



Mood: Tonal and segmental realization in Edoid

Ronald P. Schaefer & Francis O. Egbokhare*

Abstract. Relative to the under-analyzed West African language Emai, we describe a system of underlying tones and syllabic segments. They surface as co-exponents to characterize mood. At the underlying level we propose a predicative complex in which tones and segmental forms contrast to distinguish categories of mood that identify the reality status of clausal information, i.e. actualized vs. non-actualized. Actualized status is determined by a two-tone predicative complex: high low $\{^H \ ^L\}$ or low high $\{^L \ ^H\}$. These tones associate to segmental material that is lexically toneless. Subject segments on the left of the tonal component express temporal distance while segments to its right convey non-future tense (past, present). Non-actualized status is conveyed by a predicative complex with either a high $\{^H\}$ or low $\{^L\}$ tone for grammatical subject. Contrasting with subject tone is the lexical tone of segments conveying non-tense moods. Overall, the system of predicative complexes characterizes the mood types indicative, imperative, interrogative, subjunctive, and negative. We conclude that this system reflects mood prominence and relates to mood as indicator of clause type rather than speech-act type. In addition, this system bears on tone-exodus in which position-grounded syntagmatic tonal patterns come to dominate over paradigmatic tonal contrasts, leading to significant prosodic changes and eventually to tonal loss.

Keywords. grammatical tone; predicative complex; mood prominence; realis/irrealis actualization; Edoid; Emai

1. Introduction. Confusion surrounds the grammatical category mood and its history (Auwera and Aguilar 2016). Today, some reject it as a theoretical construct (Van Valin and La Polla 1997); others view it as a type of verbal inflection within modality (Bybee et al. 1994, Palmer 2001). Using a broader cross-linguistic brush, Mordashova and Plungian (2020) claim that mood expression is predominantly segmental, with suprasegmental expression possible but infrequent and limited to non-indicatives.

In response to such claims about mood, we undertake an assessment of clausal types for notional mood categories in Emai of south-central Nigeria. It is a member of the Edoid group and the Benue Congo family within the Niger Congo phylum (Williamson and Blench 2000). Our data derive from dictionary, grammar, and text collection projects that we undertook over a number of years (Schaefer and Egbokhare 1999, 2007, 2017). We employ data from these sources to show that mood expression in Emai cannot be determined without access to the suprasegmental feature tone and that tonal expression of mood is not limited to non-indicatives.

2. Background. Mood is not a term frequently used in descriptions of African languages. In its place we find various terms, mnemonic phrases, and analytic strategies.

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One of the most widely used mnemonic devices derives from the extensive crosslinguistic investigations of inflection by Anderson (2011, 2016). He analyzed STAMP morph constructions, where STAMP stands for subject, tense, aspect, mood, and polarity. With the inclusion of subject pronouns, he formulated a typology to characterize the locus of inflection relative to STAMP units and clausal verbs. Essentially, his typology asks where in a clause do we find inflectional properties of a typical grammatical subject (e.g. person, number, gender) combined with inflectional categories such as tense, aspect, mood, or polarity. There are five possible combinations, with four being basic. The locus may be an auxiliary unit (including subject pronoun), a lexical verb, or auxiliary and verb, either repeated on both or distributed asymmetrically across the two. In large sections of West Africa this typology informs the prevalence of preverbal portmanteau morphs.

The word mood appears in this mnemonic strategy as an inflectional category at the same level as tense, aspect, polarity, and subject. Our question: What principles govern how these categories might combine? For example, can subject and tense combine without mood? Can tense and polarity combine without aspect? Can mood occur without either tense, aspect, polarity, or subject? In other words, are there any hierarchical relations among STAMP units in addition to their linear relations?

Another term, widely used among linguists working on West Africa's Mande languages, is Personal Predicative Marker or Pronominal Auxiliary (Vydrin 2011). It is a morphemic amalgam that consists of a subject personal pronoun and a TAM-Polarity marker. In clausal structure, a Pronominal Auxiliary is a word-level unit unattached to a verb. Again, mood is mentioned as one inflectional element of TAM, but its syntactic relation to clause type has received little attention.

Also within the Mande linguistic tradition, we find the simpler but earlier term Predicative Marker. It refers to a class of morphemes that are positioned between the nominal subject and the verbal phrase. As noted by Bearth (1995), Predicative Marker exponents encompass tense-aspect notions and affirmative-negative polarity. According to Creissels (2023), Predicative Markers are a kind of auxiliary often found immediately after the subject noun phrase. They are a special class of grammatical words or clitics with a fixed position that interacts with TAM suffixes on the verb, some of which may have the same grammatical value as the Predicative Marker. Of special note is that deletion of a clausal Predicative Marker results in either ungrammaticality or changes in TAM-polarity.

A very different approach to mood obtains in Bantu language studies. An early study of southern Bantu by Doke (1935) identified eight distinct moods. They were imperative, indicative, subjunctive, potential, conditional, infinitive, participial, and contingent. These terms for different mood types have been applied extensively to the southernmost Bantu languages. But as pointed out by Nurse and Devos (2022), studies of the Bantu agglutinative verbal word reveal a proliferation of terms attached to a single element of meaning, a precarious condition for crosslinguistic investigations in sub-Saharan Africa. Perhaps to provide some stability, investigators turned to Meeussen (1967), who proposed a multi-slot clausal template to assemble units of inflectional and derivational material that have like-meanings.

INITIAL-SUBJECT-NEGATIVE-TA-OBJECT≠ ROOT-EXTENSION-FINAL-SUFFIX

The Meeussen template has been revised and expanded by Nurse and associates (2003, 2008, 2018, 2022). There is a FINAL slot and a subsequent SUFFIX slot that store a small, closed class of forms that bear on mood and aspect, although grammaticalization has now led to the inclusion of tense and negation. Following Hengeveld (2004), Nurse and associates define mood as an overarching concept that encompasses illocution and modality. The latter refers to expressions

characterized in terms of possibility and necessity. Illocution refers to types of speech acts such as optative, directive, imperative, jussive, hortative, and prohibitive. To express these illocutionary types, Bantu relies on a Final slot suffix *-a* to convey imperative mood and suffix *-e* to express subjunctive mood. Although declarative is infrequently mentioned, it is implied in discussions of slot TA (tense-aspect) and typically is marked by suffix *-a* in slot Final.

Given these different approaches to mood, there is much to pick from. For our study, we tend to follow the basic mood distinctions laid out in Nikolaeva (2016), also found in Allan (2006). Nikolaeva views sentence mood as a conventional indicator of illocutionary force. It is a grammatical device for the specification of illocutionary act types. A concept associated with this device is notional mood, the collection of form types at sentence level that serve as vehicles for speech acts such as directives, requests, etc. One can then recognize relations between a mood type and its typical illocutionary force: declaratives are prototypical assertions, imperatives are best for directives, and interrogatives for asking questions, etc. Consequently, the contributions of mood and illocutionary force (speech acts) to sentence meaning at the semantic level can be separated.

An additional dimension of grammatical mood discussed by Nikolaeva concerns reality status, i.e. realis vs. irrealis. This dimension pertains to actualized vs. non-actualized states of affairs. Realis deals with factual statements and positive beliefs. Irrealis concerns imagined or hypothetical situations, an element of reality that is not observable.

3. Tone and mood expression. In African linguistic studies it is not uncommon for tonal and segmental exponents of a morpheme to be described from their individual perspectives. Most often this has placed segmental forms at the center of discussion, with tonal changes of different types advanced to account for surface level prosody: addition of a tone to an existing tone, replacement of a tone by another, deletion of a tone, or insertion of a tone where there was no pre-existing tone. Our presentation centers on the latter strategy, the insertion of tone on a segmental element which in the lexicon lacks tonal expression, although other conditions of tonal change are also included.

Emai is a basic SVO language with grammatical and lexical tone as well as minimal segmental inflection. Like other Edoid varieties (Amayo 1975, 1976), subject pronoun clitics in the Emai lexicon are toneless, as are verbs. Verbs receive an initial layer of tone from a suffix that expresses viewpoint aspect (high tone *-i* for the perfective vs. floating low tone *-^L* for the imperfective). Mood-expressing clitics are not uniformly toneless in the lexicon; non-future tense clitics (past, present) are toneless, remaining mood clitics are not. Regardless of lexical tone, pronominal and mood clitics combine to articulate a surface-level system of mood expression. They do so via a structural element we refer to as a predicative complex.

A predicative complex in Emai consists of tone and segmental forms, some of the latter evincing tone in the lexicon and others not. At its underlying level, a predicative complex has a component that consists of either two tones or a single tone. The two-tone structures are high low {^H ^L} or low high {^L ^H}. The single tone structures are high {^H} or low {^L}. Position of tone in the component determines its direction of association to a segmental morpheme. When the component is exclusively two tone, left tone associates leftward to a subject pronoun (or subject index when the clausal subject is lexical) and right tone associates rightward to a non-subject segmental morpheme. When a single tone defines the component, the tonal element associates leftward to the subject pronoun (or subject index). Accompanying mood clitics retain their lexical tone. Regardless of tonal structural type at the underlying level, tonal polarity governs the predicative complex at the surface level.

3.2 MOOD IN EMBEDDED COMPLEMENTS. Mood in Emai is not limited to main clauses. It is also expressed in clauses that embed as arguments to a main clause verb.

Emai exhibits embedded sentence (S)-complements and verb phrase (VP)-complements. S-complements exhibit three types based on complementizer form: indicative (IND) *khi*, conditional (COND) *si*, and subjunctive (SBJV) *li*. Each indicates a different kind of commitment by the speaker to the veracity of the complement event: fully committed *khi*, conditionally committed *si*, or non-committed *li*. Each is illustrated in (14).

- (14) a. [ó ↓ré é **khi** òjè é ólí émàè]
 / ɔ { 'H 'L } rè ε-í khi òjè { 'L 'H } e-í ólí émàè /
 3SG DST:IND PST:CONC say:PFV IND Oje PRX:IND PST:eat-PFV ART food
 ‘She said that Oje has eaten the food.’
- b. [ó ↓ré é **si** òjè é ólí émàè]
 / ɔ { 'H 'L } rè ε-í si òjè { 'L 'H } e-í ólí émàè /
 3SG DST:IND PST:CONC say:PFV COND Oje PRX:IND PST:eat-PFV ART food
 ‘The woman asked whether Oje has eaten the food.’
- c. [ó ↓ré é **lí** ójé è ólí émàè]
 / ɔ { 'H 'L } rè ε-í lí òjè { 'L } (i) e-í ólí émàè /
 3SG DST:IND PST:CONC say:PFV SBJV Oje SBJV HOR eat-PFV ART food
 ‘The woman said that Oje should eat the food.’

Among complement types, subjunctive *li* manifests a unique relationship with the predicative elements hortative *í* and grammatical subject. With a subject that is pronominal, *li* complement clauses display hortative *í* (15a). With a subject that is lexical, the *li* complement has no hortative mark at surface level, as in (15b). Also to be noted is that the high tone of the *li* complement overrides the otherwise expected low tone of the pronoun *ò* preceding hortative *í*.

- (15) a. [ó ↓ré é **lí** ó í è ólí émàè]
 / ɔ { 'H 'L } rè ε-í lí ɔ { 'L } í e-í ólí émàè /
 3SG DST:IND PST:CONC say:PFV SBJV he SBJV HOR eat:PFV ART food
 ‘She said that he should eat the food.’
- b. [ó ↓ré é **lí** ójé Ø è ólí émàè]
 / ɔ { 'H 'L } rè ε-í lí òjè { 'L } í e-í ólí émàè /
 3SG DST:IND PST:CONC say:PFV SBJV Oje SBJV HOR eat:PFV ART food
 ‘The woman said that Oje should eat the food.’

Emai also shows verb complements that have the form of an information interrogative, i.e. indirect question (IQ) complements. They are framed by information question words such as *é[↓]bé* ‘how’ and *é[↓]mé* ‘what’ in (16). Their predicative complexes follow the basic pattern of main clause interrogatives since they are limited to { 'H 'L }.

- (16) a. [ó ↓ré é **é[↓]bé** ójé ↓í é ólí émàè]
 / ɔ { 'H 'L } rè ε-í é[↓]bé òjè { 'H 'L } ì e-í ólí émàè /
 3SG DST:IND PST:CONC say:PFV how Oje DST:INT PST:MAN eat-PFV ART food
 ‘She asked how did Oje eat the food.’
- b. [ó ↓ré é **é[↓]mé** ójé ↓é-ì]
 / ɔ { 'H 'L } rè ε-í é[↓]mé òjè { 'H 'L } e-í /
 3SG DST:IND PST:CONC say:PFV what Oje DST:INT PST:eat-PFV
 ‘She asked what did Oje eat.’

- c. [ó ↓ré é é↓mé ójé ló è]
 / ɔ { 'H \L } rɛ ɛ-í é↓mé òjè { 'H } ló e-í/
 3SG DST:IND PST:CONC say:PFV what Oje DST:INT FUT eat-PFV
 ‘She asked what will Oje eat.’

A VP-embedded complement exhibits a distinct construction type. Its embedded structure has no subject at surface level; consequently, it engages a switch subject condition whereby the direct object of the matrix verb also serves as logical subject of the complement clause. The tone of this logical subject is incorporated into the imperative mood pattern. It exhibits a surface-level high tone (*ójé*) in contrast to a lexical low tone (*òjè*).

- (17) [ó ↓ré é ójé è ólí é màè]
 / ɔ { 'H \L } rɛ ɛ-í òjè { 'H } e-í ólí é màè /
 3SG DST:IND PST:CONC tell:PFV Oje IMP eat:PFV ART food
 ‘The woman told Oje to eat the food.’

S-complements, IQ-complements and VP-complements vary in their expression of negation. Proximal negation *ì* appears in S-complements headed by *khi* and *si*, 18a and 18b, respectively. Proximal negation is prohibited in *li* complements, IQ-complements, and VP-complements.

- (18) a. [ó ↓ré é khi òjè í ì è ólí é màè]
 / ɔ { 'H \L } rɛ ɛ-í khi òjè í { 'H } ì e-^L ólí é màè /
 3SG DST:IND PST:CONC say:PFV IND Oje SI NEG PRX eat:IPFV ART food
 ‘She said that Oje has not eaten the food.’
 b. [ó ↓ré é sì òjè í ì è ólí é màè]
 / ɔ { 'H \L } rɛ ɛ-í sì òjè í { 'H } ì e-^L ólí é màè /
 3SG DST:IND PST:CONC say:PFV COND Oje SI NEG PRX eat:IPFV ART food
 ‘She asked whether Oje has not eaten the food.’

Relative clauses also reveal limited access to predicative complex tonal values and thus mood expression. Relative clauses in Emai show a head position followed by a clause containing a constituent co-referential with the head. Head position exponents are either lexical nouns or a relative pronoun (singular *óli*, plural *éli*). A lexical noun requires the particle *li*, a linker morpheme found in relative clauses and adjectival phrases. It obligatorily follows the relative clause head, *òkpósó* in (19). Like most postnominal modifiers, relative clauses induce high tone spread on their head noun (e.g. grammatical *òkpósó* rather than lexical *òkpòsò*).

Relative clauses limit predicative complex constituents much as information interrogatives do. Relative clauses permit distal past, distal present, and distal future, each of which shows a subject pronoun with high tone (19a-c). Relative clauses do not allow a low tone subject pronoun, as would be found with proximal past, proximal present, or proximal future.

- (19) a. [ókpósó lí ó ↓záwó ↓fí áwá údò]
 / ókpòsò lí ɔ { 'H \L } Ø zawo-í { 'H \L } Ø fí-í áwá údò /
 woman R 3SG DST:IND PST see-PFV DST:IND PST hit-PFV dog stone
 ‘A woman whom he saw hit a dog with a stone.’
 b. [ókpósó lí ó ò zàwò ↓fí áwá údò]
 / ókpòsò lí ɔ { 'H \L } ɔ zawo-^L { 'H \L } Ø fí-í áwá údò /
 woman R 3SG DST:IND PRS see-IPFV DST:IND PST hit-PFV dog stone
 ‘A woman whom he sees hit a dog with a stone.’

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