

Tone, viewpoint aspect, and imperative mood

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Abstract. We examine the interaction between viewpoint aspect and imperative mood in an under-described and endangered Edoid language of West Africa. In Emai, tone functions both lexically and grammatically. Verbs in citation form, including bisyllabic stems, are toneless. In declarative mood Emai distinguishes perfective from imperfective, with perfective assigning high tone to a verb and imperfective assigning low. Imperative mood takes perfective aspect, most clearly evident when an auxiliary or preverb precedes the verb or when the imperative is negated. In simpler imperatives, verb tone is low high. The low tone is conditioned by the juxtaposition of a subject phrase that shows a second person pronoun with high tone and a verb phrase whose initial syllable is high. Across phrasal constituents, consecutive high tones, as they would have appeared in simpler imperatives, are prohibited. It is the verb phrase initial high syllable that lowers.

Keywords. imperative mood; viewpoint aspect; tone; Emai; Niger-Congo

1. Introduction. Over the years, language specific and cross-linguistic analyses of grammatical aspect have tended to focus on canonical contexts. Viewpoint aspect, for example, has been traditionally analyzed in temporal terms, where perfective aligns with past and imperfective with nonpast. More recently, some investigators have shifted away from contexts of default temporal alignment (van der Auwera, Malchukov & Schalley 2009; Malchukov 2011, 2014)) toward a range of contexts that consider the nontemporal import of verbal aspect (Astrid & Brisard 2020; Dickey 2020).

For this paper, we examine the interaction between viewpoint aspect and imperative mood, as the latter is traditionally understood (Keersmaekers & Van Hal 2016, Malchukov & Xrakovskij 2016). Our attention centers on an under-described and endangered Edoid language of West Africa. Emai is basic SVO with simplex and complex predicates as well as minimal segmental morphology. Tone functions both lexically and grammatically, with prior Edoid studies agreeing that verbs in citation form are toneless. Verbs acquire their tone from adjacent grammatical elements (Amayo 1975, 1976, 1983; Elugbe 1989).

2. Aspect and declarative mood. To establish that Emai distinguishes perfective from imperfective, we briefly consider tonal behavior under declarative mood. In declaratives there is default alignment between perfective and past tense as well as imperfective and present tense.

Relative to a toneless verb, viewpoint aspect of the perfective (PFV) type assigns a high tone, whereas aspect of the imperfective (IPFV) type assigns a low tone. At the underlying level, perfective is signaled by a high tone verb suffix and its segmental co-exponent *-i*. This high tone spreads leftward onto the preceding verb, such as the lexically toneless item *muzan* ‘stand’ in (1).

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- (1) ò múzán-í vbí úkpòdè.
 3SG:PRX stand-PFV LOC road
 ‘She has stood on the road.’

Perfective expones in three patterns reflective of metatony in Bantu (Hyman and Lionnet 2012). When it occurs before a verb argument, *-í* deletes (2a); before a verb non-argument, *-í* remains (2b); and before a clause-final boundary, *-í* tone shifts from high to low (2c).

- (2) a. ó ʼgbé ólì ìbè.
 3SG:DST PST:hit:PFV SG.ART drum
 ‘She hit the drum.’
 b. éʼmé ó ʼgbé-í òdè?
 what 3SG:DST PST:hit-PFV yesterday
 ‘What did she hit yesterday?’
 c. éʼmé ó ʼgbé-ì?
 what 3SG:DST PST:hit-PFV
 ‘What did she hit?’

In contrast imperfective viewpoint aspect is expressed by a suffix that consists of a floating low tone (-^L); it has no segmental co-exponent. The low tone of the imperfective spreads leftward onto its verb, as we see in (3) with verb *muzan* and its sense ‘wait.’

- (3) ólì ìmátò ò ó mùzàn ènyáà.
 ART car SI:PRX PRS wait:IPFV just.now
 ‘The car is waiting now.’

In simple clauses with a transitive verb in perfective aspect the effect of metatony is evident at the surface level. Although segmental co-exponent *-i* fails to occur, the high tone of the perfective is still evident. In simple declaratives like (4) and (5), the verbs *kawo* ‘look at’ and *dume* ‘pound’ exhibit high tone of the perfective but do not permit its segmental form. Each verb is also conjugated for past tense, which can determine the prosodic shape of the verb. Tense is articulated with temporal distance (Dähl 1984; Fleischman 1989), specified as either proximal (PRX) or distal (DST). When the past is proximal as in (4), verb tone on *kawo* and *dume* is high. When the past is distal as in (5), verb tone remains high but its initial syllable adjusts to downstep high [^ʼ]. This is due to the floating low tone ^L of the distal past in preverbal position.

- (4) a. òjè káwó ólì òkpòsò.
 Oje:PRX PST:look:PFV ART woman
 ‘Oje has looked at the woman.’
 b. àlèkè dúmé émà.
 Aleke:PRX PST:pound:PFV yam
 ‘Aleke has pounded yam.’
 (5) a. ójé ʼkáwó ólì òkpòsò.
 Oje:DST PST:look:PFV ART woman
 ‘Oje looked at the woman.’
 b. áléké ʼdúmé émà.
 Aleke:DST PST:pound:PFV yam
 ‘Aleke pounded yam.’

When these same verbs appear in a nonpast, present context, i.e. the distal present or habitual (6) or the proximal present or progressive (7), verb tone is low. This low value is due to the floating low tone -^L of the imperfective suffix in postverbal position and its leftward spread across the verb.

- (6) a. ójé ó ò kàwò óli òkpòsò.
 Oje:DST SI:DST PRS look:IPFV ART woman
 ‘Oje looks at the woman.’
 b. áléké ó ò dùmè émà.
 Aleke:DST SI:DST PRS pound:IPFV yam
 ‘Aleke pounds yam.’
- (7) a. òjè ò ó kàwò óli òkpòsò.
 Oje:PRX SI:PRX PRS look:IPFV ART woman
 ‘Oje is looking at the woman.’
 b. àlèkè ò ó dùmè émà.
 Aleke:PRX SI:PRX PRS pound:IPFV yam
 ‘Aleke is pounding yam.’

3. Aspect and imperative mood. Imperative mood, where tense is not expressed in Emai, employs a verb that displays perfective aspect. It does so even though verb tone in some imperative constructions is not a consistent high. Retaining *kawo* and *dumè* for illustration in (8), we see that each verb exhibits a low high tone pattern, which appears to reflect neither perfective nor imperfective aspect. As we will see shortly, it is important to note that such imperatives employ an implicit second person singular subject whose tone is high.

- (8) a. kàwó óli òkpòsò.
 look:PFV ART woman
 ‘Look at the woman.’
 b. dùmé émà.
 pound:PFV yam
 ‘Pound yam.’

There are two arguments that verb tone in the imperative is perfective and high. When the verb in an imperative construction is immediately preceded by a form that expresses an auxiliary or preverb meaning, such as repetitive *chè* ‘again’ or additive *gbò* ‘also, too,’ each syllable on the verb exhibits high tone. The tonal pattern on both *kawo* and *dumè* in (9) confirm this.

- (9) a. chè káwó óli òkpòsò.
 REP look:PFV ART woman
 ‘Look at the woman again.’
 b. gbò dúmé émà.
 ADD pound:PFV yam
 ‘Pound yam too.’

In contrast, when the verb in an imperative construction is preceded by the second person plural subject pronoun *vba*, verb tone reverts to low high (10). A pronoun of this character, unlike auxiliaries and preverbs, stands outside the boundary establishing the verb phrase (VP) and its various elements. In subject phrase position, segmental *vba* and its high tone co-exponent about the verb phrase, wherein auxiliaries, preverbs, verbs, and verb arguments are contained.

- (10) a. *vbá kàwó ólì òkpòsò.*
 2PL look:PFV ART woman
 ‘You all look at the woman.’
 b. *vbá dùmé émà.*
 2PL pound:PFV yam
 ‘You all pound yam.’

We take the tonal patterning in (10) and (8) as reflective of a prohibition against a series of high tones across the juncture separating the subject phrase from the verb phrase. In the subject phrase, it is the high tone co-exponent of the overt second person plural form *vbá* that conditions the shift from high to low on the initial syllable of the verbal elements *kawo* and *dumε*. This same condition applies to (8), if we assume that the second person singular subject consists of a floating high ^H tone that lacks a segmental co-exponent.

There is thus a juncture or gap that intervenes between the subject phrase (SP) and the verb phrase (VP). Across this gap between phrasal constituents, imperatives prohibit consecutive high tones. That is Emai constrains the prosodic occurrence of a subject phrase final high tone and a verb phrase initial high tone. The prohibited tonal configuration is what we would have found in imperatives with singular or plural subjects were this constraint on surface form not operating. We formalize this constraint on imperative tonal patterns in the following simplified representation:

$${}^{\text{H}}]_{\text{SP}} \text{VP} [{}^{\text{H}} \rightarrow {}^{\text{H}}]_{\text{SP}} \text{VP} [{}^{\text{L}}$$

Further support for this interpretation comes from the negative-imperative or prohibitive (PR). The exponent of the prohibitive in Emai consists of segmental form *e* with low (^L) tone. It combines only with a second person pronoun in clause-initial position, either singular *e* in (11) or plural *vba* in (12). Across pronoun and prohibitive elements, it is compulsory that tones manifest a polarity condition and that the tonal co-exponent of the prohibitive be low. The subject pronoun in this construction consistently manifests a high tone. When prohibitive *è* and its second person pronoun occur in a subject phrase, they precede the verb phrase. Under this condition, tone on each syllable of the verbs *kawo* and *dumε* remains high. There is no auxiliary or preverb element to the left of either verb phrase in (11) or (12) that might constrain or interact with the high tone of perfective viewpoint aspect and its leftward spread across the verb.

- (11) a. *é è káwó ólì òkpòsò.*
 2SG PR look:PFV ART woman
 ‘Don’t you look at the woman.’
 b. *é è dúmé émà.*
 2SG PR pound:PFV yam
 ‘Don’t you pound yam.’
- (12) a. *vbá è káwó ólì òkpòsò.*
 2PL PR look:PFV ART woman
 ‘Don’t you all look at the woman.’
 b. *vbá è dúmé émà.*
 2PL PR pound:PFV yam
 ‘Don’t you all pound yam.’

4. Conclusion. We conclude that Emai is a language that does not align viewpoint aspect of the perfective type with its default time sphere, which is the past and which occurs in declaratives. For Emai, the perfective is aligned with different realizations of the imperative mood, whether straightforward directives or prohibitives.

Given this non-alignment of perfective aspect with its default time sphere, i.e. past tense, it is not surprising that expressions framed by future tense articulate with perfective aspect. The mark of the future in Emai consists of co-exponents segmental *lɔ* and tonal high ^H. These co-exponents appear with a verb that is conjugated with perfective aspect and the leftward spread of the perfective's high tone. As with imperatives, the high tone spread in (13) and (14) is adjusted by shifting the tone of the initial syllable of the verb phrase to low. It is, again, the sequence of high tones across the juncture between subject phrase and verb phrase that triggers this tone shift.

(13) a. ójé lɔ kàwó ólì òkpòsò.
 Oje:DST FUT look:PFV ART woman
 'Oje will look at the woman.'

b. òjè lɔ kàwó ólì òkpòsò.
 Oje:PRX FUT look:PFV ART woman
 'Oje is about to look at the woman.'

(14) a. áléké lɔ dùmé émà.
 Aleke:DST FUT pound:PFV yam
 'Aleke will pound yam.'

b. àlèkè lɔ dùmé émà.
 Aleke:PRX FUT pound:PFV yam
 'Aleke is about to pound yam.'

The nonalignment of perfective aspect with its default time sphere (the past) is also evident in hortative constructions. Hortatives in Emai are tenseless. The hortative mark consists of the co-exponents segmental *i* and high ^H tone. They combine with a verb that is conjugated with perfective aspect and its leftward spread of high tone, as in (15). Again, across the juncture between subject phrase and verb phrase, high tone spread is adjusted by lowering the initial syllable of the verb phrase, the second of two consecutive high tones. It is the configuration ^H_{SP} VP [^H that violates the constraint against consecutive high tones across the gap between phrasal constituents subject and verb. A constraint of this nature will strike some as reminiscent of Meeussen's Rule (Goldsmith 1984), which has been widely applied to account for why Bantu languages, also in the Benue-Congo family like Emai, tend to avoid consecutive tones of a high high character under certain structural conditions.

(15) a. àlèkè í dùmé émà.
 Aleke HOR pound:PFV yam
 'Aleke should eat the food.'

b. ò í dùmé émà.
 3SG HOR pound:PFV yam
 'She should eat the food.'

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