
 yesterday 3SG burp

Thus, in spite of the fact that a zero nominalisation strategy was available in the language, and was used in a small set of verbs, the large group of *y*-initial verbs must have remained verbal in nature during the entire borrowing process.

Tuareg being a language with different stem shapes in different aspects, one can prove that different aspectual stems have provided the basis for *Tasawaq* active verbs on the one hand, and for stative verbs on the other hand. Active verbs (with HL tone patterns) are based on the Short Perfective aspect in Tuareg, while stative verbs (which have LH tone patterns) are based on the Long Perfective aspect. As a result, *Tasawaq* now has a formally definable verb class (*y*-initial verbs) which is divided into two semantically based tone classes — a situation

⁴ All-Low *hândîrî* is a contextual variant of *hândîrî*; in (18a) this variant is used while followed by a direct object, in (18b) because it is part of a possessive construction.

which neither exists in the Songhay part of the Tasawaq language, nor exists as such in the donor language, Tuareg.

Northern Songhay languages are often considered to be “mixed” languages in the strong sense of the term (e.g. Wolff & Alidou 2001), i.e. in the sense that they cannot be assigned to one or the other group genetically (cf. Thomason & Kaufman 1988). Nicolai (1990, among others) has proposed that Northern Songhay originated when native speakers of Tuareg, rather unsuccessfully, shifted to Songhay. This hypothesis does not seem to explain the borrowing pattern described here. From the point of view of Songhay verb morphology, the introduction of a verb class distinction only implies a differentiation on the lexical level, which one might even consider an accident of the borrowing process. From the point of view of Tuareg, on the other hand, the reinterpretation of an aspectual distinction in terms of lexical classes implies the very basis of verb morphology — aspect distinctions, which are possible with all verbs, have to be reshaped, all of a sudden, into a lexical difference, which would be something entirely foreign to the basics of the Tuareg system.

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