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Tense and Aspect in Eight Languages of Cameroon

Stephen C. Anderson and Bernard Comrie

Editors

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Narrow Bantu

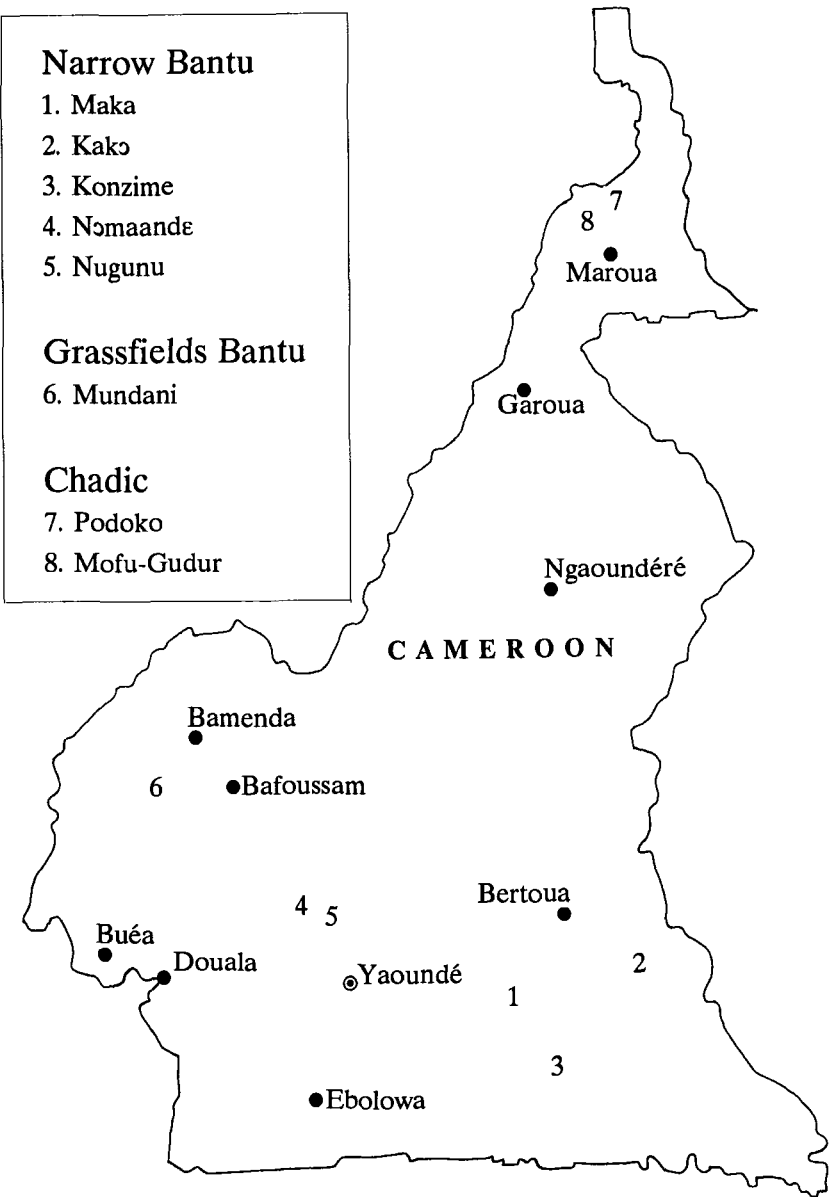
1. Maka
2. Kako
3. Konzime
4. Nomaande
5. Nugunu

Grassfields Bantu

6. Mundani

Chadic

7. Podoko
8. Mofu-Gudur



Koozime Verbal System

Keith H. Beavon

Abstract

This paper describes most of the verbal constructions found in Koozime, a Narrow Bantu language identified by Guthrie as A.84. It employs an autosegmental model for explaining various tone, intonation, and vowel changes present in these verbal constructions. An extensive inventory of tense and aspect markers exists, enabling Koozime speakers to refer contrastively and with precision to events that are distinct with regard to time and internal consistency. There is, alongside the absolute tense-marking system, a parallel system of relative tenses. Finally, the paper examines numerous possibilities for indicating mood, negation, and focus.

The many tonal markers which play an important role in distinguishing the various verbal constructions from each other are also noted. In addition to the many floating tones which are common in autosegmental descriptions of African languages, Koozime has need of a separate convention for indicating replacive tones. The author suggests one means of symbolizing these replacive tones, namely, an arrow on the tonal tier with no change to existing association lines.

Résumé

Le but principal de cet article est de décrire la majorité des constructions verbales en koozime, langue bantou identifiée par Guthrie comme A.84. L'auteur se sert d'une théorie autosegmentale qui lui facilite l'explication des phénomènes de ton, d'intonation, et des changements vocaliques qui sont impliqués dans ses constructions verbales. Le système verbal est basé sur un inventaire extensif des indices temporels et aspectuels, ces derniers permettant aux locuteurs du koozime de différencier avec précision entre des événements distinctifs par raison de leurs temps et leurs complexités internes. Il y a, en dehors de ce système des temps absolus, un système parallèle des temps relatifs. En plus, il existe maintes possibilités pour

préciser des modes, la négation, la focalisation, chaque partie grammaticale étant examinée en détail.

L'auteur examine en détail les indices tonals multiples, ceux jouant un rôle important à la différenciation mutuelle des constructions verbales. Nombreux sont les tons remplaceurs en *kɔɔzime*. Ils se distinguent des tons flottants qu'on connaît déjà bien à travers plusieurs langues analysées selon la théorie autosegmentale. Ce phénomène de tons remplaceurs nécessite la création d'une représentation conventionnelle appropriée. L'auteur en propose une qui répond au besoin de la simplicité: il s'agit d'une flèche sur la rangée des tons entre le ton remplaçant et le ton remplacé. Cette notation conventionnelle exige aucun changement des liens d'association déjà établis entre les tons et les voyelles.

Kɔɔzime is a Bantu language of the northwest zone, identified by Guthrie (1971) as A-84. It is spoken in southeastern Cameroon and represents a cluster of dialects (called *Bajwe'e*, *Nzime*, *Njem*, and *Njeme*) differing from each other with respect to the number of noun classes, the number of phonemes, and the character of certain tonal rules (Beavon 1978). Subdialectal differences also exist. The language variant described in this paper is a subdialect of *Bajwe'e* spoken to the northeast of the *Bajwe'e* region, known by the speakers as *Upriver Bajwe'e*. Any *Bajwe'e* subdialect is more progressive than any variant of the *Nzime*, *Njem*, or *Njeme* dialects. The *Upriver Bajwe'e* subdialect chosen is, however, relatively more conservative than other *Bajwe'e* subdialects.

This paper¹ is a description of the morphology and syntax of *Kɔɔzime* verb phrase constituents, including aspect, tense, mood, and negation markers. It also deals with focus markers—grammatical words usually associated with the noun phrase rather than the verb phrase. This section is included because of the influence of focus markers on the syntax of the verb phrase.

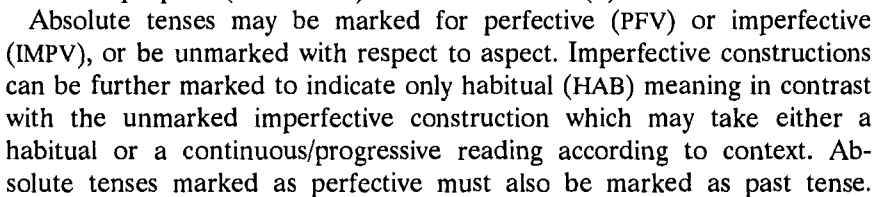
The parts of speech used in this paper have been defined in Barreteau and Beavon (1989). They have also been used in the context of other aspects of the phonology (Beavon 1983a, and Beavon 1984b) and of the grammar (Beavon 1986). The special uses of tense markers to indicate discourse units have been treated elsewhere (Beavon 1984a), as have the peculiar problems posed by the locative verb (Beavon 1990).

Before proceeding with the details of the *Kɔɔzime* verbal systems, a broad overview is here presented.

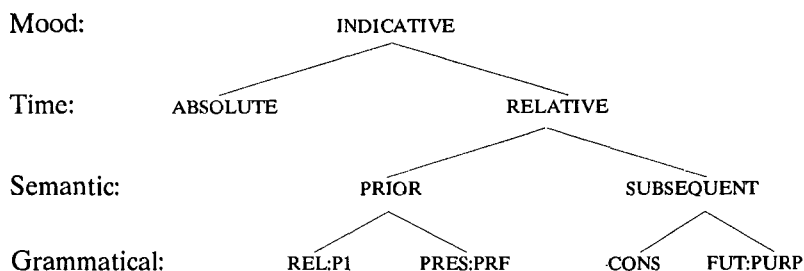
The fundamental distinction in the *Kɔɔzime* verbal system is that between the tense-marking and nontense-marking moods. The marking of

¹This analysis of aspect and tense, as well as the final form of the article, reflects many suggestions and comments from Bernard Comrie and Stephen C. Anderson. Ursula Wiesemann contributed significantly to the analysis of toneless verbs which we follow in this paper.

(1) Mood restrictions

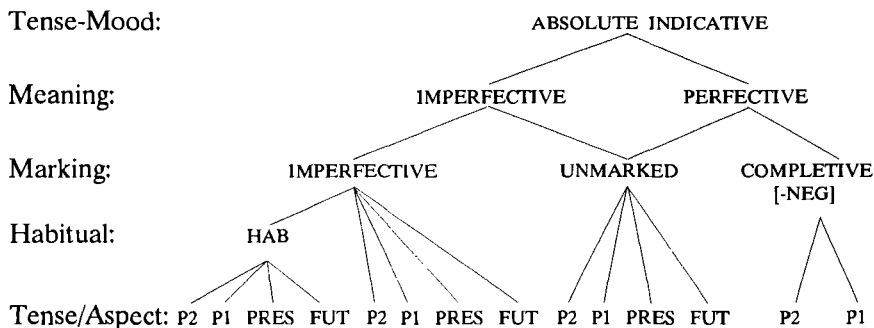


(2) Indicative tenses



Imperfective constructions may be in any of the tenses—past (remote or recent), present, or future. These distinctions are captured in (3).

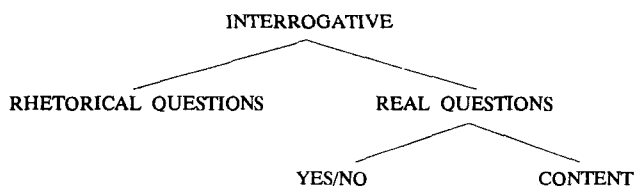
(3) Absolute indicative tense-aspect restrictions



The distinction between indicative and interrogative is based not only on semantic criteria, but also on syntactic evidence. For example, focus marking is excluded in interrogative constructions. Furthermore, in the indicative mood, the negation marker (NEG) and the completive aspect marker may not occur together but both elements may be present in the interrogative and indicate that a question is rhetorical (see §§7, 9.2). Most importantly, a number of morphemes distinguish interrogatives from each other and from indicative sentences.

With this brief overview of the Koozime verbal system, we must now give a brief introduction to tone representation (§1) before proceeding to a detailed discussion of the specifics of the verbal categories of tense, aspect, and mood (§§2–7).

(4) Interrogative mood

**1. Autosegmental representation of tone**

An autosegmental approach is used in this paper, since it is well suited to the data presented.

There is a simple two-tone distinction in Kɔɔzime, and there is also a small set of morphemes with toneless vowels. Toneless vowels are found only in the following: the marker of perfective aspect, six monosyllabic verbs, the serial verb meaning ‘direction away from speaker’, and the second vowel of disyllabic verbs. Surface tones assigned to these toneless syllables vary according to the tonal melody, which may include tonal morphemes (a morpheme with tone but no segments) indicating tense and aspect. The surface tones which result, therefore, always carry grammatical information.

In most verbal constructions, tense is marked discontinuously. For example, recent past tense is marked by three tonal morphemes: a low tone (L) following the subject noun phrase, a high tone (H) following either the verb or the perfective marker, and a high replacive tone (\leftarrow H or $H\rightarrow$) following the verb. This last tone associates with the first word after the verb, replacing an initial L which is thereby deleted. All of these tense markers are glossed P1 for ‘recent past tense’ rather than being distinguished one from the other. Where these tense markers need to be distinguished from each other, however, the first is identified as the ‘main tense marker’, the second, as the ‘stem’ tone, and the third, as the ‘suffixal’ tone, following Goldsmith (1976:71), whose model of autosegmental phonology is followed as closely as possible throughout this paper.

In the case of Kɔɔzime, however, there seems to be no possibility of adopting the first part of Goldsmith’s Well-formedness Condition, which states: “All tones must be associated with some syllable” (1976:155). In Kɔɔzime, floating L noun class prefixes (C#) are left unassociated, but other floating Ls are associated to the left as predicted. For an example of the nonassociation of a floating L noun class prefix, see (5), where the class

seven prefix is not associated with the preceding syllable. (For an explanation of the line markings in the examples, see §1.1 below.)

- (5) *Be* *bee* *o* *Ø-li.*

 3p P1 see P1 P1 FOC C7-tree

It was they who saw a tree (earlier today).

In (5), a floating L prefix marking recent past is associated with the subject pronoun, forming a tonal contour. In (6), it is associated with the H of the focus marker.

- (6) *Be* *o* *bee* *Ø-li.*

 3p FOC P1 see P1 P1 C7-tree

It was they who saw the tree (earlier today).

To recapitulate, the leftward docking of a floating L is observed only if that tone is a tense marker. If it is a noun class prefix, it is left unassociated. On the other hand, floating Hs of all types dock left, as in (6).²

1.1. Association lines. Within the autosegmental model, tones and syllabic segments occur on separate tiers and are associated with each other by rules and conventions. This means that tones are not regarded as elements of a vowel's feature matrix. The association lines are of three kinds: solid lines, representing lexical associations accomplished by a general mapping rule; cross-hatched lines when a given tone is dissociated from a vowel; and dotted lines indicating where tones are associated by rule.

In (7), the two Ls of 'area behind the house' are always associated with the word's two syllables by an early mapping rule. They may stay this way in the final representation of the word if it is spoken in isolation.

In (8), however, the word is preceded by a locative preposition (LOC) manifested by a tonal morpheme meaning 'in, at'. This H replaces the first L of the noun.

²The convention for marking replacive tones followed in this paper is a departure from Goldsmith's model. This convention is described in §1.2.

- (7) *domo*
 | |
 L L
 area^behind^the^house
 an area behind the house

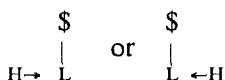
- (8) *Domo.*
 | |
 H→ L L
 loc area^behind^the^house
 It's in the area behind the house.

1.2. Replacive tones. In Kɔɔzime, it appears necessary to posit two types of tonal morphemes—replacive and floating tones. In (8), a replacive H associates with a syllable to the right, causing detachment and deletion of a lexically-assigned L.

All replacive tones in Kɔɔzime are H. A replacive H replaces a L either to its right or to its left, depending upon the morpheme in question. This bidirectional characteristic of replacive tones constitutes a point of difference between them and floating tones in Kɔɔzime, since floating tones may be either H or L and their association lines may be drawn only to the left.

The replacing of one tone by another is described in (9). This shorthand represents the following process: a replacive H replaces an adjacent L, attaching itself to the L's syllable nucleus (\$) by means of an existing association line. This means that no new association lines are added and the L is deleted entirely from the tonal tier.

- (9) Replacive tones



This manner of presentation is seen in (10), where an initial sequence of two Ls on the object pronoun becomes a H-L sequence.

- (10) *Me o bee mur.*
 | | | |
 L H L L H→ L L
 1s FUT see FUT FUT person
 I'm going to see a person.

It might not be clear in example (10) that the first L of 'person' has been deleted rather than being attached to the syllable along with the H and L. Support for the claim that the replaced tone is deleted is found in (11). Phonetic data show that the surface tone pattern following tonal replacement is H-H rather than H-L-H, the latter sequence also existing in the language with single, short vowels. The absence of a H-L-H sequence in (11) is, therefore, clear evidence that the L has been completely deleted.

- (11) *zɪ*
 / \
 H→ L H
 LOC trail
 (It's) on the trail.

If a replacive high tone does not, for some reason, replace the adjacent tone, the arrow accompanying it is 'stopped' by a vertical bar, as in (12), where the replacive H encounters a H. Such tones are never replaced, as seen in the study of sentence-final intonational lowering (§1.4).

- (12) *kwar*
 / \
 H→| H H
 LOC village
 (It's) in the village.

Another context where a replacive H fails to have any effect is before *e* or *le* 'with'. This preposition is unlike any other with respect to its stability in the face of replacive Hs.³ In (13), the tonal stability of 'with' is clearly evident. The replacive suffixal H that follows the verb 'return' cannot replace the L of 'with'.

- (13) *Nye* *si* *bula* *e* *me.*
 / \ / \ / \ / \ / \
 L L H H L H→| L L L
 3s P1 PFV P1 return P1 P1 with 1s S^{FINAL}
 He brought me back (in the recent past).

Other Ls are replaced, however, as in (14), where a tonal noun class prefix becomes H and associates to the left.

³This is the case in Mākaa as well, according to Heath, personal communication.

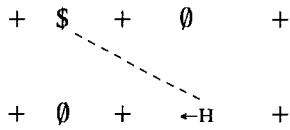
- (14) *Nye si bula Ø-perme.*

 3s P1 PFV P1 return P1 P1 C7-field

He returned from the field (in the recent past).

A replacive H encountering a toneless syllable acts like a floating tone, associating with that syllable, as represented in (15). This process is observed in the case of toneless verbs, as in (16). These replacive tones, which are numerous in Kɔ̀zime, are either not found or not as frequent in other Cameroonian languages.

- (15) Replacive tones adjacent to toneless syllables



- (16) *Nye de-k me-de!*

 3s eat-HORT C6-food

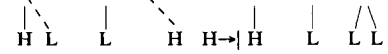
Let him eat some food!

1.3. Floating tones. Not all tonal morphemes cause adjacent tones to be deleted. Some tones are simply added to the underlying tones of a word, coexisting with them. Such tones are more common worldwide than replacive tones and are called FLOATING TONES. In the transcription of Kɔ̀zime, floating tones are shown in the tonal tier as simply H or L with no arrow, and they are glossed like any other morpheme.

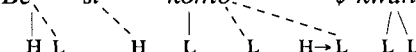
It is unnecessary to specify which direction is taken by a floating tone in Kɔ̀zime because all floating tones associate to their left, attaching themselves to the preceding vowel.

Two examples of floating tones are found in (17). The L following the subject pronoun and the H immediately following the verb are discontinuous parts of the morpheme marking recent past tense (P1). In both cases these tones attach to the left, associating themselves with the other

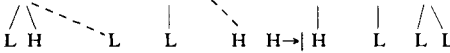
tones of their respective syllables. In the process, a contour tone H-L is produced on the subject pronoun, and a L-H sequence on the verb.⁴

- (17) *Be komo o bi-kwan.*

 3p P1 store P1 P1 FOC c8-plantain
 It was plantains they stored (earlier today).

In (18), the object of the verb (*kwàn* 'plantain') has a floating L prefix.⁵ This tonal prefix is replaced in the construction by the suffixal tone, a replacive H. But since the tonal prefix is floating, the H that replaces it docks left like all Koozime floating tones. In this way, the preceding vowel acquires a L-H contour.

- (18) *Be si komo Ø-kwan.*

 3p P1 PFV P1 store P1 P1 c7-plantain
 They have stored a plantain (earlier today).

Up to three tones have been found sharing a single short vowel in Koozime. Note in the first word of (19) that a floating L is added to a syllable that already has two lexically-assigned tones. After the L marking recent past is associated with it, this one syllable has a L-H-L contour.

- (19) *Bih komo o bi-kwan.*

 1s^EXCL P1 store P1 P1 FOC c8-plantain
 It was plantains we (not you) stored (earlier today).

Additional evidence for three-tone contours is found in (20). The floating tonal prefix of the noun 'plantain' becomes H due to the replacive

⁴The high replacive suffixal tone is shown in (14) by analogy with other constructions like (16). It does not, in Koozime, replace lexical Hs, as seen in §1.4.

⁵For a defense of the claim for two Ls in the stem of this word, see Beavon 1984b.

suffixal H present following infinitives (INF). This H, in turn, associates itself with the tones of the preceding vowel to form the contour H-L-H.⁶

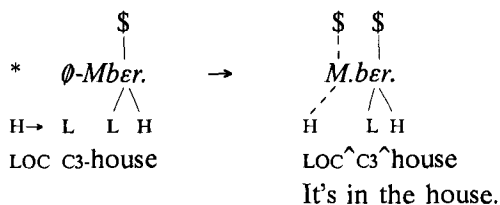
- (20) *Nye k̩ e-jam Ø-kwan.*
- $\begin{array}{ccccccc}
| & | & | & | & & & \\
L & H & L & H & & L & H \rightarrow L & L & L
\end{array}$
- 3s LOC C5-cook INF INF C7-plantain
- He is cooking a plantain.

The rule that floating Hs are associated with a syllabic segment to the left holds without exception. (The nonassociation of floating Ls indicating class membership has been noted above.) When floating Hs are found in utterance-initial position, they are unable to find a syllable to their left, as in (21). Such floating Hs do not have the option of finding a syllable to the right and, rather than associating to the right, they are left floating, without any surface result.

- (21) *Ø-Peme.*
- $\begin{array}{ccc}
H \rightarrow & L & L & H \\
& | & | & \\
& LOC & C7-field
\end{array}$
- It's in the field.

In (22), however, the floating tone takes advantage of a third option—creating a syllable for its own use. This is a possibility only when the word begins with a prenasalized stop. As a previously nonsyllabic nasal is made syllabic, this new syllable (\$) is associated with the nasal consonant and with the floating tone.

- (22) Resyllabification



⁶As is common when complex tone glides occur on short syllables, the L found in a H-L-H contour is phonetically not as low in pitch as lows found elsewhere. If H is level 1 and L is usually level 4, then H-L-H would be realized phonetically as [1-2-1] or [1-3-2], but never as [1-4-1].

1.4. Intonation. Intonation, both rising and falling, plays a role in the differentiation of indicative, interrogative, and imperative moods. There are two sentence-final intonation contours, one rising (R) and the other falling (F). These are shown on a third tier, employed whenever intonation is relevant to a discussion.

Rising intonation. A rising intonation contour (R) is a mark of the interrogative mood. It is limited to those questions that lack an interrogative word, such as 'is-it?', 'what?', 'why?', 'who?', and 'when?', as illustrated in (23).

- (23) [4 1 4 4 1]
Nye a si bee?
 | | | |
 L H L L L
 R
 3s P2 PFV P2 see P2 INT
 Did he see (it)?

Falling intonation. The lowering of tones in ultimate and penultimate positions is dealt with by means of a rule associating the fall (F) with the tone in the penultimate position. The phonetic values reflecting the four tonal sequences (H-H, H-L, L-H, L-L) are shown in the following examples. In this section, we follow the additional convention of marking phonetic pitch with numbers, 1 for the highest pitch and 5 for the lowest.

- (24) [4 1 4 4 2]
Me a si bee son.
 | | | / \
 L H L L L H H
 F
 1s P2 PFV P2 see P2 father IND
 I saw (his) father.

- (25) [4 1 4 4 2-4]
Me a si bee mwan.
 | | | |
 L H L L L H L
 F
 1s P2 PFV P2 see P2 child IND
 I saw (his) child.

If H is found in penultimate position, the fall associates itself with that tone. Examples (24) and (25) show that the penultimate H is lowered to a level of [2].

In (26), the falling intonation contour associates itself with L, and H is found in the ultimate position. The pitch of the latter is lowered to the height of the preceding L, [4]. In (27), L in the ultimate position is lowered to [5].

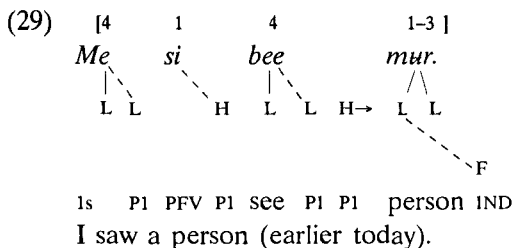
- (26) [4 1 4 4 4]
Me a si bee nyɔŋ.
 | | | | |
 L H L L L H
 F
- 1s P2 PFV P2 see P2 mother IND
 I saw (his) mother.

- (27) [4 1 4 4 4-5]
Me a si bee mur.
 | | | | |
 L H L L L L
 F
- 1s P2 PFV P2 see P2 person IND
 I saw a person.

Observe in (28) how falling intonation and tonal replacement interact. It was seen in §1.2 that a replacive tonal morpheme causes tonal replacement followed by deletion. The falling intonation contour has no effect on replacive Hs. In (28), the final tones are H-H, with the first H representing the result of tonal replacement. The L that had been in penultimate position has been deleted, together with the falling intonational contour which had been associated with it. The phonetic pitch of this final H-H sequence is [1] rather than [2], reflecting the deletion of the falling intonation together with the lexical L.

- (28) [4 1 4 1]
Me si bee nyɔŋ.
 | | | |
 L L H L L H→ L H
 F
- 1s P1 PFV P1 see P1 P1 mother IND
 I saw (his) mother (earlier today).

In (29), the final tones are H-L, with H being a replacive high. Its phonetic value is [1-3] rather than [2-4].



In order to arrive at correct outputs, one must establish ordered rules: The intonational fall must first be associated with the penultimate L, and then replacement and deletion can take place. Reversing this order causes the replacive H in the penultimate position to be associated with the intonational fall which would produce the wrong phonetic output.

Intonational contours are not marked throughout the rest of this paper, since the effect of intonation is highly predictable.

2. Aspect

Four possibilities exist with respect to the formal marking of aspect in Koozime—perfective, imperfective, habitual, or unmarked. A verb unmarked for aspect is interpreted as being perfective, imperfective, or habitual depending upon the context.

Perfective is defined by Comrie (1976:21) as the aspectual form which “involves lack of explicit reference to the internal temporal constituency of a situation.” Even if events are internally complex and last over long periods of time, they may nevertheless be viewed perfectly as constituting a single situation.

Imperfective aspect, on the other hand, draws attention to the fact that the event in question occurred over a period of time and its internal make-up is relevant.

Habitual aspect is a subtype of imperfective, describing “a situation which is characteristic of an extended period of time, so extended in fact that the situation referred to is viewed not as an incidental property of the moment but, precisely, as a characteristic feature of a whole period” (Comrie 1976:27ff). Verbs with imperfective aspectual marking can be given either an imperfective or a habitual reading while verbs with habitual marking have only the habitual reading.

2.1. Perfective. Perfective aspect is marked by the serial verb *si*, which is derived from the verb *síe* 'be done'. Lacking principled criteria for assigning either H or L to the perfective aspect marker, we represent it as inherently toneless, with its surface tone being determined by adjacent tones in a given verbal context.⁷

Perfective aspect occurs only with the past tenses, as in (30) and (31).

- (30) *Be si fumo mi-mber.*
 H L H L L H → L L H
 3p P1 PFV P1 build P1 P1 C4-house
 They built some houses (earlier today).

- (31) *Be a si fumo mi-mber.*
 H H L L L L L H
 3p P2 PFV P2 build P2 C4-house
 They built some houses (yesterday or before).

The perfective marker does not occur with nonpast tenses: **Bé ósí fùmò mímbër*. 'They are going to build (viewed perfectly) some houses'. It

⁷Older speakers of Bajwe'e have a different pronunciation of the perfective marker than that represented here. For these, the underlying form of the perfective marker evidently has a H, *sí*. Depending on the grammatical tone which follows, the surface tones of *sí* are either H-L or H-H, as in (154) and (155).

- (154) *Me a si de.*
 L H H L L
 1s P2 PFV P2 eat P2
 I ate (yesterday or before) (older speakers of Bajwe'e).

- (155) *Me si de.*
 L L H H L
 1s P1 PFV P1 eat P1
 I ate (earlier today) (older speakers of Bajwe'e).

The surface form of (155) does not differ from that of younger speakers of Bajwe'e. This is due to the absence of contrast between one and two Hs on a single syllable. There are two associated with the perfective marker of (155), but only one in (156), which represents the speech of a younger speaker of Bajwe'e.

- (156) *Me si de.*
 L L H L
 1s P1 PFV P1 eat P1
 I ate (earlier today) (younger speakers of Bajwe'e).

occurs rather with the two absolute past tenses (remote past and recent past) and with the relative recent past tense.

Negating a sentence marked for perfective aspect entails the deletion of the perfective marker and the addition of the auxiliary verb, *be*, before the negation marker. A suffixal H must be added where it was lacking in the affirmative construction, as in (32), which is the negation of (31).

- (32) *Be a be a fumo mi-mber.*
 H H L ← H L L L H → L L H
 3p P2 be P2 NEG build NEG NEG C4-house
 They didn't build any houses (yesterday or before).

2.2. Imperfective. Imperfective aspect is marked by a periphrastic locative construction corresponding roughly to the literal gloss, 'was at the ... -ing'. As seen in (33), the construction in the present tense is essentially nonverbal, lacking a finite verb. The verb is grammatically an infinitive, the object of the locative preposition *li* 'in, at'.⁸

⁸A verb in the infinitive is prefixed by *e* (C5) and followed by a floating L. The infinitive is syntactically distinct from nouns and verbs. On the one hand it resembles nouns, sharing with them the syntactic possibility of being the head of a noun phrase. For example, it governs agreement in possessive pronouns, as seen below:

- (157) *e-to lam*
 L H L H L
 C5-go INF INF C5^my
 my departure

The infinitive may also function as the head of an associative construction, being followed by the associative concord marker (AM).

- (158) *e-gwamle e Ø-mber lo e-ni*
 L H L H L L L H L L L L
 C5-sweep INF AM^C5 C3-house C5^your C5-that
 that way you have of sweeping the house

It differs from other nouns, however, in that it is followed by both a stem tone and a replacive H (INF) that is characteristic of most verbal constructions.

- (159) *e-de me-de*
 L L L L
 C5-eat INF INF C6-food
 to eat some food

- (33) *Be lĩ e-fumo mi-mber.*
 H H L L L H→ L L H
 3p LOC C5-build INF INF C4-house
 They are building houses.

If past or future tense markers are present in the construction, these must be followed by the auxiliary verb, *be* 'be (at)', and the locative preposition *lĩ* before the infinitive, as in the following three examples.

- (34) *Be a be o lĩ e-fumo mi-mber.*
 H H L H H L L L H→ L L H
 3p P2 be P2 FOC LOC C5-build INF INF C4-house
 They were building houses (in the remote past).

- (35) *Be be o lĩ e-fumo mi-mber.*
 H L H H H L L L H→ L L H
 3p P1 be P1 FOC LOC C5-build INF INF C4-house
 They were building houses (in the recent past).

- (36) *Be o be o lĩ e-fumo mi-mber.*
 H H L H H L L L H→ L L H
 3p FUT be FUT FOC LOC C5-build INF INF C4-house
 They will be building houses.

The failure to employ the auxiliary or locative verb after a segmental tense marker is ungrammatical: **Bé á lĩ èfùmò mímběr* 'They were building houses.' In the reference dialect, Upriver Bajwe'e, the auxiliary verb must be followed by the focus marker *ó* in affirmative constructions, as seen in the previous three examples. Failure to include the focus marker results in ungrammatical focus, such as: **Bé á bè lĩ èfùmò mímběr* 'They were building some houses.' In the Nzime dialect, however, both of these sentences are grammatical.

Negating an imperfective sentence entails dropping any focus marker in the main clause and introducing a negation marker followed by the auxiliary verb, as in (37).

- (37) *Be a be a be li e-fumo mi-mber.*
 H H L ← H L L H L L L H → L L H
 3p P2 be P2 NEG be NEG LOC C5-build INF INF C4-house
 They were not building houses (in the remote past).

2.3. Habitual. Habitual aspect is formed by reduplicating the auxiliary verb of a sentence marked for imperfective aspect. The habitual form corresponding to (34) is (38).

- (38) *Be a bi-be o li e-fumo mi-mber.*
 H H L H H L L L H → L L H
 3p P2 RED-be P2 FOC LOC C5-build INF INF C4-house
 They used to build houses (in the remote past).

Reduplicating a verb may involve certain morphophonemic changes and apocope. In the case of the auxiliary *be*, its vowel is raised from a mid front tense to high-mid front tense unrounded *i* before its reduplicated counterpart.

The second tonal morpheme of the recent past tense, a floating H following the verb, spreads to both parts of the reduplicated auxiliary, as in (38) and (39).⁹ The association convention for Koozime can be restated in the following way: floating tones associate themselves with one or more toneless vowels to the left.

- (39) *Be bi-be o li e-fumo mi-mber.*
 H L H H H L L L H → L L H
 3p P1 RED-be P1 FOC LOC C5-build INF INF C4-house
 They used to build houses (during the recent past)."

It is shown in (33) that the present imperfective construction is nonverbal, lacking an auxiliary verb. The present habitual construction is fully verbal, however. The verb employed is *sâ* 'make, do'. This is reduplicated (RED) and followed by the focus marker, as in the habitual construction in other tenses. The salient verb of the sentence is no longer the head of a

⁹This sentence presupposes that houses of some kind can be made within the span of one day (as in the case of toy houses) and that the activity became habitual over the course of one day's activity before ceasing to be habitual.

locative prepositional phrase, as is the case in (33–39), but is instead conjugated, as in (40).

- (40) *Nye si-sa o fumo mi-mber.*
 L H H H H L L H → L L H
 3s PRES RED-do PRES FOC build PRES PRES C4-house
 He usually builds houses.

The negation of a present habitual form is dealt with in §3.3, in connection with present tense. There is no distinct way of creating negated habitual constructions in the other tenses. In such cases, the negated imperfective form can be substituted, which acquires a habitual reading.

Future habitual employs an auxiliary verb *di*, ‘remain, stay’, as in (41).

- (41) *Nye o di li e-fumo mi-mber.*
 L H L L H L L L H → L L H
 3s FUT remain FUT LOC C5-build INF INF C4-house
 He will habitually build houses.

3. Absolute tenses

As indicated at the outset of this study, Koozime has both absolute and relative tenses. In the case of absolute tenses, a situation is placed in respect to a fixed reference point, the present moment. Any situation recounted which existed before the present moment is marked by one of the two past tense markers. Present tense is used to refer to situations existing at the present moment and future tense is used for those events which take place after the present moment.

The melodies of the tenses are shown in (42).

As seen in (42), Koozime tenses are marked by a number of elements (usually tonal morphemes) that together constitute the melody (Goldsmith 1976:71) for each tense. These elements are identified by Goldsmith as the tense marker, the stem tone (or stem tones, in the event that a perfective marker, adverbial, or serial verb is present), and the suffixal tone (SFX). The suffixal tone is a suffix to the entire verb phrase, associating with the following word.

The first stem tone of any tense (shown before the three dots) follows any verb that might be present, including *si* (perfective). If more than one auxiliary is present, all receive that tone. The final verb receives the second stem tone (... L for both past tenses.)

(42) Affirmative indicative tone melodies

	TNS	STEM	SFX
P2	<i>á</i>	L...L	Ø
P1 (nonfocus)	L	H...L	H→
Object or subject focus	L	H	H→
PRES			
No copula	H	Ø	Ø
Object focus	H	H	H→
Subject focus or dependent clause (verb medial)	Ø	←H H	H→
(verb final)	Ø	←H L	Ø
FUT (nonfocus)	<i>ó</i>	H...L	H→
Subject focus	<i>ngá</i>	H...L	H→
Dependent clauses	<i>ngá</i>	H...L	H→

3.1. Remote past. Remote past is marked by *á* and by one or more stem Ls. In affirmative constructions, no replacive suffixal H follows the verb. One is present, however, in the corresponding negative construction. These melodies are shown in (43).

(43) Remote past tense melodies

P2	TNS	NEG	STEM	SFX
AFF	<i>á</i>		L...L	Ø
NEG	<i>á</i>	←H <i>à</i>	L...L	H→

Examples (44) and (45) give evidence of remote past forms unmarked for aspect. Such forms must be negated, have a focus-marked verb complement as in (44), or be grammatically dependent as in (45).

- (44) *Nye o a be bi-kwan.*
 | | | | | | |
 L H H L L L L L
 3s FOC P2 plant P2 C4-plantain
 It's he who planted some plantains.

When there are three adjacent vowels, as in (44), an epenthetical consonant appears between the second and third vowels. In the Nzime dialect the consonant is *b*, as in *nye ó b'á* . . . In the Bajwe'e dialect, it is *w*, as in *nye ó w'á* . . .

As mentioned above, the remote past tense marker may occur without any aspect marker in dependent constructions such as the relative clause in (45). At the beginning of the relative clause there is a replacive H morpheme which marks the beginning of the relative clause (Beavon 1985), though its presence is not obvious when it is followed by a morpheme which lexically has a H. It is ungrammatical to employ the perfective marker in relative clauses (**mùr á sì bè bikwàn nywá*). (In (45), note the abbreviations SUB for subordinator, and DEF for definite article.)

- (45) *m-ur* [*a be* *bi-kwan*] *nywa*
 L L H→| H L L L L L H
 C1-person SUB P2 plant P2 C8-plantains DEF C1
 the person who planted some plantains (yesterday or before)

In independent affirmative past constructions, however, an aspect marker is required. In (46) both *sì* (perfective) and the verb are followed by a stem tone. This supports our claim that *sì* is a verb, albeit an auxiliary verb.

- (46) *Be a sì fumo mi-mber.*
 H H L L L L H
 3p P2 PFV P2 build P2 C4-house
 They built some houses (yesterday or before).

A stem tone indicating tense also follows a serial verb occurring in a past tense form.

- (47) *Be a sì ze fumo mi-mber.*
 H H L L L L L L H
 3p P2 PFV P2 come P2 build P2 C4-house
 It was they who then built some houses.

At least four stem tones may be found in a single construction, since the perfective marker, an adverbial, and a serial verb may all exist together with the main verb and each receives a stem tone. This is L in the case of the remote past tense, as in (48).

- (48) *Be a si ka ze fumo mi-mber.*
 H H L L L L L L L L H
 3p P2 PFV P2 finally P2 come P2 build P2 C4-house
 It was they who then finally built some houses.

Independent remote past tense sentences lacking a perfective marker must either have a focus-marked complement, as in (44), or be negated, as in (49).

- (49) *Be a be a fumo mi-mber.*
 H H L ←H L L L H→ L L H
 3p P2 be P2 NEG build NEG NEG C4-house
 They did not build any houses (yesterday or before).

A past-tense independent sentence, therefore, must have an aspect marker, have a focus marker, or be negated. The following sentence is ungrammatical due to the absence of any of these markers: **Bé á fūmo mīmber* 'They built some houses.'

3.2. Recent past. Recent past tense is marked by a floating L, which occurs after the subject noun phrase, a stem H, and a suffixal H (see (42)). If a form includes one or more auxiliary verbs (such as perfective aspect), the stem H follows all of these. A stem L occurs only on the final verb.

(50) Recent past tense melodies

P1	TNS	NEG	STEM	SFX
AFF	L		H...L	H→
NEG	L	←H à	H...L	H→

The L tense marker follows the subject noun phrase, the last constituent of which may be *ó* (focus). The L of recent past associates with the preceding word, as in (51).

- (51) *Be o fumo mi-mber.*
 H H L L H H→ L L H
 3p FOC P1 build P1 P1 C4-house
 It's they who built some houses (earlier today).

In (52) and (53), the tense marker associates with a subject pronoun and a noun, respectively.

- (52) *Be fumo o mi-mber.*
 H L L H H→| H L L H
 3p P1 build P1 P1 FOC C4-house
 It's houses that they built (earlier today).

- (53) *Fwun lɛɛ o Ø-no.*
 H H L H H H→| H L H H
 your^father P1 say P1 P1 FOC C7-thus
 It's that that your father said (earlier today).

The stem tone of recent past tense is H. Any subsequent stem tones associated with verbal auxiliaries are also H, but the stem tone associated with the final verb is L.

- (54) *Be si ka ze fumo mi-mber.*
 H L H L H L H L L H→ L L H
 3p P1 PFV P1 finally P1 come P1 build P1 P1 C4-house
 It was they who then finally built some houses (earlier today).

In (52) and (53), the stem H combines with a L and a H verb, respectively. In (55) it associates with a verb which lacks lexical tone.

- (55) *Be be o Ø-mber.*
 H L H H→| H L L H
 3p P1 be P1 P1 FOC C3-house
 They were at the house (earlier today).

As shown in Beavon 1990, the locative verb is atypical with respect to phonology. There are five other verbs which, like the locative verb shown above, are inherently toneless.¹⁰ They are listed in (56), including the

¹⁰The citation form of a verb is the infinitive, which includes (1) a class 5 prefix *è-* and (2) a low stem tone following the verb. For this reason, toneless verbs spoken in citation receive a stem L.

homophonous forms of *jwe*, which means either 'die' or 'give' according to the number of arguments in the clause.

- (56) *ze* 'come'
jwe 'die'
de 'eat'
cwe 'stumble'
jwe 'give'

By positing a toneless lexical form for these verbs, it is possible to account for a L in remote past forms but H in recent past forms, by attributing these changes to the grammatical tones of the respective tense melodies.

The corresponding negated form of the recent past in (55) is presented in (57). Note that the first occurrence of the locative verb represents its use as an auxiliary, while the second manifests its role as main verb.

- (57) *Be* *be* *a* *be* *Ø-mber.*

 3p P1 be P1 NEG be NEG NEG C3-house
 They were not at the house (earlier today).

Examples (58) and (59) illustrate affirmative and negative recent past when the verb is in sentence-final position.

- (58) *Be* *o* *fumo.*

 3p FOC P1 build P1
 It's they who built (something earlier today).

- (59) *Be* *be* *a* *fumo.*

 3p P1 be P1 NEG build NEG
 They did not build (anything earlier today).

3.3. Present. There are six contrastive tone melodies for present tense. Some include a floating H tense marker which contributes to the distinction between present and recent past. Some present-tense forms are marked by means of one or two stem Hs, although others employ stem Ls. A summary of the present-tense melodies posited is presented in (60).

(60) Present tense melodies

PRES	TNS	NEG	STEM	SFX
No copula	H		∅	∅
Object focus AFF	H		H	H→
Subject focus or dependent clause				
AFF (verb medial)	∅		←H H	H→
AFF (verb final)	∅		←H L	∅
NEG-neutral	∅	←H á	L	H→
NEG IMPF	∅	←H á	L	H→
NEG HAB (verb medial)	∅	á	←H H	H→
NEG HAB (verb final)	∅	á	←H L	∅

Two syntactic restrictions need to be mentioned. (1) Independent, present-tense forms have either a focus-marked verb complement or a negated verb. (Dependent clauses, on the other hand, can be affirmative (AFF) and yet be unaccompanied by a focus-marked complement.) (2) There is a syntactic incompatibility between the perfective aspect marker and either of the nonpast tenses.

The mark of present tense in nonverbal constructions is a floating H after the subject pronoun, as in (61).

- (61) *Nye e mi-mber*
 L H L L H
 3s PRES with C4-house
 He has/owns some houses.

This same H present-tense marker is found in the affirmative construction with an object in focus, as in (62). The high tense marker posited for affirmative present constructions has not, in preceding examples, been in an environment where its presence can be seen. It is in present-tense forms with a postverbal complement in focus that the floating H marking present time is observed. This floating tone attaches itself to the L subject pronoun as in (62). (The suffixal tone is posited in this construction by analogy, even though there is no way to confirm its presence.)

Present tense can also be indicated by one or two stem Hs appearing on the verb. These can be seen in affirmative, dependent constructions, as in (63).

- (62) *Nye fumo o Ø-mber.*
 L H L H H→ H L L H
 3s PRES build PRES^HAB PRES^HAB FOC C3-house
 It's a house he builds.

- (63) *mi-mber [nye fumo b-ur] mi*
 L L H H→ L L ←H H H→ L L H
 C4-house SUB 3s build PRES^HAB PRES^HAB C2-people DEF^C4
 the houses he builds for people

This tone pattern on the verb is also found in affirmative independent sentences with a subject in focus, as in (64) and (65). In (64), the tone pattern on the verb is ←H...H, because the verb is not sentence final. In sentence-final position, the stem tone pattern for subject-focus present tense sentences becomes ←H...L, as in (65).

- (64) *Nye o fumo mi-mber.*
 L H L ←H H H→ L L H
 3s FOC build PRES^HAB PRES^HAB C4-house
 It's he who builds houses. *or* It's he who should build houses.

- (65) *Nye o fumo.*
 L H L ←H L
 3s FOC build PRES^HAB
 It's he who builds. *or* It's he who should build (them).

Four negative constructions are possible in present tense, one being unmarked (neutral) in aspect, one being imperfective (progressive or habitual), and the other two indicating only habitual aspect with either a medial or a final verb.

The negated present-tense construction that lacks aspectual specification has a stem L and a suffixal H. Negation in present tense consists of a replative H followed by the prefix *à-*. This same negation marker has already been seen in negated past tense forms (§§3.1–2).

Example (67) shows a present tense form that permits either a progressive or a habitual reading. It is more complex than (66), employing the locative verb as auxiliary and a locative prepositional phrase containing the salient verb, as seen in (33) to (36).

- (66) Nye a fumo mi-mber.
 L ← H L L L H → L L H
 3s NEG build NEG NEG C4-house
 He isn't building houses. *or* He doesn't build houses.

- (67) Nye a be li e-fumo mi-mber.
 L ← H L L H L L L H → L L H
 3s NEG be NEG LOC C5-build INF INF C4-house
 He isn't building houses.

Negated present habitual forms are presented in (68) and (69). Note the presence of a replacive H in the verb, followed by either a floating H or L, depending on the verb's position in the utterance. In (68), the tones are ←H...H because the verb is in utterance-medial position. In (69), on the other hand, the stem tones are ←H...L, since the verb is utterance final.

- (68) Nye a fumo mi-mber.
 L H L ← H H H → L L H
 3s PRES^NEG^HAB build PRES^NEG^HAB PRES^NEG^HAB C4-house
 He doesn't ever build any houses.

- (69) Nye a fumo.
 L H L ← H L
 3s PRES^NEG^HAB build PRES^NEG^HAB
 He doesn't ever build (anything).

As seen in both of these cases, negation is expressed by *á*, together with accompanying tonal morphemes. This marker is homophonous with remote past. Negated present habitual therefore differs from affirmative remote past perfective only by the tones found on the verb and not by any difference in preverbal markers.

3.4. Future. Regular future tense refers to any event conceived of as occurring after the present moment. The affirmative future tense marker is *ó*. In negated future forms, the future marker is *ńá* (*ngá* in the Nzime dialect), with the negation marker preceding it. The future marker *ńgó* is found in future forms with a subject in focus, while the marker *ngá* is found in dependent future forms. For all these tonal melodies there is a stem L and a suffixal H. These facts are summarized in (70).

(70) Future tense melodies

FUT	NEG	TNS	NEG	STEM	SFX
Nonfocus					
AFF		ó		L	H→
NEG	a	ŋá		L	H→
Subject focus		ngó		L	H→
Dependent clauses		ngá		L	H→

Affirmative future tense is illustrated in (71).

- (71) *Nye o fumo mi-mber.*
 L H L L H→ L L H
 3s FUT build FUT FUT C4-house
 He's going to build some houses.

The marker *ŋá* (future), used in negative constructions, is seen in (72), together with the negative marker appropriate to the tense.¹¹

- (72) *Nye a ŋa fumo mi-mber.*
 L L H L L H→ L L H
 3s NEG FUT build NEG^FUT NEG^FUT C4-house
 He's not going to build (any) houses.

The future marker *ngá* is presented in (73) with subject in focus.

- (73) *Nye o nga fumo mi-mber.*
 L H H L L H→ L L H
 3s FOC FUT build FUT FUT C4-house
 It's he who is going to build houses.

¹¹In the Nzime dialect, the negation marker and the future tense marker form a portmanteau, *á*, as seen in (160).

- (160) *Nye a fumo mi-mber.*
 L H L L H→ L L H
 3s NEG^FUT build NEG^FUT NEG^FUT C4-house
 He's not going to build (any) houses. (Nzime dialect)

The same marker is found in dependent constructions for many speakers of Koozime. Others, primarily speakers of Bǎjwe'e, use *ó*, however, as in (74) and (75).

- (74) *mur* [*nga fumo* *mi-mber*] *nywa*
 L L H→| H L L H→ L L H H
 person SUB FUT build FUT FUT C4-house DEF^C1
 the one who is going to build houses

- (75) *mur* [*o fumo* *mi-mber*] *nywa*
 L L H→| H L L H→ L L H H
 person SUB FUT build FUT FUT C4-house DEF^C1
 the one who is going to build houses

4. Relative tenses

All the verbal constructions considered thus far have been in some direct relation to the fixed point of temporal reference represented by the present moment. In this section, attention is given to relative tenses, which have no inherent relation to this reference point. Relative tenses acquire their specific temporal meaning only in relation to a preceding clause. For this reason, relative tenses are restricted to occurrence in a discourse-medial position.

4.1. Relative recent past. Relative recent past tense indicates that an event occurs prior to some other event, which may be past, present habitual, or future. Past perfect and future perfect constructions are possible by means of this relative recent past tense. In the independent clause, a time frame is established, making use of an absolute tense. Then the clause containing relative recent past tense is introduced. This establishes what events preceded the event of the main clause. These events are presented as having occurred in the recent past with respect to the event of the main clause.

It is necessary for syntactic and phonological reasons to deal separately with two types of absolute relative constructions—those in which the verb of the independent clause is *-be* 'be (at)' and those in which the main clause contains some other verb. As is seen below, a locative verb in the main clause creates certain special syntactic possibilities for the clause containing the relative tense. For this reason, the presentation of the

absolute relative construction begins with the normal one, that is, where the verb in the main clause is other than the locative verb.

Normal construction. In relative recent past constructions which do not contain the locative verb, the relative tense marker is $\leftarrow H\ o$, where *o* is toneless but takes the floating L of the normal P1 melody. The first stem tone of the P1 melody, a H, follows the PFV marker and the second stem tone, a L, follows the main verb. The tonal and segmental marks of the relative recent past tenses are summarized in (76).

(76) Relative recent past tense melodies

REL^P1	REL	TNS	NEG	STEM	SFX
AFF	$\leftarrow H\ o$	L		H...L	H→
NEG	<i>le</i>		$\leftarrow H\ à\ p\grave{a}$	H...L	H→

The relative recent past tense in (77) is shown apart from any independent clause and is, therefore, grammatically incomplete. The tense-aspect marking indicates that the event in question took place in the recent past relative to some unstated reference point, and that it is viewed as a whole.

- (77) *nye o si ba nkũ*
 $\begin{array}{ccccccc} | & & \diagdown & & | & & \diagdown \\ L & \leftarrow H & L & & H & L & H \rightarrow L & H \end{array}$
 3s REL P1 PFV P1 cut^up P1 P1 pig
 ...he having just cut up the pig

The negative construction corresponding to (77) is (78). The relative past tense marker is not present in the negative construction. Note that the negation marker follows *e* (*le* before vowels) 'with', which here seems to function as a marker of the negative relative past construction.

- (78) *nye le a pa ba nkũ*
 $\begin{array}{ccccccc} | & | & & | & \diagdown & & | & & \diagdown \\ L & L & & \leftarrow H & L & L & H & L & H \rightarrow L & H \end{array}$
 3s REL^NEG NEG yet P1 cut^up NEG NEG pig
 ...he not yet having cut up the pig/... prior to his having cut up the pig

The event referred to in a relative recent past clause, such as the cutting up of the pig in (78), is relegated to past, present, or future time by the tense of the independent clause. In (79), the relative tense acquires a

remote past orientation from its context. This means that the pig butchering occurred in the remote past (yesterday or before), just prior to the event (also in the remote past) of the main clause. A pause is present between the two clauses, which is indicated by a comma.

- (79) *Nye a jebe bur o, nye o si ba nku.*
 L H H L L L H L H L L H → L H
 3s P2 call P2 people FOC 3s REL P1 PFV P1 cut^up P1 P1 pig
 He called the people (in the remote past) after having just cut up the pig.

In (80), the first verb is in the recent past. This influences the possible readings of the second clause. Both the action of cutting up the pig and the action of calling the people occurred earlier today.

- (80) *Nye jebe bur o,*
 L L H H H → L L H
 3s P1 call P1 P1 people FOC
- nye o si ba nku.*
 L ← H L H L L H → L H
 3s REL P1 PFV P1 cut^up P1 P1 pig
 He called the people (earlier today) having just cut up the pig.

In (81), the first clause is marked for future tense. This gives a future reading to the relative recent past tense of the second clause. The cutting up will occur in the future, but just prior to the calling of the people.

- (81) *Nye o jebe bur o,*
 L H H L H → L L H
 3s FUT call FUT FUT people FOC
- nye o si ba nku.*
 L ← H L H L L H → L H
 3s REL P1 PFV P1 cut^up P1 P1 pig
 He is going to call the people just after cutting up the pig.

In (82), the main clause is marked as present imperfective. Depending upon the context, the reading of this verb may be either progressive or habitual. In the event that the former is chosen, the relative tense refers to a single action in the recent past. If the main verb is interpreted as indicating habitual aspect, then the action in the second clause is repeated. Both of these readings are appropriate to (82).

- (82) *Nye li e-jebe bur o,*
 L H L H L H → L L H
 3s LOC C5-call PRES PRES people FOC

nye o si ba nkũ.
 L ← H L H L L H → L H
 3s REL P1 PFV P1 cut^up P1 P1 pig

He is calling the people having just cut up a pig. *or* He calls the people just after cutting up pigs.

The choice of subjects in the two clauses is not restricted. As seen in (83), different subjects can appear in the two clauses.

- (83) *Nye a jebe bur o, me o si mekle.*
 L H H L L L H L ← H L H L L
 3s P2 call P2 people FOC 1s REL P1 PFV P1 consent P1
 He called the people just after I consented.

Either or both of the clauses in an absolute relative construction can be negated, as in (84)–(86). Note in (85) and (86) that when the main clause is negated, the focus marker no longer occurs at the end of the main clause. This is because the *ó* (focus) and negation are mutually exclusive within a clause.

- (84) *Nye a jebe bur o, me le a pa mekle.*
 L H H L L L H L L ← H L L H L L
 3s P2 call P2 people FOC 1s REL^NEG NEG yet NEG consent NEG
 He called the people without my consent.

- (85) *Nye a be a jebe bur,*
 L H L ←H L H L H→ L L
 3s P2 be P2 NEG call NEG NEG people

me o si kamle.
 L ←H L H L L
 1s REL P1 PFV P1 forbid P1
 He didn't call the people after I had forbidden it.

- (86) *Nye a be a jebe bur,*
 L H L ←H L H L H→ L L
 3s P2 be P2 NEG call NEG NEG people

me le a pa kamle.
 L L |←H L L H L L
 1s REL^NEG NEG yet NEG forbid P1
 He called the people in spite of my just having forbidden it.

Locative construction. This section considers a special case in which the verb of the main clause is the locative verb *be*. Although these constructions conform in general with what has been seen above, they are distinct from a syntactic and phonological point of view. When the first verb in an absolute relative construction is the locative verb, deletion of the subject and the relative marker ←H *o* of the second clause is allowed. It is also necessary in this case to delete the floating L recent past tense marker. These constructions constitute the past and future perfect constructions in Koozime.

In (87) and (88), absolute relative constructions have the same subjects throughout, and the first clause contains the locative verb. In (88), the subject of the relative clause is deleted along with the markers of recent past and relative tense. The pause between the two clauses in (88) is so minimal that it has been left unmarked.

- (87) *Nye a be o, nye o si kamle.*
 L H L H L |←H L H L L
 3s P2 be P2 FOC 3s REL P1 PFV P1 forbid P1
 He had just finished forbidding it.

- (88) *Nye a be o si kamle.*
 L H L H H L L
 3s P2 be P2 FOC PFV P1 forbid P1
 He had just forbidden (it).

Negating these perfect constructions is possible only in the second clause, as in (89). It is ungrammatical to attempt to negate the main clause: **Nye á bé abe sí kamle* 'He had not forbidden (it).'

- (89) *Nye a be o, le a pa kamle.*
 L H L H L |←H L L H L L
 3s P2 be P2 FOC REL^NEG NEG yet NEG forbid NEG
 He had not yet forbidden (it).

The locative verb in the independent clause may be given any absolute time reference. In (90) and (91), the main verb is in the present tense. Note that the present tense form of the locative verb is suppletive: *mú* 'be (PRES)'. Example (91) is a transformation of (90), illustrating deletion of the subject, the recent past tense marker, and the relative tense marker.

- (90) *Nye mú o, nye o si kamle.*
 L H L H L |←H L H L L
 3s be^PRES FOC 3s REL P1 PFV P1 forbid P1
 He has just forbidden (it).

- (91) *Nye mú o si kamle.*
 L H L H L L
 3s be^PRES FOC PFV P1 forbid P1
 He has just forbidden (it).

A future perfect construction, making use of the relative recent past tense, is seen in the next two examples. The second shows the result of subject and tense deletion in the second clause.

- (92) *Be o be o, be o si kamle.*
 H H L H H←H L H L L
 3p FUT be FUT FOC 3p REL P1 PFV P1 forbid P1
 They will have just forbidden (it).

- (93) *Be o be o si kamle.*
 H H L H H L L
 3p FUT be FUT FOC PFV P1 forbid P1
 They will have just forbidden (it).

When an absolute relative construction is transformed into a dependent clause, the focalizer in the first part of the construction must be deleted. The verb 'be' may also be deleted. Both of these changes are seen in (94). The optionality of the locative verb is shown by means of parentheses. The subjects of the two clauses can differ, as seen in (95). It is not possible to delete the second subject in this case, however. (The final L indicates sentence final (S^{FINAL}).)

- (94) *Be o (be) si kamle wa, ...*
 H H L H L L H
 3p FUT (be FUT) PFV P1 forbid P1 if/when
 If/when they will have just forbidden (it) ...

- (95) *Me a be o, nye o si bene me.*
 L H L H L←H L H L L H→ L L
 1s P2 be P2 FOC 3s REL P1 PFV P1 reject P1 P1 1s S^{FINAL}
 I had just been rejected by him.

4.2. Consecutive relative. In the preceding section, relative tenses all relate to events or situations existing prior to the action of main verbs. In this section, relative tense refers to a subsequent action.

When a sequence of activities is in view, the preferred way of referring to them is by use of the consecutive relative tense. Verbs in this tense acquire a past, present, or future reference depending on the tense of the verb that initiates the sequence of verbs. The essential meaning of the consecutive relative tense is 'next' or 'then'. There is no negated form of this tense. The structure of the consecutive relative tense is simple, as indicated in (96).

(96) Consecutive relative tense melodies

CONS^REL	TNS	STEM	SFX
Third person plural subjects			
Following P2	∅	H... -ǝǝ	H→
Elsewhere	∅	H... L	H→
Other person and number subjects	∅	H... L	H→

The second clause in (97) contains an example of the consecutive relative tense. It has a remote past orientation due to the tense of the preceding verb.

- (97) *Nye a si lolo me-jwii me,*
 L H L H L L L L H
 3s P2 PFV P2 transport P2 C6-pole C6^3s

ntɔk fumo ∅-mber.
 H L L L H→ L L H
 then build CONS^REL CONS^REL C3-house

He carried his poles in and then built his house.

In (97), it is evident that the verb in the consecutive relative tense is unmarked with respect to person and number of subject. In the case of the remote past consecutive relative tense, however, a suffix exists to indicate that the subject is third person, plural, and human. The suffix is -ǝǝ after disyllabic stems and monosyllabic CVC stems; it is -ɛǝ after CV stems.¹² This plural suffix is illustrated in (98).

¹²This suffix is formally identical to the passive suffix. There is no confusion between the two, however, due to other aspects of passive voice marking, such as fronting of the promoted object.

- (98) *Be a si lolo me-jwii mɔɔ,*
 H H L H L L LL H
 3p P2 PFV P2 transport P2 C6-pole C6^3p

fum-ɔɔ *Ø-mber.*
 L L H→ L L H

build-CONS^REL^3p CONS^REL C3-house

They carried their poles in and then built a house.

The consecutive relative tense acquires a future reading when it follows a future-tense main verb.

- (99) *Be o lolo me-jwii mɔɔ,*
 H H H L H→ L LL H
 3p FUT transport FUT FUT C6-pole C6^3p

fumo *Ø-mber.*
 L L H→ L L H

build CONS^REL CONS^REL C3-house

They will carry their poles in and then build a house.

The tense melodies in (96) state that, if there are serial verbs preceding the main verb, they are accompanied by high stem tones. This is illustrated in (100) on the serial verb *ze* 'then', derived from *ze* 'come'.

- (100) *Be li e-ze wa,*
 H H L L H→ H L
 3p LOC C5-come INF INF here

ze *fumo* *mi-mber.*
 L H L L H→ L L H

then CONS^REL build CONS^REL CONS^REL C4-house

They come here and then build houses.

4.3. Consecutive future purpose. Consecutive future purpose differentiates between two future events that are logically linked such that the first

event is done in order that the second might take place. There is no negative counterpart to the affirmative form. This construction exists only following a future-tense clause. Its form is presented in (101).

(101) Consecutive future purpose melody

	TNS	STEM	SFX
CONS [^] FUT [^] PURP	←H \dot{o}	L	H→

This construction is similar to that of future, except that the tone of consecutive future purpose is L rather than H. In addition, there is a replacive H in the consecutive future that brings about tonal change in L subject pronouns, as seen in (102).

(102)

<i>Nye</i>	<i>o</i>	<i>fumo</i>		<i>Ø-mber</i>
L	H	L	L	L
			H→	L
3s	FUT	build	FUT	FUT C3-house

<i>nye</i>	<i>o</i>	<i>di</i>		<i>t̩</i>
L	←H L	L	L	H→
				H L
3s	CONS [^] FUT [^] PURP	stay	FUT	FUT there

He's going to build a house in order to live in it.

4.4. Present perfect. Present perfect is the only absolute relative tense. It relates a present situation to a past event. This means that it has an absolute time orientation, since the situation exists at the present moment. It also has a relative time orientation, since the past event in question may be either remote or recent past, depending on the larger context. There is no negated counterpart to present perfect. Its tone melody is presented in (103).

(103) Present perfect tense melody

	TNS	STEM	SFX
PRES [^] PRF	←H [+1H]	L	H→

This tense is also unique with respect to vowel-raising, which occurs on the subject pronoun. The vowel of the subject pronoun is raised one level. Given the vowels of Koozime pronouns, examples are limited to *e* and *o*. These become *i* and *u*, respectively. These changes are illustrated in (104)

and (105). The feature [+1 Height] (abbreviated [+1Ht]) is used to represent the closure of the oral cavity. This is employed in the examples on a separate tier. (Note: *i* refers to a mid high front unrounded tense vowel, and *u*, to a mid high back rounded tense vowel.)

- (104) [+1Ht]
- Nye fumo mi-mber.* (/nyè/→/nyí/)
- L ← H L L H → L L H
- 3s PRF build PRF PRF C4-house
- He has built some houses.

- (105) [+1Ht]
- Go fumo mi-mber.* (/gò/→/gú/)
- L ← H L L H → L L H
- 2s PRF build PRF PRF C4-house
- You have built some houses.

Present perfect tense is semantically distinct from the relative recent past constructions discussed in §4.1. In the latter case, it is possible to cancel the implicature created by the tense. With the present perfect tense, however, this is not possible. For example, it must be true, in the case of the present perfect construction in (105), that houses exist. This is not necessarily the case with the relative recent past construction in (106). One can go on to say after (106) “but they have all been destroyed.”

- (106) *Go mu o si fumo mi-mber.*
- L H L H H L L H → L L H
- 2s be[^]PRES FOC PFV P1 build P1 P1 C4-house
- You have just built some houses.

This concludes the proposed analysis of tense in Konzime. An overview of negation is presented in the following section, drawing together elements included in the preceding description and adding details which were not in focus there.

5. Negation

The principal negation markers are shown in (107), which incorporates information given throughout the paper with reference to negation. In certain cases, therefore, it is helpful to refer to the relevant section for more detail and examples.

(107) Negation markers

	NEG	TNS	NEG	STEM	SFX
P2		á	←H à	L...L	H→
P1					
(verb medial)		L	←H à	H...L	H→
(verb final)		L	←H à	H...L	∅
PRES					
Neutral		∅	←H à	L	H→
IMPF		∅	←H à	L	H→
HAB (verb medial)		∅	á	←H H	H→
(verb final)		∅	á	←H L	∅
FUT	a	ɲá		L	H→
REL ('with ... yet')		le	←H à pà	H...L	H→
HORT		∅	àyí	L	H→
IMP		∅	à	L	H→
INF		∅	à	L	H→

One common mark of negation is *a*. Other additional marks of negation vary according to the tense and aspect of the construction. These additional markers are tonal morphemes, many of them being replacive. These tones have the effect of encoding tense and aspect information on the negation marker.

The negation marker has a dual function as a class 1a noun prefix. When it is present on a verb, the result can be interpreted as a verbal noun capable of governing the agreement of modifiers. In (108), the negated verb *atô* 'not going' is the head noun of a noun phrase. The possessive pronoun and the subject pronoun are in class agreement with *atô*.

- (108) A- to ï 0-peme we, nye ï bebe.
 | | | | | | | |
 L H L H L L H H L H H H L
 C1a^NEG^INF go NEG LOC C7-field C1^his C1^3s PRES LOC bad
 His (habit of) not going to the field is bad.

Several of the negative morphemes in (107) merit special attention. Present habitual employs a H negation marker *á* as discussed in §3.3. This is homophonous with the remote past marker discussed in §3.1. The two are distinct, however, since their tonal melodies differ in other respects. The melody for negated habitual is |←H H or |←H L, while it is L for affirmative remote past.

A frequent variant of the negation marker is |←H à-, which is used in past and present (nonhabitual) tenses, among others. In (109), it can be seen in recent past, and a comparable example in remote past is seen in (110).

- (109) *Nye be a be bi-kwan.*
 L L H |←H L L L H→ L L L
 3s P1 be P1 NEG plant NEG NEG C8-plantain
 He did not plant (any) plantains (in the recent past).

- (110) *Nye a be a be bi-kwan.*
 L H L ←H L L L H→ L L L
 3s P2 be P2 NEG plant NEG NEG C8-plantain
 He did not plant (any) plantains (in the remote past).

Negating nonverbal constructions such as the present imperfective is done by introducing the locative verb *be* 'be (at)' in its role as auxiliary verb, followed by the primary stem tone, as in (111).

- (111) *Nye a be li e-fumo mi-mber.*
 L |←H L L H L L L H→ L L H
 3s PRES*NEG be NEG LOC C5-build INF INF C4-house
 He is not building houses.

Another nonverbal construction is given in (112). This lacks a verb in the surface structure due to the mandatory deletion of the locative verb in independent, affirmative, present-tense constructions (see Beavon 1990). This is negated in example (113), in which the locative verb resurfaces.

- (112) *Nye o ngbel.*
 L H L L
 3s FOC hunter
 He is a hunter.

- (113) *Nye a be ngbel.*
 L | HL L H → L L
 3s NEG be NEG NEG hunter
 He is not a hunter.

The negated future imperfective also requires the locative verb *be* in its role as auxiliary verb, as seen in (114).

- (114) *Be a ŋa be li e-fumo mi-mber.*
 H L H L L L L H → L L H
 3p NEG FUT^NEG be NEG LOC C5-build INF INF C4-house
 They're not going to be building houses.

Nonpresent imperfective constructions are negated by adding a second auxiliary verb following the negation morpheme, as in (115) and (116).

- (115) *Nye a be a be li e-fumo mi-mber.*
 L H L ←H L L H L L L L H → L L H
 3s P2 be P2 NEG be NEG LOC C5-build INF INF C4-house
 He was not building any houses (in the remote past).

- (116) *Nye be a be li e-fumo mi-mber.*
 L L H |←H L L H L L L L H → L L H
 3s P1 be P1 NEG be NEG LOC C5-build INF INF C4-house
 He was not building any houses (in the recent past).

The perfective aspect marker *si* can occur with negation, but only in the case of rhetorical questions (by which one calls to mind a piece of generally-shared truth). This is encountered in greetings, as in (117).

- (117) *Go a si bwak a?*
 L |←H L H L L H
 2s NEG PFV NEG become^big NEG INT
 Haven't you grown!

6. Focus

Although focus is most often treated in the context of the noun phrase, it merits discussion alongside verb phrase constituents since focus marking and perfective aspect are in complementary distribution in Koozime. As already noted in §3.1, independent affirmative past tense sentences must either mark perfective aspect or focalize a nominal, but not do both. This seems to indicate that focus and perfective aspect occupy the same syntactic position, and that one or the other may be selected, but not both.

Focus markers in Koozime are either assertive or counterassertive. These are syntactically distinct, as will be shown.

6.1. Assertive focus. Assertive focus is marked by *ó*. Any noun phrase may be focalized regardless of its grammatical relation to the verb. *ó* (focus) follows a nominal that precedes a verb, but precedes one that follows the verb. Postverbal noun phrases not selected for focus are generally deleted if another verb complement is focussed. If an object is focussed, however, the subject is usually pronominalized rather than deleted.

Sentences with focussed complements are generally construed as responses to questions or counterassertions in which a speaker is asserting slightly different information from that which someone else has just asserted. That part of the response regarded as most salient (new information) is focussed. This noun phrase often corresponds to the interrogative word in a previous question. If a question is polar (a yes/no question), the response lacks a focussed nominal.

The epenthetic consonant /w/ is automatically inserted between the second and third vowels of any three vowel sequence, as in the first answer of (118). This consonant is enclosed in parentheses and shown without a gloss because it has no semantic or syntactic content.

(118) Question

Ze a de?
 | |
 H H L
 who P2 eat P2
 Who ate?

Answer

Nye o (w') a de.
 | | |
 L H H L
 3s FOC P2 eat P2
 It was he who ate.

- (119) *Nye a de nkoo?*
 L H L LH
 3s P2 eat P2 where
 Where did he eat?

- Nye a de o, i Ø-mber wam.*
 L H L H H L L H H L
 3s P2 eat P2 FOC in c3-house c3^my
 It was in my house that he ate.

- (120) *Nye a de ye?*
 L H L H
 3s P2 eat P2 what
 What did he eat?

- Nye a de o, bi-kwan.*
 L H L H L L L
 3s P2 eat P2 FOC c3-plantain
 It was plantains he ate.

It is ungrammatical in Koozime to use the affirmative focus marker in a perfective sentence: **Nyè á sî dè ó mede*. 'It was food he (perfectly) ate.' The affirmative focus marker may be used together with negation only if it is the subject that is focussed, as in (121).

- (121) *Nye o be a de me-de.*
 L H L H L H L L H L L L
 3s FOC P1 be P1 NEG eat P1 P1 C6-food
 It was he who did not eat any food (in the recent past).

6.2. Negative focus. Negative focus is marked by *niúk* H→ 'it's not' where the H is replacive. This focus marker may also occur sentence medially, in which case the stem tone is also H: *niúk* H→ 'it's not'. In either case, however, it precedes the focussed noun. It can be used together with the assertive focus marker in successive sentences to give counterassertive focus to a noun phrase. This enables the speaker to isolate and correct a mistake found in another speaker's statement. In (122) and (123), a noun is the head of a relative clause. The fact that the noun it focusses must be relativized is peculiar to the negative focus marker.

Example (122) demonstrates that the clause following a negative focus marker is a relative clause, due to the occurrence of *nywá*, the specific definite article which can only follow such constructions. There is a tone change in the first tone to the right of the negative focus marker which affects the pronoun *me* 'I'.

- (122) *Ntuk me [a fumo Ø-mber] nywa.*
 L H H→ L H→ H L L L L H H
 FOC^NEG 1s SUB P2 build P2 c3-house DEF^C1
 It was not I who built the house (in the remote past).

Marking a noun phrase with the negative focus marker precludes marking the verb with perfective aspect: **Ntũk mé á si fumo mbër nywá*. 'It's not I who built the house'. This reinforces another restriction that the verb in a dependent or relative clause may not be marked as perfective.

A further restriction is that negative focus cannot occur with negation of the verb: **Ntũk nyé á bé ade méde nywá*. 'It's not he who didn't eat any food.' However, a double negative may occur, as in (123), where both the relative clause and the main clause are negated.

- (123) \emptyset -mber [me a be a fumo] wi
 L L H H→ L H L ←H L L L H
 C3-house SUB 1s P2 be P2 NEG build NEG DEF~C3
 the house that I did not build

Any sentence beginning with *ntũk* can be preceded by the class 7 subject pronoun *yé* which gives the sentence a dummy subject and moves the negative focus marker from sentence-initial position. Its tone then changes to H-H, as in (124).

- (124) Ye ntuk me-de [nye a de] ma.
 H H H H→ L L H→ L H L H
 3s~C7 FOC~NEG C6-food SUB 3s P2 eat P2 DEF~C6
 It's not food that he ate (in the remote past).

7. Mood

There are five moods in Koozime—indicative, hortative, imperative, consecutive imperative, and interrogative. No formally distinct subjunctive mood exists. In the place of a subjunctive, hortative is used, which acquires a subjunctive reading in certain contexts.

7.1. Indicative. Indicative mood, treated in considerable detail in preceding sections, needs little further comment. In contrast with nonindicative moods, indicative encodes statements of fact. It is syntactically distinguished from other moods by the possibility of focussing its noun phrases.

There are, however, a number of indicative constructions which may receive an extended pragmatic reading which is usually triggered by the context. A present indicative with an object marked for assertive focus can

be given a near-future reading, as in (125), if it is obvious the man has not yet commenced building.

- (125) *Nye fumo o Ø-mber.*
 L H L H H→| H L L H
 3s PRES build PRES PRES FOC C3-house
 It's a house he's building. *or* He's going to build a house soon.

A negated present equative form has a paradoxically affirmative reading when the complement is a verbal noun, shown by the nominalizer suffix (NOM) *-a*, as in (126).

- (126) *Ye a be n-dim-a!*
 H |←H L L H→| L H H
 3s^C7 NEG be NEG NEG C3-deep-NOM
 It was really deep!

There is an unusual modal use of the future indicative which can be seen in (127).

- (127) *Me nteme o to Ø-nkana.*
 L H H H H L H→| L L L
 1s also FUT go FUT FUT C7-city
 I would like to go to the city too.

7.2. Nonindicative. Hortative (HORT) and imperative (IMPV) moods are both marked by verbal suffixes, a given verb usually having similar forms for both. For the most part, the morphology of these suffixes is regular, being governed by the phonological attributes of the verb stem. In a few cases, however, the form of the verb stem changes in the hortative or imperative, as in (128).

- (128) *e-ze* → *Nta-k!*
 L L H
 C5-come INF come^IMP-IMP
 to come Come!

In general, regular rules generate the appropriate hortative or imperative forms. The selection of the right suffix is based on the number and type of stem syllables and on vowels in the syllable nuclei. (129) gives an idea of the regularities observed in the morphophonemics of these moods.¹³

(129) Imperative and hortative suffix formation

Stem	Affix	IND	HORT	IMPV	Gloss
<i>ce, o, a</i>	<i>-k</i>	<i>bà</i>	<i>bâk</i>	<i>băk</i>	'plant'
		<i>bá</i>	<i>bâk</i>	<i>bák</i>	'marry'
<i>ci, i</i>	<i>-ke</i>	<i>bì</i>	<i>bíkè</i>	<i>biké</i>	'receive'
		<i>bí</i>	<i>bíkè</i>	<i>bíké</i>	'beat'
<i>cu, u</i>	<i>-ko</i>	<i>dú</i>	<i>dúkò</i>	<i>dúkó</i>	'follow'
		<i>sù</i>	<i>súkò</i>	<i>súkó</i>	'pour out'
CVC	'v-copy'	<i>cìk</i>	<i>cíkì</i>	<i>cíkí</i>	'save'
		<i>cík</i>	<i>cíkì</i>	<i>cíkí</i>	'be cut'
CVCV	<i>-a</i>	<i>fùmo</i>	<i>fúmà</i>	<i>fúma</i>	'build'
		<i>lúmo</i>	<i>lúmà</i>	<i>lúma</i>	'pierce'
<i>caa</i>	<i>-ŋ-</i>	<i>ntàa</i>	<i>ntàŋà</i>	<i>ntàŋá</i>	'cross over'
		<i>sáa</i>	<i>sáŋà</i>	<i>sáŋá</i>	'seek'

Although hortative and imperative moods resemble each other with respect to the verb suffix required, they differ in their tonal melodies. The hortative melody, ←H-L, follows the verb, with the replacive tone neutralizing tonal distinctions between lexically H and L verbs. There is no replacive suffixal H following the verb in the hortative mood, even when an object is present.

In contrast, the imperative melody is a floating H following the verb. This associates to the left, becoming a tone of the verb in its final pronunciation. In addition, a suffixal replacive H does follow an imperative verb, causing detachment and deletion of an immediately-following L on a following complement.

In addition to this regular imperative, there is also a sequential imperative that follows a previous command. It is formally distinct from either hortative or the regular imperative, consisting of a stem ←H-L and a suffixal H.

¹³'V-copy' means that the vowel of the verb stem is copied as the suffix.

Interrogative mood is not indicated by any distinctive tonal melody on the verb. It is usually marked by an interrogative word; but in the absence of one of these, it is indicated by an intonational rise at the end of the question.

(130) Tonal melodies for nonindicative moods

	MOOD	STEM	SFX
Hortative	∅	←H L	∅
Imperative (verb medial)	∅	H	H→
(verb final)	∅	H L	∅
Consecutive imperative (verb final)	∅	←H L	∅
(verb medial)	∅	←H H	H→

Hortative. Hortative is used to express an intention, permission, a wish, or a prohibition. The subject of the verb may be first, second, or third person, in contrast with the imperative.

The affirmative hortative mentioned above has a different tonal melody than the negated counterpart, as seen in (131).

(131) Hortative tonal melodies

HORT	MOOD	NEG	STEM	SFX
AFF PFV	∅		←H L	∅
IMPF	∅		←H L	H→
NEG	∅	àyí	L	H→
OR	lè	à	L	H→

Affirmative hortatives have a H-L melody regardless of the lexical tone of the verb, as seen in (132).

(132) Nye fum-a mi-mber.

|

|

|

L

L←HL

|

/\

L

L H

3s build-HORT c4.house

He should build some houses!

This tone melody is maintained for monosyllabic verbs as well, since Kɔɔzime allows for the association of multiple tones with a single, short vowel. This is seen in (133).

- (133) Nye *to-k* \emptyset -mber!
 L H |←H L L L H
 3s go-HORT C3-house
 He should go home!

Negating hortative constructions is done in one of two ways—either through the use of the negative hortative marker *ayi* or by using *le* ‘with’ and the negated infinitive. Stem L and suffixal H accompany both of these constructions. In negated hortative constructions there is no suffix to the verb indicating hortative mood. These are shown in (134) and (135).

- (134) Nye *ayi* *fumo* *mi-mber.*
 L L H L L H→ L L H
 3s NEG~HORT build NEG NEG C4-house
 He should not build any houses. *or* Don’t let him build any houses!

- (135) Nye *le* *a-fumo* *mi-mber.*
 L L |←H L L L H→ L L H
 3s with NEG~INF-build NEG~INF NEG~INF C4-house
 He should not build any houses. *or* Don’t let him build any houses!

The hortative in (136) shows progressive or habitual action through the use of the imperfective auxiliary *di* ‘stay’.

- (136) Nye *di-ke* *fumo* *mi-mber.*
 L L←H L L L H→ L L H
 3s stay-HORT build HORT HORT C4-house
 He should continuously build houses.

Imperative. Affirmative imperative involves a single floating H added to the verb and a replative suffixal H following the verb. The tense marker for negative imperative is *à* followed by a stem L and a suffixal H, as summarized in (137).

(137) Tonal melodies for the imperative mood

IMP	MOOD	NEG	STEM	SFX
AFF (verb medial)	∅		H	H→
(verb final)	∅		HL	∅
NEG	∅	â	L	H→

In (138)–(140), H verbs are seen to become H-H (138) after the addition of this stem tone, while L verbs become L-H (139) and toneless verbs become H (140).

- (138) *Jam-a* *bi-kwan* *bi!*
 | | | | | |
 H H L L H L
 H→
 cook-IMP IMP c8-plantains c8^these
 Cook these plantains!

- (139) *Be-k* *bi-kwan* *bi!*
 | | | | | |
 L H L L H L
 H→
 plant-IMP IMP c8-plantains c8^these
 Plant these plantains!

- (140) *De-k* *me-de* *ma!*
 | | | | | |
 H L L H L
 H→
 eat-IMP IMP c6-food this^c6
 Eat this food!

Sentence-final verbs, which have the segmental imperative suffix *-a*, receive an additional L, as in (141).

- (141) *Jam-aa!*
 | | | |
 H H H L
 H→
 cook-IMP^VERB^S^FINAL
 Cook (it)!

Prohibitions are expressed as a negative imperative, which employs the negation marker *â* followed by the verb, a stem L, and a suffixal H, as in (142). In negative commands, the verb does not include the segmental suffix encountered in affirmative commands.

- (142) *A fumo mi-mber!*
 L L L H→ L L H
 NEG^{IMP} build IMP IMP C4-house
 Do not build any houses!

Commands addressed to two or more persons use the plural marker (PL) *gá*, which becomes *gâ* word-finally, and occurs after the suffixal H, as in (143). This plural morpheme is also encountered in prohibitions, as in (144). Once again, because the negative marker is present, the segmental imperative suffix is not present.

- (143) *Fum-a ga mi-mber!*
 L L H→| H L L H
 build-IMP IMP PL C4-house
 Build houses (you plural)!

- (144) *A di ga kul!*
 L L L H→| H L H
 NEG stay IMP IMP PL outside
 Don't stay outside (you plural)!

Imperfective aspect in the imperative mood is conveyed by the auxiliary *di* 'stay' rather than by the locative verb *be*, as seen in (145).

- (145) *Di-ke de me-de ma!*
 L H L H→ L L H L
 stay-IMP eat IMP IMP C6-food C6^this
 Keep on eating this food!

Consecutive imperative. Consecutive imperatives exist only in the affirmative. There are two tonal melodies, presented in (146), which depend upon the location of the verb in the sentence.

(146) The consecutive imperative construction

Consecutive imperative	MOOD	NEG	STEM	SFX
(verb medial)	-à		←-H H	H→
(verb final)	-à		←-H L	∅

This mood is used noninitially in a chain of commands. It occurs in nonfinal position in (147), where it is reflected in the H-H melody of the verb.

(147) *Go-a fumo mi-mber!*

$\begin{array}{c} | \quad | \\ L \quad L \end{array}$
 $\begin{array}{c} | \\ L \end{array}$
 $\begin{array}{c} \text{---} \text{H} \text{H} \end{array}$
 $\begin{array}{c} \text{H} \text{---} \end{array}$
 $\begin{array}{c} | \quad \diagup \diagdown \\ L \quad L \quad H \end{array}$

2s-CONS^{IMP} build CONS^{IMP} CONS^{IMP} C4-house

And build houses!

In (148), it occurs in utterance-final position, where the verb has a H-L melody.

(148) *Go-a fumo!*

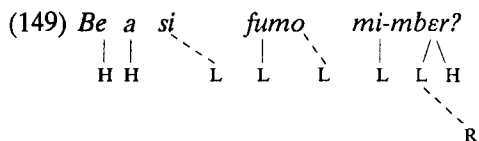
$\begin{array}{c} | \quad | \\ L \quad L \end{array}$
 $\begin{array}{c} | \\ L \end{array}$
 $\begin{array}{c} \text{---} \text{H} \text{L} \end{array}$

2s-CONS^{IMP} build IMP

And build!

Interrogative. Interrogative mood is distinguished from imperative and hortative by the possibility of marking tense. It is distinguished from indicative by the incompatibility between focussing a verb complement and addressing a question. It is also distinguished from the other moods by the presence of an overt interrogative marker—interrogative word or a distinctive, rising intonation.

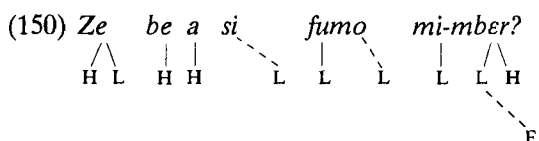
On the other hand, there is a structural resemblance between indicative and interrogative moods. A yes/no question can be derived from a statement simply by adding rising intonation, as in (149), which is derived from (30). The tone on *mbër* 'house' rises to a height equal to that of the H at the beginning of the sentence.



3p P2 PFV P2 build P2 C4-house INT

So they built some houses (yesterday or before)?

In other interrogative constructions, the slightly falling utterance-final intonation of the indicative occurs along with an interrogative word somewhere in the construction. In (150), the interrogative word *zê* 'is it?', is used to ask a yes/no question similar to that of (149). Note the presence of falling intonation with the question word instead of the rising intonation for questions without such a word. The difference between these two questions is that (149) occurs in the context of an assertion's having been made 'they built some houses', while (150) can occur more freely.



is^it? 3p P2 PFV P2 build P2 C4-house INT

Is it true that they built some houses (in the remote past)?

Interrogative words other than *zê* 'is it true?' cannot occur in a construction with *si* (perfective). This indicates that other interrogative words are in the same syntactic class as the focus marker, which is likewise incompatible with the perfective marker. See examples (118–120) above, where interrogative morphemes meaning 'who?', 'where?', and 'what?' are used.

Rhetorical questions are discussed in §5 and illustrated by (117), which is clearly rhetorical due to the occurrence together of negative, interrogative, and perfective markers. Any real question may also be used rhetorically. When a 'normal' question is asked, it is necessary to decide whether or not it should have a rhetorical or nonrhetorical reading. This is done on the basis of pragmatic considerations. The constellation of interrogative, negative, and perfective markers removes such ambiguity since such a construction is capable of bearing only a rhetorical reading.

8. Conclusion

This study of the Koozime verbal system has detailed a rich and varied verb-marking system. It has been seen that an extensive inventory of tense and aspect markers exists, which enables its speakers to refer contrastively and with precision to events that are distinct with regard to time and internal consistency. There is, alongside the basic tense-marking system, a parallel system of relative tenses, as well as numerous possibilities for indicating mood and negation.

In the course of this study, we have examined in detail the multiple tonal markers which play an important role in distinguishing the verbal constructions from each other. The numerous replacive tones found among Koozime grammatical markers, some of which occur alongside of and in contrast with the more normal floating tones common in autosegmental descriptions, show the need for an autosegmental convention to indicate replacive tones. We have suggested as one possible means of notation the use of an arrow on the tonal tier with no change to existing association lines.

In conclusion, three lists follow which summarize many of the numerous tonal melodies found in the Koozime verbal system.

(151) Relative tense summary

CONS REL tense	REL	TNS	NEG	STEM	SFX
3p subjects					
Following p2		Ø		H . . . -òò	H→
Elsewhere		Ø		H . . . L	H→
Other subjects		Ø		H . . . L	H→
REL P1					
AFF	←H o	L		H . . . L	H→
NEG 'with' + 'yet'	le		←H à pà	H . . . L	H→

(152) Absolute tense summary

P2	NEG	TNS	NEG	STEM	SFX
AFF		á		L...L	Ø
NEG		á	←H à	H...L	H→
PI					
AFF		L		H...L	H→
NEG		L	←H à	H...L	H→
PRES					
No copula		H		Ø	Ø
Object focus AFF		H		H	H→
Subject focus or dependent clause					
AFF (verb medial)		Ø		←H H	H→
AFF (verb final)		Ø		←H L	Ø
NEG neutral		Ø	←H à	L	H→
NEG IMPF		Ø	←H à	L	H→
NEG HAB (verb medial)		Ø	á	←H H	H→
NEG HAB (verb final)		Ø	á	←H L	Ø
PRF		←H		L	H→
		[+Ht]		L	H→
FUT					
Nonfocus					
AFF		ó		H...L	H→
NEG	a	ηá		H...L	H→
Subject focus		ngá		H...L	H→
Dependent clauses		ngá		H...L	H→
CONS FUT		←H ò		H...L	H→

(153) Nonindicative mood summary

INF	MOOD	NEG	STEM	SFX
AFF	è-		H . . . L	H→
NEG	∅	à	H . . . L	H→
HORT				
AFF			←H L	∅
AFF (HAB)			←H L	H→
NEG		àyí	L	H→
IMP				
AFF (verb medial)			H	H→
AFF (verb final)			HL	∅
NEG		à	L	H→
CONS IMP				
(verb medial)	-à		←H H	H→
(verb final)	-à		←H L	∅

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