GOOD NOUNS, NAUGHTY VERBS: HOW FRENCH BORROWINGS RECEIVE GRAMMATICAL TONES IN GUINEAN KPELLE

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Abstract: The paper discusses how modern French loan nouns and verbs are morphophonologically adapted into Guinean Kpelle (Southwestern Mande), with a special focus on tone. To date, studies of prosodic loanword adaption from stress to tone languages have mainly focused on lexical tone assignment, largely neglecting other phenomena. This study contributes to the discussion by describing primary tone assignment of French loanwords in Guinean Kpelle, and, crucially, by exploring how loan words behave with respect to other complex morphophonological phenomena, mainly, prefixal and replacive grammatical tones, consonant alternations, and surface tone rules. My data suggest that loan nouns perfectly follow native Guinean Kpelle rules, whereas loan verbs have a distinct replacive {HL} morphological marker corresponding to {L} in native verbs. Distinct prosodic marking of loan verbs in Guinean Kpelle broadens our understanding of loanword typology, as well as of grammatical tone.

Key words: Mande, French, sandhi, tone, loanword phonology, replacive tone, down-step

1. Introduction

In this paper, I study the adaptation of French nouns and verbs into Guinean Kpelle (henceforth GK), a Southwestern Mande language spoken by almost 500 000 people in the Republic of Guinea, West Africa.

French and Guinean Kpelle have been in contact for around 100 years since colonial times, and there are some old French borrowings in
Guinean Kpelle: hɔ́lahi ~ hɔ̀là hí ‘soldier’ (Fr. soldat), kpì tá lî ~ kpù tá lî ‘bottle’ (Fr. bouteille). These items are not easily traceable to their French sources and are perceived as native words by Kpelle speakers. Other established borrowings include sikéétɔ ‘cigarette’, lɔ̀pɛ̀ ‘bread’ (Fr. le pain), mɔ̀tɔ̂ ‘motorbike’.

Nowadays, French is the official language in the Republic of Guinea. School and university education is held exclusively in French, hence educated L1 speakers of GK tend to have a good command of French. Code-switching and code-mixing between French and GK are quite common among educated speakers (Khachaturyan & Konoshenko in press), e.g. (1) heard in a natural conversation in a taxi:

(1) ηɔ́ (1SG.POSS) bateri kaa (be) preskɔ̃ deʃarʒe ‘my battery is nearly out of charge’ (cf. Fr. Ma batterie est presque déchargée)

In yet some other cases, French borrowings appear to be strongly morphologically and phonetically modified when occurring in Kpelle discourse:

(2) ηàà gwɔ̀néktɔ
1SG.RES 1SG\connect
‘I got connected.’ (cf. Fr. Je me suis connecté)

In (2), a French verb (se) connecter ‘get connected’ is modified segmentally; it receives high tone and, finally, it attaches 1SG pronominal object marker realised as initial consonant alternation. Such items cannot be easily attributed to single-word code mixing or borrowing. On the one hand, they seem to have low conventionality, but at the same time, they are adapted segmentally and prosodically. In this paper, I tentatively label them nonce (or ad hoc) borrowings following Poplack et al. (1988). The question discussed in this paper is to what extent recent or ad hoc French borrowings are adapted tonally in GK, given the complex prosodic rules of the recipient language.
GK has the following properties relevant for the present paper:
(a) H vs. L lexical tone contrast with fixed word level patterns on nouns and verbs
(b) various grammatical tones on nouns and verbs
(c) various surface phonological tone rules
(d) morphological initial consonant alternation accompanied by tone change

The adaptation of loanwords from stress to tone languages has been frequently discussed in literature, cf. overviews in Haspelmath & Tadmor (2009) and Kang (2010). However, African languages have been much less studied regarding this topic, the best known papers being Leben (1996) for Hausa and Kenstowicz (2006) for Yoruba. Moreover, current research has mainly focused on how lexical tone is assigned to loanwords. To my knowledge, surface tone rules and grammatical tones have been largely neglected in studies of prosodic loanword adaption (Kang 2010), as well as in general literature on loanword adaptation (Wohlgemuth 2009; Uffmann 2015). In this paper, I describe tone assignment rules, but also how native grammatical rules and surface phonological rules, as well as consonant alternations, apply to French loanwords in GK.

I demonstrate that in GK, loan nouns behave like native nouns following the same grammatical and surface tone rules. Loan verbs pattern in the same way as native ones regarding initial consonant alternation and surface rules, but they have a distinct morphological replacive {HL} marker corresponding to {L} in native verbs. This instance of distinct loanword prosodic morphology poses interesting theoretical and descriptive questions.

The paper is organised as follows. §2 provides basic information regarding native GK tonal morphophonology. §3 focusses on the data set and the rules of lexical tone assignment in loanwords. §4 describes morphophonological behaviour of loan nouns and verbs, with a special focus on tone rules. §5 concludes the paper.
2. Native Guinean Kpelle tonal morphophonology

GK is a two-tone language with contrastive H and L. These tones combine to produce six main word level tone patterns, which may be lexical or contextual:1

<table>
<thead>
<tr>
<th>Patterns</th>
<th>Phonetic realization</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>/HL/</td>
<td>High falling</td>
<td>gwí ’banana’, yílɛ́ ‘dog’</td>
</tr>
<tr>
<td>/LHL/</td>
<td>Low falling</td>
<td>tɛ̰̀ ‘truth’, yɔ̀wâ ‘ax’</td>
</tr>
<tr>
<td>/L(H)/</td>
<td>Low flat</td>
<td>hòǒ ‘horse’, yàlá ‘lion’, kùlɔ ‘go out’</td>
</tr>
<tr>
<td>/L/</td>
<td>Low falling</td>
<td>bɔ̀nɔ̀ ‘mouse sp.’, gbɔ̀nɔ ‘ring’</td>
</tr>
<tr>
<td>/LH/</td>
<td>Low high</td>
<td>mànάj ‘manioc’, zàlɔ́j ‘grasshopper’</td>
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</table>

In certain constructions, grammatical replacive {L} tone completely rewrites lexical tones of nouns and verbs.

Head nouns are marked with {L} in compounds or characterising possessive constructions, e.g. in (3). Verbs receive {L} in certain TAM constructions. For example, verbs retain their lexical tone in Resultative construction (4), whereas Aorist, Conditional, Irrealis and Prohibitive forms are marked by {L} on the verb (5)–(6).

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1 In this paper, I represent native GK words generally following modern orthography as discussed in Konoshenko (2019), with marked tones. Letter ɠ represents velar fricative [ɣ], j stands for [dʒ], single e represents central [ə]. French loanwords are represented phonetically. In the examples, surface tones are marked by default; replacive L and HL tones in the glosses reflect the morphophonological form, which does not necessarily coincide with surface realization due to surface rules.
(3) *kpélèè* ‘Kpelle’ + *wóó* ‘speech’ → *kpélèè* {wòò}*L* ‘the Kpelle language’

(4) Resultative construction, native verb *pá* ‘come’ with lexical tone:

àà pá bé

3SG.RES come here

‘(S)he has come (and is still here).’

(5) Aorist construction, native verb *pá* ‘come’ with grammatical {L}:

è pà bé

3SG.B come\L here

‘(S)he came here (but has already left).’

(6) Conditional in the first clause, Irrealis in the second one; native verbs marked with grammatical {L} in both cases:

yà pà ñà wáli téŒè é pó

2SG.COND come\L 1SG.IRR money give\L 2SG to

‘If you come, I’ll give you some money.’

Apart from replacive tones, GK also has initial consonant alternation whereby voiceless consonants become voiced, and non-nasal sonorants are nasalised.

### Table 2

<table>
<thead>
<tr>
<th>Initial consonant alternation</th>
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<tr>
<td>p→b</td>
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<td>b→m</td>
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<tr>
<td>t→d</td>
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<tr>
<td>l→n</td>
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<td>k→g</td>
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<tr>
<td>w→ŋ</td>
</tr>
<tr>
<td>kp→gb</td>
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<tr>
<td>h→z~j</td>
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</table>

The alternation occurs automatically after word final -ŋ and as a morphological marker; the latter case is of interest here. In relative nouns and verbs, the consonant alternation serves as a pronominal marker accompanied by prefixal H for 1SG and prefixal L for 3SG (7)–(8). The prefixal tone is realised on the first tone bearing unit.

(7) *kófó* ‘leg’ – *gófó* ‘my leg’ – *gófó* ‘his leg’

(8) *káá* ‘see’ – *gáá* ‘see me’ – *gáá* ‘see him/her’
In free nouns, consonant alternation together with prefixal L marks definiteness (9). In nouns with initial L tone, definiteness is marked by consonant alternation (10), for items with lexically voiced or nasal initial consonants, definite forms are only marked by L tone (11).

(9) kpélúj ‘chair’ – gbèlúj ‘the chair’, béláá ‘sheep’ – mèláá ‘the sheep’; wáli ‘money’ – ηwáli ‘the money’
(10) hèfgéyàa ‘clothes’ – jèfgéyàa ‘the clothes’
(11) gbànàa ‘gun’ – gbànàa ‘the gun’, jùnè ‘mouse’ – jùnè ‘the mouse’.

Finally, both lexical and grammatical tones are subject to surface phonological rules: H spread, contour simplification resulting in downstep, and (H) linking (Konoshenko 2019).

3. Loanwords in Guinean Kpelle

3.1. The data

As discussed in §1, studies of loanword adaption into tone languages generally focus on patterns of lexical tone assignment, and hence they are usually based on large lists of loanwords, e.g. Kenstowicz (2006). The present study explores a wider range of phenomena including lexical pattern assignment, grammatical tones, morphophonological alternations, as well as the application of surface rules. The study is based on an admittedly small corpus of ad hoc French loans comprising twelve nouns and nine verbs, but crucially, these items were tested in several forms and contexts following the complexity of GK tonology.

The data were elicited from one male speaker born in 1979, and partly checked with his father born in 1953, as well as with another young male speaker. The sessions took place during a field trip to the Republic of Guinea in January 2020, and via Facebook Messenger in February and June 2020.

It should be noted that the data analysed here pose some questions pertaining to the segmental structure of loanwords. French monosyllabic
words attach optional final shwa in GK: \textit{film(ə)} ‘film’, \textit{klîp(ə)} ‘clip’, and the rules governing the choice between the forms with and without the schwa remain unclear. One can also note that most verbs, but not nouns, have pretonic vowel lengthening, as in \textit{trânsfé érə́} ‘transfer’, but this is not true for \textit{pré fé rə́} ‘prefer’ and \textit{kónéktə́} \textasciitilde{} \textit{kwânéktə́} ‘connecter’ for unknown reasons. I leave these questions for future research.

### 3.2. Lexical tone accommodation of loanwords

As can be seen from Table 3, nouns and verbs are assigned tone patterns differently.

For nouns, word final stress in French is associated with a falling pattern: \textit{minîstr(ə)} ‘minister’, \textit{prôzidâ} ‘president’. Since tones in GK function as word level patterns, French loan nouns can be assigned /\textit{L})HL/ pattern, cf. Table 1.

Monosyllabic loan nouns are assigned /\textit{HL}/ pattern: \textit{lîvr} ‘book’, \textit{klîp} ‘clip’. It is interesting to note that in native GK vocabulary, /\textit{HL}/ pattern is mapped as H.HL on CVCV structures including those with

<table>
<thead>
<tr>
<th>Nouns</th>
<th>Verbs</th>
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<tbody>
<tr>
<td>\textit{film(ə)} ‘film’</td>
<td>\textit{kwâáfə́} ‘style (hair)’</td>
</tr>
<tr>
<td>\textit{klîp(ə)} ‘clip’</td>
<td>\textit{tôʃrə́} ‘point with a torch’</td>
</tr>
<tr>
<td>\textit{lîvr(ə)} ‘book’</td>
<td>\textit{pré fé rə́} ‘prefer’</td>
</tr>
<tr>
<td>\textit{bânk(ə)} ‘bank’</td>
<td>\textit{kónéktə́} \textasciitilde{} \textit{kwânéktə́} ‘connecter’</td>
</tr>
<tr>
<td>\textit{bâr(ə)} ‘bar’</td>
<td>\textit{trânsfé érə́} ‘transfer’</td>
</tr>
<tr>
<td>\textit{máryâţ} ‘marriage’</td>
<td>\textit{réépâásə́} ‘iron’</td>
</tr>
<tr>
<td>\textit{mándâ} ‘mandate’</td>
<td>\textit{ámbráásə́} ‘kiss’</td>
</tr>
<tr>
<td>\textit{kôntrâ} ‘contract’</td>
<td>\textit{évútố} ‘invite’</td>
</tr>
<tr>
<td>\textit{minîstr(ə)} ‘minister’</td>
<td>\textit{éfěktố} ‘infect’</td>
</tr>
<tr>
<td>\textit{prôzidâ} ‘president’</td>
<td>\textit{éfěktố} ‘infect’</td>
</tr>
<tr>
<td>\textit{ámbásâd(ə)} ‘embassy’</td>
<td>\textit{éfěktố} ‘infect’</td>
</tr>
<tr>
<td>\textit{éfěksyố} ‘infection’</td>
<td>\textit{éfěktố} ‘infect’</td>
</tr>
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final schwa: **yílê** [yílə] ‘dog’. However, when monosyllabic loans are realised with final ə, the /HL/ mapping is H.L as in [lívrə] ‘book’.

Non-monosyllabic nouns are assigned /(L)HL/ pattern: **mándâ** ‘mandate’ vs. **kòntrâ** ‘contract’, the factors behind the appearance of initial L remain unclear so far.

Verbs are borrowed into GK in the typologically common Infinitive form (Wohlgemuth 2009: 80) with lexical /H/: **kwááfço** ‘style (hair)’, **préférâ** ‘prefer’. In contrast to nouns, word-final schwa is never omitted in verbs.

To conclude this section, GK largely follows typologically common trends of lexical tone assignment in loanwords, in that it interprets stress as H(L) tone – cf. also (Leben 1996: 140; Hao 2009: 42). Still, some language specific rules apply since loan nouns are assigned /(L)HL/ and loan verbs get /H/ tone. A possible explanation of this difference may come from the fact that while /(L)HL/ pattern is common for native GK nouns, it is quite rare for native verbs accounting for as little as 10% of the verbs in my dictionary (Konoshenko 2019). I would argue that, since final fall associated with French stress in GK is not common in native verbs, loan verbs are assigned lexical /H/ in GK.

### 4. Loanword tonal morphophonology in Guinean Kpelle

#### 4.1. Nouns

Loan nouns follow all the native noun rules in GK. Just like native nouns (3), loan nouns receive replacive {L} when appearing as heads of compounds or characterising possessive constructions (12–13):

(12) **kpèlê lèò klîp**

Kpelle language\L clip\L
‘a clip about the Kpelle language’

(13) **kpèlê lèò lívr**

Kpelle language\L book\L
‘a book about the Kpelle language’
Second, loan nouns are marked for definiteness by means of initial consonant alternation with prefixal L (14), cf. (9) for native nouns.


Similarly to native nouns (8–9), in loan nouns with lexically assigned initial L tone, definiteness marking can only be instantiated through consonant alternation (15). For loan nouns with initial voiced obstruent, nasal sonorant or a vowel, definiteness marking is realised via initial L tone (16):

(15) kòntrà ‘contract’ – gòntrà ‘the contract’
(16) máryâž ‘marriage’ – màryâž ‘the marriage’, ámbásâd ‘embassy’ – àmbásâd ‘the embassy’

Finally, loan nouns undergo surface contour simplification triggering downstep on a following H tone (17):

(17) máryâž ŋhó làà ←/máryâž hó làà/ + downstep
marriage NEG there
‘There is no marriage.’

4.2. Verbs

Loan verbs are generally susceptible to the same morphophonological rules as native verbs, with a surprising exception. In 4.2.1, I describe morphophonological rules which are common for loans and native verbs; and 4.2.2 shows instances of divergent behaviour in loan verbs.

4.2.1. Common rules for loan and native verbs

Verbal loans undergo the same segmental morphological operations as native verbs. Verbal loans are subject to initial consonant alternation with prefixal tones (H for 1sg and L for 3sg) marking either pronominal object (19), (21)–(22) (cf. 8 with native verbs) or intransitive subject in a stative construction (23). They can also attach segmental suffixes (23).
Unlike native words, loanwords may have an initial vowel: ámbráásá ‘kiss’. According to my consultant’s intuition, the 3sg pronominal marker lowers the tone on the first syllable of vowel-initial loan verbs (25), similarly to native and other loan verbs (19), (21), cf. also similar lowering in the noun ámbásâd with definiteness marker in (16).

(18) ñàà wálî ṭransfèérô
1SG.RES money transfer
‘I transferred (some) money.’ (downstep triggered by wálî ‘money’)

(19) ñàà drànsfèérô
1SG.RES 3SG\transfer
‘I transferred it.’

(20) ñàà é kwááfô
1SG.RES 2SG style
‘I styled your hair.’

(21) ñàá gwàáfô
1SG.RES 3SG\style
‘I styled his/her hair.’

(22) àà gwàáfô
3SG.RES 1SG\style
‘(S)he styled my hair.’

(23) gónékté-áá-ì
1SG\connect-STAT-PRED
‘I am connected.’

(24) ñàà é ámbráásá
1SG.RES 2SG kiss
‘I kissed you.’

(25) ñàá ámbráásá
1SG.RES 3SG\kiss
‘I kissed him/her.’
However, in my data, 1SG is systematically marked by a presumably borrowed pronominal mə̂ (cf. Fr. me) for vowel-initial loan verbs (26), cf. also (30) below.

(26) àà mə̂  ámbráásə
  3SG.RES 1SG kiss
  ‘(S)he kissed me.’

Note that for native verbs and consonant-initial loan verbs, the 1SG pronominal is marked by prefixal H and initial consonant alternation (8, 22). Vowel-initial loan verbs cannot undergo consonant alternation, and prefixal H is not visible in verbs with initial H tone (be it /H/ or /HL/ pattern). Hence, 1SG marking would be morphophonologically invisible for vowel-initial verbs, and hence an overt borrowed pronominal is used.

Similarly to native verbs with /H/ tone, loan verbs are downstepped after direct objects with final -HL contour, e.g. wálî ‘money’ downsteps tránsféérə in (18); and mə̂ downsteps ámbráásə in (26).

4.2.2. A distinct rule for loan verbs: {HL} marker

In the constructions where native verbs receive replacive {L} tone (5), (6), (25), loan verbs are marked with replacive {HL} tone. Such a discrepancy between native vs. loan verb realizations cannot be attributed to surface rules, hence a different morphological tone marker has to be posited.

Examples (27)–(30) illustrate native and loan verbs in Aorist, Irrealis, Conditional and Prohibitive forms. In (30), loan verb ëfëktó ‘infect’ receives {HL}, and the second clause contains a synonymous expression, where native verb pèlè ‘stretch’ receives replacive {L}.

(27) Native verb káá ‘see’ with {L} in Aorist:
    tólóótólóó  nè  wálî  kàà
    long.ago  1SG money see\L
    ‘I saw money long time ago.’
(28) Loan verb *trǎnsfěérā* ‘transfer’ with {HL} in Aorist:

\[ tōlōtōlōō ŋē wālī \Downarrow trǎnsfěérā \]

long.ago 1SG money transfer\HL

‘I transferred money long time ago’, downstep triggered by *wālī* ‘money’

(29) Native verb *pá* ‘come’ with {L} in Conditional, loan verb *trǎnsfěérā* ‘transfer’ with {HL} in Irrealis:

\[ yā pā ṅā wālī \Downarrow trǎnsfěérā \Downarrow yē \]

2SG.COND come\L 1SG.IRR money transfer\HL 2SG.on

‘if you come, I will transfer some money to you.’

(30) Loan verb *ɛ̰́fé ktə́* ‘infect’ with {L} in Prohibitive, native verb *pɛ̀lɛ̀* ‘stretch’ with {L} in Prohibitive

\[ hō mō \Downarrow ɛ̰́féktə̂, hō ɛ̰́féksyō pɛ̀lɛ̀ mû \]

2SG.NEG 1SG infect\HL 2SG.NEG infection stretch\L 1SG.on

‘Do not infect me, do not stretch infection on me!’

Examples (28)–(30) suggest that French loan verbs obey a separate rule of grammatical tone marking in GK, as opposed to loan nouns that do receive {L} (12)–(13) and, crucially, contrasting with native verbs in this particular domain of tone grammar.

The use of a distinct morphological rule for, presumably, non-conventional loans calls for a structural explanation. One could argue that loan verbs do not accept {L} marking to preserve the original prominence of word final syllables in French loanwords, associated with H(L) tone in GK. However, as demonstrated in §4.1, loan nouns do receive {L} marking, which works against the raised argument.

5. Discussion and conclusion

This paper explores how French loanwords are adapted into Guinean Kpelle, a West African tone language with an intricate morphophonological system featuring consonant alternation, prefixal and replacive grammatical tones, and surface tone rules. I demonstrate that loan nouns perfectly
fit into GK rules, whereas loan verbs have a distinct morphological \{HL\} marker corresponding to \{L\} in native verbs.

Instances of loanword prosodic phonology diverging from native phonology have been reported in literature, e.g. H spread attested in loanwords of Yoruba, Hausa, and Mende (Kenstowicz 2006: 138), or H tone assignment to English loanwords containing syllables with a long vowel and a final obstruent in Thai (Suthiwan & Tadmor 2009: 610). However, in the case of GK, we deal with a morphological rule, albeit prosodically implemented, which is unique for loan verbs. On the other hand, in his typology of (morphological) loan verb adaptation, Wohlgemuth (2009: 98–99) mentions distinct loan verb markers in Romani and Manange, but not specific morphological marking of particular forms which would be unique for loan verbs.

Distinct prosodic marking of loan verbs in GK points to the complex nature of grammatical tones, which are by definition grammatical markers but have greater phonological freedom and mobility and, hence, are more prone to innovations, cf. similar observations by Lionnet & Hyman (2018: 668). The reason why similar cases of distinct loanword morphology have not been reported in literature might be that grammatical tones are generally not considered in loanword studies.

Finally, as demonstrated by Poplack et al. (1988), lexical borrowing in a bilingual environment is a complex sociolinguistic phenomenon with strong interspeaker variation. In this paper, I concentrated on purely structural phenomena in a very limited data set. Clearly, exploring social borrowing strategies in a larger corpus of spontaneous speech remains a task for the future.

Acknowledgements

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Abbreviations

B – basic pronominal  
COND – conditional  
DEF – definite  
GK – Guinean Kpelle  
H – high tone  
L – low tone  
IRR – irrealis  
PRED – predicative  
RES – resultative  
SG – singular  
STAT – stative

References


