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The Koh verbal system

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THE KOH VERBAL SYSTEM

Suellyn H. Glidden

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1 Introduction

1.1 Location and population of Koh

The term Koh refers in this paper to a language and people located primarily in the cantons of Pao and Bouroum of the Baiboukoum Sous-Prefecture and the Logone Prefecture of Chad. There are also Koh speaking migrant communities in the vicinity of Garoua, Cameroon, and in the border area between Cameroon and Chad. Koh is spoken by an estimated 7-10,000 persons. On the basis of informal observation and partially completed dialect surveys one can distinguish two dialects of Koh, corresponding to the two cantons of Pao and Bouroum where the language is spoken.

The Koh within these two cantons tend to be quite isolated from one another and from the neighboring ethnic groups: the Ngambay and Sakpu in canton Bouroum and the Nzak-mbái, Mbum, and Karang in canton Pao. The Koh may understand some of the language of the neighboring ethnic groups if their villages are close and there is contact, but, generally, monolingualism remains very high. Very few Koh understand or speak French and almost none understand Arabic, the two national languages of Chad.

The Koh are a patrilineal society and are animistic or Christian. They are almost exclusively agriculturists. The main crops are red or white millet and peanuts. Cotton is the cash crop, and for most, the sole means of gaining a cash income. Goats are kept primarily as symbols of wealth and as part of the bride price system. The Koh are facing change at an ever increasing rate. Outside contact is increasing and resulting in greater expectations for goods,

medical aid, and education. This will lead inevitably to changes in the Koh culture and language.

1.2 Classification and earlier studies of Koh

Koh is to be identified as one of the "Lakka" languages, classified by Greenberg (1963) as a member of Group 6 in the Adamawa branch of the Adamawa-Eastern family of Niger-Congo. The members of Greenberg's Group 6 are Dama, Mono, Mbere, Mundang, Yasing, Mangbei, Mbum, Kpere, Lakka, and Dek. Samarin (1971:215-219) and Boyd (1974:15-19) give a more detailed subclassification of most of the Group 6 languages. Samarin excludes Mangbei and Yasing from this group and adds five languages from Central African Republic. He also notes the ambiguity of the term "Lakka," which is used pejoratively by Muslims to refer to the ethnic groups occupying the Adamawa plateau and its environs. The ethnic groups of this area use the term "Lakka" in reference to a dialect of the Chadic language Sara-Ngambay.

Boyd (1974:17,18) gives a more precise and thorough subclassification of Group 6 languages. He uses the term **Lakka** for the proto-language of a large number of Group 6 languages. Within Lakka he establishes two main subdivisions, Eastern and Western, which are further subdivided. His final classification is as follows:

- A. Western
 - 1. Pan/Mono, Mundang
 - 2. Dama, Galke/Pormi, Kali
- B. Eastern
 - 1. Mbum, Man, Mbere
 - 2. a. Pandjama, Touboro, Koh
 - b. Ndó-Mbàli, Nzak-mbái, Pana, Ngoumi

Within the subgroup 2 of the eastern group of Lakka, Boyd establishes two subdivisions based upon two corresponding phonological sets:

Group a	Group b
w	v
v	g

Touboro is, as noted by Boyd, a dialect of Pandjama which is also known as Sakpu. Ndó-Mbàli is also known as Karang. Koh is classified in Group 2a, of the eastern division of Lakka, of Group 6 Adamawa languages, in the larger division Adamawa-Eastern of Niger-Congo.

There have been no previous linguistic studies of Koh aside from an unpublished comparative study of Koh and Karang by Ubels (1983). Ubels' purpose was to study the feasibility of establishing one standard orthography for

both Koh and Karang. sixty-seven percent of the 487 words used to compare Koh and Karang are cognate. But while Karang is closely related to Koh, both phonologically and also syntactically, Ubels concluded that they were separate languages and would require separate writing conventions. Karang is the language most closely related to Koh in which there has been linguistic investigation (Ubels and Ubels 1980, Ubels 1983).

1.3 Basis and purpose of the present study

The data were collected between June 1983 and April 1984. I was aided in my investigation primarily by Bétar Ozias (canton Pao), Beassem Sylvain (canton Pao), Soroda Samuel (canton Bouroum), and Médangé Silas (canton Pao). These four men are French speakers and hold positions of leadership in their respective villages. They were chosen to be my informants with the approval of a committee of Koh representing both the cantons of Pao and Bouroum.

The purpose is to describe the Koh verbal system in terms of its grammatical forms and their possible meanings. Special attention is given to the tense-aspect-mood (TAM) system. The formally marked categories of the TAM system are relatively few in Koh. In fact Koh is a "tenseless" language in the sense that temporal deixis does not appear as a formal category in the verbal system. Rather, it is a sentence level function or is derived from the discourse-pragmatic context. There are one basic mood opposition and four aspectual categories. One aspectual category has a restricted usage. Even though there are a small number of overt forms in Koh, there is a wide range of expressible TAM notions. So, in order to describe the verbal system adequately, one must consider the full range of meanings possible for each form and combination of forms.

Before turning to the consideration of the verbal system I will introduce the basic phonology (Sect. 1.4) and syntax (Sect. 1.5) of Koh. Then in Sect. 2 I will examine the relevant phonological and morphological information concerning verb roots. In Sect. 3 the classification of verb roots will be discussed. Then in Sect. 4 I will turn to the formal TAM categories of Koh, and in Sect. 5 to complex verbal constructions. I will conclude, in Sect. 6, with a summary of verbal forms and some of their possible meanings.

1.4 Basic phonology¹

There are thirty-five phonemes in Koh, of which seven are vowels and twenty-eight are consonants. These phonemes are represented in the orthography as follows.

i	voiced	high	close	front	unrounded	vowel
e	voiced	mid	close	front	unrounded	vowel
ee	voiced	mid	open	front	unrounded	vowel
a	voiced	low	open	mid	unrounded	vowel
u	voiced	high	close	back	rounded	vowel
o	voiced	mid	close	back	rounded	vowel
oo	voiced	low	close	back	rounded	vowel
b	voiced	bilabial				stop
bb	voiced	bilabial				stop-implosive
d	voiced	alveolar				stop
dd	voiced	alveolar				stop-implosive
f	voiceless	labiodental				fricative
g	voiced	velar				stop
g	voiced	labio-velar				stop
h	voiceless	glottal				fricative
k	voiceless	velar				stop
kp	voiceless	labio-velar				stop
l	voiced	alveolar				lateral
m	voiced	bilabial				nasal
mb	voiced	bilabial		prenasalized		stop
mgb	voiced	labio-velar		prenasalized		stop
n	voiced	alveolar				nasal
nd	voiced	alveolar		prenasalized		stop
nz	voiced	alveolar		prenasalized		fricative
ŋ	voiced	velar				nasal
ŋg	voiced	velar		prenasalized		stop
p	voiceless	bilabial				stop
r	voiced	alveolar				retroflex
s	voiceless	alveolar				fricative
t	voiceless	alveolar				stop
v	voiced	labiodental				fricative
vb	voiced	labiodental				flap
w	voiced	labio-velar				non-syllabic vocoid
y	voiced	palatal				non-syllabic vocoid
z	voiced	alveolar				fricative

All examples of Koh data in this paper are written according to the proposed standard orthography.

In addition to these phonemes, Koh has three level tones: high, mid, and low, which are symbolized as [˥], [˦], and [˧], respectively. There is also a rising contour tone, symbolized as ^{˨˥}. There is one phonemic tone per morpheme. Tone is marked on the first vowel of each morpheme.

There is nasalization prosody in Koh which applies to the word. In every word where nasalization occurs, the

nasalization extends to every vowel and to certain consonants. For example, in *wara* 'man', both vowels and *w* and *r* are nasalized. Nasalization is symbolized by a cedilla (,) under the first vowel of the word.

1.5 Basic syntax

Before I turn to the description of the verbal system, I will briefly outline in this section the main clause and noun phrase constituents and their ordering, and several clause level constructions.

1.5.1 Constituents and constituent ordering

1.5.1.1 Clause level. Koh is an SVO language.² The basic constituent order in intransitive sentences is SV, as seen in (1), and in transitive sentences is SVO, as seen in (2).

- (1) *mì zool*
 I go
 'I'm going.'
- (2) *mì nza mbedde*
 I look paper
 'I'm looking for paper.'

Indirect objects and other obliques usually occur after the direct object or after the verb when there is no DO (3).

- (3) *mì se bbà Laramanay*
 I go to Laramanay
 'I'm going to Laramanay.'

Other main clause constituents usually occur at the end of the clause. The basic order of these constituents is: adverbs, aspectual particles, negative marker, and question marker. While it is unusual to have all of these constituents simultaneously, (4) is a maximal expansion showing the constituent ordering.

- (4) *i bbàh bbày bbamba bbáy ya le*
 they talk word a:lot IMPFT NEG QM
 'They aren't still talking a lot, are they?'

Emphasis by left-dislocation is frequent in Koh for object NPs, temporal adverbs, or prepositional phrases.

- (5) *fè káy ná, mì sù ya*
 thing this here I eat NEG
 'I don't eat that.'

1.5.1.2 Noun phrases. Modifiers typically follow the noun which they modify. Within the noun phrase there is a general fixed constituent order as follows: NOUN (ADJ) (POSS) (PL) (NUMBER) (REL CL) (DEM/LOC). The number of modifying constituents within a noun phrase rarely exceeds three with, possibly, a relative clause as a fourth (e.g., (6) as a maximal expansion NP).

- (6) nzòbb kpíri-rì síddi ká i guh fè
 person leprous-PL two REL they groan thing
 'the two lepers who are groaning'

Koh has both alienable and inalienable possession, reflected in the following two sets of possessive pronouns:

Alienable		Inalienable
bbi	my	-i
bbo	your	-a
bbe	his	-e/ee
nári	ours (incl)	nári
ná	ours (2)	ná
bburu	ours (excl)	bburu
bbarì	yours (PL)	bbarì
bbari	theirs	bbari

1.5.2 Clausal constructions.

1.5.2.1 Serial verbal constructions. The juxtaposition of two or more verbs with a common subject in a single clause occurs in Koh, as it does in a large number of Niger-Congo languages. Welmers (1973:366) calls this phenomenon "serialization." The structure of serial verbal constructions is discussed in Sect. 5.2.

1.5.2.2 Multiple clauses. States or actions associated with a single subject which are not expressed through a serial verbal construction are frequently expressed in multiple clause constructions. In multiple clauses the first clause contains reference to the subject, and all subsequent clauses in the construction have a corresponding subject pronoun. The form of subject pronouns in multiple clauses differs from their form in independent clauses, as shown in the following chart:

Subject Pronouns

Independent Clause

mì
mù
ka
nàri
ná
bburu
ì
i

I
you
he
we (incl)
we (2)
we (excl)
you (PL)
they

Multiple Clause

mí
mú
à
nàri
ná
bbúru
í
í

Actions expressed in multiple clauses are either simultaneous or sequential. Example (7) illustrates a multiple clause construction where the actions are simultaneous. In (8) the actions are sequential.

- (7) i m̩ay bb̩ay, í mbi nzáh-rì, í
they discuss word they take tongue-PL they

bb̩ah m̩h
talk that

‘They discussed, they had their say, and they said....’

- (8) ka m̩gba bàl ná, à i ni, à gòodd ni
he seize goat there he kill it he gut it
‘He grabbed the goat, killed it, and gutted it.’

1.5.2.3 Coordinate and subordinate clauses. Coordinate and subordinate clausal constructions are a significant part of Koh syntax. Clauses in conversation or discourse seldom occur without a conjunction of coordination or subordination which relates what is said to previous and/or following statements. Subordinate clauses generally occur before the main clause. Subordination markers occur clause initially (9).

- (9) zàddká m̩ bba lèdd h̩y ná, b̩h bb̩ay m̩h,
when I DCOP child only there father and mother

i f̩ere m̩ bb̩ay ngéereew̩ru
they teach me word God

‘When I was just a child, my parents taught me the Bible.’

Coordinating conjunctions may occur sentence initially, relating what follows to a previous statement, or between two clauses forming a continuum of thought or action. In

example (10) **báyìh lee** 'and then' relates the clause to the previous clause (which in this situation was a direct quote), and **lee** 'and' joins clauses that form a continuum of thought. This sentence is from a narrative text.

- (10) **báyìh lee ná tawara ví mgbà seri mbel, à**
 then and there panther come seize tooth pig he
- kùoo lee nah wukluk, à lieke tieerjsee lee**
 pull and ?it come:out he fall backwards and
- sàw-e ví haw dduoomì**
 tail-his come break silently
- 'Then Panther came and grabbed Pig's tooth; he
 pulled on it and it came out; he fell backwards
 and his tail broke silently.'

Complement subordinate clauses are considered further in Sect. 5.1.

2 Phonological and morphological structure of the verb

2.1 Verb root morpheme structure

There are six consonant/vowel patterns in Koh verb roots: (C)V, (C)V₁V₂, (C)VC, (C)VCV, and CVCCV. The majority of Koh verb roots are monosyllabic. Each verb root, whether monosyllabic or disyllabic, has one lexical tone. This base tone is either mid or low. The base tone of a verb³ is most clearly seen in a negated factive sentence.

Reduplication of the verb is common in Koh. The initial (C)V of the verb root is reduplicated and preposed to the root. The lexical tone of the verb is carried by the reduplicated (C)V and the root's tone is neutralized to mid. This process is illustrated in (11) and (12) below, where the unreduplicated verb root in (11) is reduplicated in (12).

- (11) **tédd hùo bbamba**
 cold:N cold:V very
 'It is very cold.'
- (12) **tédd hù-huo**
 cold:N RED-cold:V
 'It is cold.'

The entire verb root is reduplicated when an object is present (13). This object, whether noun, noun phrase, or pronoun, occurs between the reduplicated particle and the verb root.

- (13) tédd hùo mì huò
 cold:N RED I cold:V
 'I'm cold.'

2.2 Verbal affixes

There are two verbal affixes, **-ka** and **-ke**. **-ka** occurs with certain CV verb roots, but only when the verb carries a high tone. When **-ka** is affixed to a verb root, the resultant form is a variant of the verb root.

In Karang, a similar particle, **-na**, occurs and its function is to nominalize intransitive verbs.⁴ That **-ka** cannot have the same function in Koh is apparent for two reasons. First, a Koh verb with **-ka** can appear as a main verb in a clause (14) and (15).⁵

- (14) mì súŋa fè
 (sú-ka)
 I eat thing
 'I'm going to eat something.'

- (15) mǎh, à kíŋa mbedde bbi
 (kí-ka)
 mother she read paper my
 'My mother will read my letter.'

When **-ka** occurs with a verb root, it does not have an identifiable meaning and does not modify the meaning of the verb root. In (15) **-ka** was affixed to the verb **kí** 'to read'. It is possible to omit **-ka** without changing the meaning (16).

- (16) mǎh, à kí mbedde bbi
 mother she read paper my
 'My mother will read my letter.'

A second reason for distinguishing the function of **-ka** in Koh from that of **-na** in Karang is that the affixation of **-ka** to verb roots is not restricted to intransitive verb forms. It appears, for example, with the locative copula **ddò** 'to be located', the descriptive copula **bba** 'to be', and is obligatory with such transitive forms as **mbi** 'to take', **mgbá** 'to hold', and **koo** 'to see or know'.

All verb roots taking the affix **-ka**, whether optionally or obligatorily, when they carry a high tone are short open CV syllables. The only exception to this is the verb **yǎh** 'to take', for which no contrastive short form occurs. The affix **-ka** is obligatory with **yǎh** when it has a high tone. Aside from **yǎh**, no non-CV verb root occurs with **-ka**.

- (17) ka séke kpuru bbà yāhja zàdd bbe
 (yāh-ka)
 he go until that take place his
 'He will advance until he takes his place.'

-ka usually, but not always, appears in the nominalized form of the verb roots with which it occurs, as the following examples show:

yah	'to take'	yāhja	kɪ	bburu	'our marriage'
		REFL	our		
vbu	'to throw'	vbúka			'the throw'
vi	'to come'	sie	vika		'the arrival
		hour			
kɪ	'to read'	fè	kɪnja		'reading
		thing			material'

The only other affix that occurs on the verb is a complement marker, **-ke**, which indicates an underlying oblique object that does not appear on the surface. The verbal complement usually is one of instrument, 'by means of'. Example (18) illustrates **-ke** to mark an unspecified oblique, (19) makes explicit the oblique, and (20) shows the impossibility of **-ke** co-occurring with the oblique phrase.

- (18) mì húnj-ke gári
 I rub-OBLM clothes
 'I will rub the clothes (with something).'
- (19) mì húnj gári bbáy sàbun
 I rub clothes with soap
 'I will rub the clothes with soap.'
- (20) *mì húnj-ke gári bbáy sàbun
 I rub-OBLM clothes with soap
 'I will rub the clothes with soap.'

3 Classification of verb roots

Koh verb roots may be classified by the traditional categories of copula, intransitive, and transitive; see Sect. 3.1 and 3.2. Further, as discussed in Sect. 3.3, inherent aspectual differences in verbs must be carefully studied in order to adequately describe TAM categories and verbal systems.

3.1 Copular forms

There are two copular forms in Koh, each with several distinctive functions. The copula **bba** 'to be' (glossed DCOP) is used in two constructions to express identification and equation/characterization. A copular sentence of

identification is formed by the use of **bba** followed by a nominal complement.

- (21) bba lédd
 DCOP child
 'This is a child.'

An equation/characterization sentence is formed by a nominal phrase followed by **bba** and a nominal or adjectival complement.

- (22) vúri bba nám pédd mbíw
 today DCOP day work one
 'Today is Monday.'

- (23) mì bba gèl
 I DCOP left
 'I'm left-handed.'

Koh also has a locative copula **ddò** (glossed LOC) used to indicate location. This copula can be followed by a nominal complement (24) or an adverbial complement (25).

- (24) máy bbi ddò hùl-a
 wife my LOC house-her
 'My wife is at her house.'

- (25) máy bbi ddò ddi
 wife my LOC there
 'My wife is there.'

As in many Niger-Congo languages (Welmers 1973:309), the locative copula can be used to express possession.

- (26) mì ddò bbáy lédd-rì
 I LOC with child-PL
 'I have children.'

3.2 Transitivity

Few Koh verbs are intransitive. These can be subdivided into three groups. The majority are stative and must be translated into English by 'to be' and some attribute. **hìh** 'to be heavy' in (27) and **ndàdd** 'to be good' in (28) are examples of stative verbs that are intransitive.

- (27) hìh bbamba
 heavy very
 'It is very heavy.'

- (28) ngáw bbo ná ndàdd bbamba
 food your there good a:lot
 'Your food is very good.'

These forms are full-fledged verbs: they accept modal and aspectual categories and can be reduplicated or negated as any other verb. Example (29) illustrates a reduplicated verb, while (30) illustrates negation.

(29) ngáw bbo ná ndà-ndadd
 food your there RED-good
 'Your food is good.'

(30) ngáw bbo ná ndàdd ya
 food your there good NEG
 'Your food isn't good.'

These verbs are the only verbs, other than certain copular constructions as in (21), for which a subject is not obligatory (27).

Verbs of movement form a distinct semantic class in Koh. Only two have been found that never take an object (*zool* 'to go or leave' and *na* 'to remain'). All others are more correctly called semi-transitive in that they optionally take either a direct object (31a) or an oblique (31b).

(31) a. mì se Laramanay
 I go Laramanay
 'I'm going to Laramanay.'

b. mì se bbà Laramanay
 I go to Laramanay
 'I'm going to Laramanay.'

A third subclass of intransitive verbs, a closed class, includes verbs describing the weather and verbs in which the subject is always a patient and not an agent.

(32) mbàm tòo-too
 rain:N RED-rain:V
 'It's raining.'

(33) pédd bbi òo ró
 work my done PERF
 'My work is already done.'

The majority of Koh verbs are transitive, requiring a direct object.⁶ Most transitive verbs are expected semantically to have a direct object. Such verbs as *siŋ* 'to attach', *gaŋ* 'to wait for', *loŋ* 'to bite', and *nza* 'to look for' are representative of this open class. More interestingly, there is a set of transitive verbs in Koh that, semantically, would not normally be expected to require a direct object. This closed subclass of transitive verbs has what Welmers (1973:484) calls a "cognate object." This cognate object is a nominal which is derived from the verb form for which it is the object. This nominal appears

only as the object of the verb form from which it is derived. Cognate objects can be distinguished from a reduplicated verb root by their tone. When a verb is reduplicated the reduplicated portion carries the tone and the root is neutralized to mid. A cognate object carries its own lexical tone. Examples of verbs with cognate objects are as follows:

bbàh bbày	'to speak a word'
ddù ddúl	'to run a run (race)'
na nám	'to sleep a sleep'
pah pày	'to cultivate a cultivation'
ree rëew	'to cry a cry (tears)'
se sédd	'to walk a walk'

Further, many verbs with a cognate object can also be reduplicated, as in (34) and (35).

- (34) mì bbàh bbày bbah
 I RED word talk
 'I'm talking.'
- (35) mì pah pày pah
 I RED field plant/cultivate
 'I'm cultivating.'

There are methods by which a direct (including a cognate) object may be deleted from an ordinarily transitive sentence. The most common use of reduplication is as follows:

NP	V	NP	->	1	Redup	+	2	ø
1	2	3						

Examples (36a) and (36b) illustrate this process.

- (36) a. mì sɿ fè
 I eat thing
 'I'm eating something.'
- b. mì sɿ-sɿ
 I RED-eat
 'I'm eating.'

A grammatical function of reduplication is to allow for the deletion of an object in a normally transitive sentence and thus reduce its valency. There is also a pragmatic function: the reduplication may give assertive focus to the action specified by the verb. The object may also be omitted in the presence of the following verbal or clausal elements: adverbs (37b), aspectual particles (37c), negation (37d), or interrogation (37e).

- (37) a. mì garŋ nzòbb
 I wait person
 'I'm waiting for someone.'
- b. mì garŋ hǒy
 I wait only
 'I'm only waiting.'
- c. mì garŋ bbáy
 I wait IMPFT
 'I'm still waiting.'
- d. mì garŋ ya
 I wait NEG
 'I'm not waiting.'
- e. mì garŋ le
 I wait QM
 'I'm waiting?'

In all these cases, there appears to be a special focus on the action of the verb which overrides the normal presence of an object.

3.3 Inherent aspect

The distinction copula/non-copula and transitive/intransitive are useful natural classes; I have shown some of their distinctive characteristics above. However, of greater significance for the classification of Koh verbs is their inherent aspectual meaning. It is necessary to consider these; for when inherent aspect interacts with the syntactic TAM categories, especially the aspectual categories, the meaning of the syntactic category and/or the inherent aspect of the verb may change. Thus, the meaning of an aspectual marker may vary according to the inherent meaning of the verbs with which it is combined. The possible meaning of a verb may also change as it combines with different aspects. The interaction of inherent and syntactic aspect may also prohibit or restrict the co-occurrence of certain forms.

For the purpose of this paper, aspect is defined as the manner of "viewing the internal temporal constituency of a situation" (Comrie 1976:3). Syntactically, aspects are limited to the number of grammatical forms which express them. It is more difficult to form a concrete list of inherent verbal aspects since semantic notions vary widely. Lyons (1977:706) defines the inherent aspect of a verb as, "that part of its meaning whereby it (normally) denotes one kind of a situation rather than another." He goes on to say that many languages differentiate among states, events, and processes. These distinctions seem to reflect natural classes in Koh and are useful in analyzing inherent and grammatical aspect. Events and processes denote dynamic

situations, whereas states refer to non-dynamic situations.⁸ Events and processes are distinguished in terms of perfectivity. Typically, verbs that make events view the situation perfectly, whether or not the action expressed by the verb is punctual or durative with a built-in termination point. Processes, on the other hand, view the situation imperfectively. States, events, and processes are the three inherent aspectual classes with which I deal in this paper.⁹ Comrie (1976:13) summarizes these classes as follows: "States are static, i.e. continue as before unless changed, whereas events and processes are dynamic, i.e. require a continual input of energy if they are not to come to an end; events are dynamic situations viewed as a complete whole (perfectively), whereas processes are dynamic situations viewed in progress, from within (imperfectively)."

States differ from events or processes in that a stative situation is non-dynamic. Inherently stative verbs, then, would refer to durative situations that lack any element of progressive change. Examples of verbs with a primarily stative meaning in Koh are seen in the following examples:

- (38) mǐ koo fè
 I know thing
 'I know something.'¹⁰
- (39) mǐ hǐ-hǐee
 I RED-fear
 'I'm afraid.'
- (40) mǐ ker bbày
 I think word
 'I'm thinking.'
- (41) sò-i sée mǐ see
 body-my RED me hurt
 'I'm sick.'

Events refer to dynamic situations that are viewed as a whole. There may be several subcategories within events, but the primary focus in this study is on **telic** situations in which there is a built-in terminal point beyond which the action cannot be said to continue. Representative verbs in this class are seen in these examples:

- (42) ka mborǝ lédd
 she birth child
 'She had a child.'
- (43) ka mbuo hùl
 he build house
 'He built a house.'

- (44) mǐ zool
 I go
 'I'm leaving.'

Processes differ from events in that, while they refer to dynamic situations, they have no intrinsic terminal point. They are atelic in that the action, which is inherently durative, could conceivably continue indefinitely or it could end at any point and an instance of that action would have occurred. All verbs in Koh taking cognate objects are process verbs (see Sect. 3.2). Other examples in Koh are as follows:

- (45) ka ru sùnnum
 he plant peanuts
 'He is planting peanuts.'
- (46) ka ddarj mbìh
 he draw water
 He is drawing water.'
- (47) ka ddi sìm
 he sing song
 'He is singing.'

My interest in these inherent aspect classes in Koh is to study them in relation to syntactic TAM categories, some of which are naturally compatible (process verbs with the progressive), others incompatible (stative with the progressive or the imperfective). In order to understand adequately the range and semantic meaning of grammatical forms in Koh, they must be studied with constant reference to the inherent meaning of the verbs with which they appear.

4 Tense, aspect, and mood in Koh

Tense, aspect, and mood (TAM) distinctions are made by means of verb inflection, auxiliaries, and aspectual particles. In the following sections I examine the grammatical forms used and the range of meanings associated with these forms. First, I consider verbal inflection (Sect. 4.1), which expresses mood distinctions. Within this section I also examine two complications in verbal inflection: an unusual rising tone (Sect. 4.1.3) and tone perturbation (Sect. 4.1.4). Two auxiliaries are described in Sect. 4.2 which express aspectual categories. Aspectual distinctions are also expressed by aspect particles. These particles and their meaning are studied in Sect. 4.3.

4.1 Inflection and mood distinctions

Koh verbal inflection is limited to tone, which expresses mood. Mood here refers to the grammaticalization of the relationship between the speaker and his message (i.e., whether the speaker is affirming, commanding, asking)

or of the relationship of the message's content to reality (i.e., true, possible, probable, necessary). Thus, grammatical categories that distinguish degrees of actuality or desirability of an action are mood categories.

Tone is used in Koh to make one basic mood distinction, which Lyons (1977:816) refers to as the distinction between factive (F) and non-factive (NONF). This distinction has been noted in other Niger-Congo languages, and various terms have been used to express the same phenomenon: real/non-actual, actualized/non-actualized, realis/irrealis, etc. I have chosen to use the terms factive and non-factive.

All Koh verbal roots fall into one of two classes according to their tone in their most unmarked form. This **base** tone is either mid (**koo** in (48)) or low (**ddàŋ** in (49)) and marks factivity. Factivity expresses the actuality of a situation at the time of utterance or time of reference made clear in the utterance.

(48) mì koo fè
 I know:F thing
 'I know something.'

(49) mì ddàŋ mbìh
 I draw water
 'I draw water.'

Non-factivity is indicated by high tone for all verbs. Non-factivity asserts a meaning of potentiality of a situation.

(50) mì kóo fè
 I know:NONF thing
 'I'll know something.'

(51) mì ddáŋ mbìh
 I draw:NONF water
 'I'll draw water.'

These two tone classes, base tone (mid or low) and high tone, express the basic mood distinction between factive and non-factive. The purpose of the following discussion is to further show the range of semantic functions of these two basic mood categories.

4.1.1 Base tone and the factive mood. The factive mood marks a situation that is either fully developed at the time of utterance or has reached a point of stable development at the moment of speaking (Johnson 1980:227). While this is basically a mood distinction, it also implies reference to past or present time. Depending on the inherent aspect of a verb, factive mood indicates past or present, as now explained.

An inherently stative verb in the factive mood with no marked aspect will usually be interpreted, if the context allows, as referring to a situation that is a present reality. For example, *h̥ee* 'to fear' is stative and is interpreted as a present condition when combined with factive mood in (52).

- (52) *m̥i h̥ee f̥e h̥ee*
 I RED thing fear:F
 'I'm afraid of it.'

In the case of an event verb which is inherently telic, however, factivity is generally interpreted as indicating an accomplished fact, and is thus translated with an English past tense (53).

- (53) *ka mbor̥j l̥edd*
 she birth:F child
 'She had a baby.'

Process verbs which center in the internal structure of a dynamic situation are more difficult to interpret as either past or present reality. In the absence of any overriding factor (aspect markers or time reference), an inherent process verb in the factive mood may refer to either a past or present situation and either a completed or a continuous action. Thus, (54) can be interpreted variously as a) past continuous, b) past action, c) present continuous, d) present action.

- (54) *ka ru s̥unum*
 he plant:F peanuts
 'He was planting peanuts', 'He planted peanuts',
 'He is planting peanuts', or 'He plants peanuts
 (general truth).'

Although these are the most general interpretations associated with base tone on stative, event, or process verbs, factivity can express other meanings.

Factive mood on a stative verb may also refer to a fully developed state in the past (55) or even to a general truth (56).

- (55) *liee, m̥i h̥i-h̥ee*
 yesterday I RED-fear:F
 'Yesterday, I was afraid.'

- (56) *m̥i h̥ee nd̥áy-r̥i h̥ee*
 I RED cow-PL fear:F
 'I fear cattle.'

Event verbs which refer to dynamic telic situations may also be interpreted as a present point of action. Thus in answer to the question, "What is he doing?" one can respond:

- (57) ka mbuo hùl
 he build:F house
 'He's building a house.'

It is also possible to interpret factive mood with an event verb as habitual or general truth, although in this case the inherent perfectiveness of the verb is lost. Thus one can ask, "What do the Koh do in January?" and get the response:

- (58) i mbuo hùl
 they build:F house
 'They build houses.'

As indicated above, inherent process verbs can also have this habitual or general truth interpretation in the factive mood. The form of (54) above could be given in reply to the questions, "What does he do in May?" or, "What is his job?"

There is a case in which a verb marked for factive mood (i.e., with the base tone) is used even though the indicated action has not actually occurred at the time of speaking; seemingly, the speaker is so sure that the action will take place that he speaks of it as an actuality. For example, in (59) the speaker is asserting the certainty of his imminent departure by using the factive mood for an event that is not yet a fact. The equivalent in English might be, "I'm already gone."

- (59) mì zòol ró
 I go:F PERF
 'I'm leaving.'

Base tone (mid or low) on Koh verbal roots is the grammaticalization of the factive mood, which basically says, "It is a fact that. . . ." Determining the exact meaning of the verb from among the wide range of possibilities is dependent upon the inherent meaning of the verb, the context in which the verb is employed, and the presence or absence of grammatical aspect markers. A discussion of concrete aspect markers and their interpretation with mood categories is the subject of Sect. 4.2 and Sect. 4.3. In the absence of marked aspect or limitations of context, factive mood can be interpreted as follows:

1. Present continuous
2. Present
3. Past continuous
4. Past
5. Habitual
6. General truth

Which of these various interpretations is the most natural rendering depends on the inherent meaning of the

verb. Inherently stative verbs in the factive are usually interpreted as a stable situation in the present. Telic verbs are interpreted as fully developed action at the time of speaking, and, thus, are past events. Verbs which center attention on the inner dynamics of an action or situation are usually interpreted as either past or present continuous, the choice between these being determined either by contextual or overt markers of time and/or aspect. In summary, factive mood limits the action to the real world of **fact**, with various interpretations possible in that world.

The complement of factive is the non-factive mood (NONF). I now present the way in which non-factive is formally marked and the range of semantic interpretations of the verb in the non-factive mood.

4.1.2 High tone and the non-factive mood. Non-factive mood is indicated by high tone which is placed on the main verb of a simple clause or on the main verb of a subordinate clause in a complex sentence.

Non-factivity is used in Koh to assert possibility or potentiality. Verbs indicating situations which may be further developed are often interpreted as future. One of the functions of non-factive mood is to assert the likelihood of an action occurring in the future. Non-factivity, however, should not be identified with simple future tense: a simple assertion that something is likely to occur reflects the attitude of the speaker concerning the action and is thus a distinction of mood. In addition to stating possibilities, non-factivity is used to express desire/volition/purpose, obligation, contrary-to-fact conditions, as well as hortatives and imperatives. I will now examine briefly each of these semantic distinctions in the use of non-factive mood.

4.1.2.1 Stated possibilities. A simple clause with high tone on the verb is usually interpreted as a possibility (with various degrees of likelihood) unless the context indicates a different interpretation. This is true whether the speaker is asserting the potential for further development of a state (60), an event (61), or a process (62).

(60) m̀ì h́ee f̀è h́ee
 I RED thing fear:NONF
 'I will be afraid' or 'I may be afraid.'

(61) m̀ì mbóŋ léd̀d
 I birth:NONF child
 'I will have a child.'

- (62) ka ddǎŋ mbìh
 he draw:NONF water
 'He will draw water' or 'He may draw water.'

Interestingly, in Karang the various meanings of non-factive mood can in many cases be differentiated syntactically (Ubels 1983:12-26). Stated possibilities are marked by high tone on the verb, whereas in the case of other meanings the high tone is marked within the subject nominal phrase. Ubels classifies stated possibilities (called "non-subjunctive") as predictive and non-predictive. Predictive indicates not only the possibility but the likelihood of an event and is marked by a pre-verbal element **bbày**. This distinction is not found in Koh. Ubels (1983:13-16) groups other uses of non-factive mood under the term "subjunctive" because of the consistent manner in which the high tone is marked in the subject phrase. These syntactic differences do not appear in Koh. Because semantic distinctions are not formally marked in Koh as they are in Karang, I have chosen not to further subclassify the non-factive mood.

4.1.2.2 Desire/volition/purpose. Desire and purpose are expressed in Koh through complex sentences in which non-factive high tone is marked on the verb in a complement clause. Desire is expressed with complement-taking verbs such as the following:

Object Complement-taking Verbs

hìh bbày	'want that'
vbi bbày	'ask that'
goonj bbày	'beg, demand that'

Non-object Complement-taking Verbs

màh bbày	'be sufficient that'
ndàdd bbamba bbày	'be very good that'
ddò bbày	'be good that'
ddò ngoonj bbày	'be important that'

These complement-taking verbs and their sentence structures are treated in greater depth in Sect. 5.1. The following examples show the use of the high tone on the subordinate verb to mark an unaccomplished desired action.

In object complement-taking verbs it is the desire of the subject of the main clause that is being expressed. The subject may desire to perform an action himself (63) or desire another to perform it (64). In both instances, the main verb of the subordinate clause is non-factive.

(63) ka hìh bbày séke zìŋj mù
 he want:F that go:NONF with you
 'He wants to go with you.'

(64) ka hìh bbày hă mù kaw
 he want that give:NONF you stay
 'He wants you to stay.'

In non-object complement-taking verbs it is the opinion or desire of the speaker that is recorded. Sentences with these types of verbs usually follow the pattern of (65).

(65) ndàdd bbày hă mù kaw
 good:F that give:NONF you stay
 'It's good that you stay.'

As seen in the examples above, factive mood, marked by base tone on the complement-taking verb, represents an action/state that has reached a stable point at the time of speaking. The non-factive mood of the second verb marks a situation which has further potential for development and which, in this case, is desired. It is also possible to place high tone on the complement-taking verb. This results in a not-yet-accomplished state of desire, as shown in (66), where both the desire and the desired action are unrealized at the moment of speech.

(66) mì hìh bbày séke zìŋj ni ròobbaáy
 I want:NONF that go:NONF with him again
 'I will want to go with him again.'

The complements of sentences expressing purpose have the same structure as complements of complement-taking verbs. But the matrix clause has a subject performing an action designed to result in the desired action/state indicated by the subordinate clause. Thus, in (67) the purpose of the subject's going is to cultivate. In (68) the subject does something in order to cause someone else to do something.

(67) ka se bbà wáh bbày páh pày
 he go:F to field that cultivate:NONF cultivation
 'He went to the field in order to cultivate.'

(68) mì t̃à bbày h̃àŋja rì h̃à mì ñàŋj
 I stop:F that give:NONF you:PL give:F me millet
 'I'm stopping so that you can give me some millet.'

In both complements of complement-taking verbs and purpose clauses, high tone on the subordinate verb is used to mark non-factive mood.

4.1.2.3 Obligation. Non-factive mood can also be used to indicate that the referent of the subject is obliged to perform the action of the verb. In this case, it is due to some unnamed circumstance or the will of a person. In (69) the non-factive high tone on **seke** 'to go' indicates the obligation placed on the referent by the will of the chief, **mbáy**.

- (69) zàddká mbáy ddií mù lee, mù séke
 when chief call:NONF you CONJ you go:NONF
 'If (when) the chief calls you, you must go.'

In (70) the obligation is due to unnamed circumstances.

- (70) mì híee ngéereewùru híee
 I RED God fear:NONF
 'I must fear God.'

4.1.2.4 Contrary-to-fact. Non-factive mood can be used to indicate contrafactual meaning in the past. In a simple clause the main verb carries a high tone.

- (71) ka kér bbày
 he think:NONF word
 'He should have thought.'

In contrary-to-fact conditions the high tone is on the main verb of the matrix clause (e.g., **léke** in (72)).

- (72) zàddká à se púoo ná ya lee,
 if he go:F home there NEG CONJ

 sòoy, à ti léke ni ya
 snake he NEG bite:NONF him NEG

 'If he had not gone home, the snake wouldn't have bitten him.'

4.1.2.5 Hortative/imperative. A speaker may express his desire that something occur by a direct statement with the non-factive mood. Non-factivity indicates that the situation is outside the control of the speaker. Example (73) is such a hortative clause.

- (73) ngéereewùru, ka sádd zìnj mù
 God he be:NONF with you
 'May God be with you.'

A final use of the non-factive mood is in imperative clauses. Imperatives have been analyzed here as non-factive, although their forms do not always follow the pattern of high tone on the verb, as seen in other

non-factive forms. I now present the form of imperatives and then the reasons for considering them non-factive.

Imperative forms are of various kinds depending on the base tone of the verbs. Those with low base tone form two classes. Those with mid form a third. The majority of low tone verbs form the imperative by a) raising the inherent low tone of the second person pronominal subject to mid and b) marking the verb with a high tone. Examples (74a) and (74b) show the formation of the imperative for Class 1 low verbs.

- (74) a. mù rùma hùh
 you put:out:F fire
 'You are putting out the fire.'
- b. mu rúma hùh
 you put:out:NONF fire
 'Put out the fire!'

A smaller class of low tone verbs (a closed class) form the imperative by raising the tone of the pronoun to high without modifying the tone of the verb. Class 2 low imperative formation is illustrated in (75a) and (75b).

- (75) a. mù yìh
 you come:F
 'You returned.'
- b. mú yìh
 you come
 'Come back!'

Mid base tone verbs form the imperative by raising the tone of the pronoun to mid with no modification of the tone of the verb. Mid base tone imperative formation is illustrated in (76a) and (76b).

- (76) a. mù bber túl tagra
 you nail:F head table
 'You are nailing the table together.'
- b. mu bber túl tagra
 you nail head table
 'Nail the table together!'

In each of the above rules there has been a raising of tone; this suggests a relationship with non-factive marking, which always involves tone raising. Class 1 low is typically non-factive with the high tone marked on the verb, while Class 2 low includes high tone, although it is on the pronoun. It is only mid base tone verbs that are ambiguous, since the pronoun is raised only to mid and not to high and the tone of the verb is not changed at all. In any case,

the imperative forms definitely do not follow a normal factive form, but rather are more like non-factive.

There is an exact correspondence between Class 2 low imperatives in Koh and all imperatives in Karang.¹² Imperative forms in Karang are unambiguously non-factive. This supports the conclusion that Koh imperative forms should be interpreted as non-factive.

Finally, imperative as a notion fits into a non-factive mood category. We have described non-factive as referring to situations in which there is further potential for dynamic development. Non-factive can also express the speaker's desire that an action occur. Non-factive can attest a lack of control of the speaker over the situation. All three of these criteria apply to an imperative clause. In a mood system such as Koh, where there is clearly a distinction between factive and non-factive, imperatives are non-factive.

4.1.3 Rising tone. We stated in the previous section that base tone (mid or low) and high tone are the inflectional forms making the mood distinction between factive and non-factive. I have occasionally noted (when eliciting text material) a rising tone on the verb when there seem to be semantic elements of both factivity and non-factivity. This rising tone appears only infrequently, and I have not as yet been able to predict its occurrence or find a frame in which it could be elicited. A rising tone appears in factive situations in which the action has started. The situations are also non-factive in that the actor expects or intends that this action will continue. Rising tone thus indicates present actuality with future intention. Several examples of rising tone are given here to show how factivity and non-factivity are both semantically present on one verb. In (77) *kăw* 'to stay' has a rising tone.

(77) toom rŏo bba hŭru-sŭo-ná roo zé ná
 cotton first CDOP force-body-our ? TOP we

kăw kéy yah
stay here !

'It's the cotton that's our strength that we can
stay here!'

In (78) *bbòodd* 'to beat' is marked with a rising tone.

- (78) Sùh ná ví mbi pùh, à bbôoddke ni
 Suh there come:NONF take:F wood he beat him
 kpóy-kpóy, à i ni
 pow-pow he kill:F him
 'Suh there gathers up a stick and beats him with it
 "pow-pow," and he kills him.'

In (79) **yàh** 'to take' has a rising tone.

- (79) bbày sù-oo seereem bbe zé hạ ni yàhke
 because body-his hurt his TOP give:F him take
 sàw-pùh
 root-wood
 'Because of his sickness, he is taking medicine.'

In all phrases with rising tone on the verb, this rising tone may be replaced by the base tone. If so, the desirability of continuing the action is de-emphasized, and the verb simply describes the present situation.

Although further work is needed to isolate the factors controlling the use of rising tone, my preliminary analysis is that rising tone combines the semantic notions of factivity and non-factivity on one verb.

4.1.4 Tone perturbation. Inflection in Koh, it has been noted, is restricted to tone representing the mood distinction between factive and non-factive. Lexical tone on the verb (low or mid) represents factive mood while high tone represents non-factive. There is a phenomenon in Koh where under certain conditions, factive tone becomes high. Mid tone on an inherently stative verb which is either reduplicated in an affirmative sentence or carries other verbal elements (adverbs, negation) becomes high when it is followed by a pronoun bearing low tone. This is summarized in the following rule:

V -> V / _____ PRÒ

Condition: the verb (V) is stative and is either reduplicated, negated, or accompanied by adverbs.

The following paradigm illustrates this perturbation of tone. **koo** is a mid tone verb meaning 'to know'. The perturbation of tone is seen on the reduplicated particle of the verb preceding the first and second person singular and the second person plural pronouns.

- (80) a. ka kóo mǐ koo
 he RED me know:F
 'He knows me.'
- b. ka kóo mù koo
 he RED you know:F
 'He knows you.'
- c. ka koo nǐ koo
 he RED him know:F
 'He knows him.'
- d. ka koo bburu koo
 he RED us know:F
 'He knows us.'
- e. ka kóo rì koo
 he RED you:PL know:F
 'He knows you.'
- f. ka koo rǐ koo
 he RED them know:F
 'He knows them.'

As seen from the paradigm the low tone of the first and second singular and the second plural pronouns has caused the normal mid tone of the verb in the factive to rise to high, although the sense remains factive. The same tone perturbation from mid to high has been noted in two other environments, as now explained.

The verbal affix *-ka* carries a high tone when followed by a low tone pronoun. This is true whether the verb involved is in the main clause (81) or the subordinate clause (82). Examples (81a) and (82a) show the mid tone of *-ka* when it is followed by a pronoun carrying mid tone, while (81b) and (82b) show the high tone *-ká* when it is followed by a low tone pronoun.

- (81) a. rúo bburu háŋǎ nǐ nàŋǐ
 há-ka
 tomorrow we give:NONF him millet
 'Tomorrow, we will give him some millet.'
- b. rúo bburu háŋǎ rǐ nàŋǐ
 tomorrow we give:NONF you:PL millet
 'Tomorrow, we will give you some millet.'

(82) a. bburu hìh bbày háǵǵa ni gǵǵ ndìh ròò
 we want:F that ive:NONF him wait little first
 'We want him to wait a minute.'

b. mì hìh bbày háǵǵa rì lo sòro
 I want:F that give:NONF you:PL talk:F visit

zìǵǵ bburu
 with us

'I want you to visit with us.'

The third environment where tone perturbation has been noted is in two-syllable imperative forms where the verb carries a high tone (i.e., Class 1 low).¹³ This high tone is pronounced on the first syllable while the second normally retains its lexical tone. But this lexical tone changes to high before a low tone pronoun. Thus, in (83a) the tone of the second syllable remains unchanged before the mid tone pronoun *ni*, but in (83b) it changes to high before the low tone *mì*.

(83) a. mu úla ni ya
 you deceive:NONF him NEG
 'Don't deceive him!'

b. mu úlá mì ya
 you deceive:NONF me NEG
 'Don't deceive me!'

In each of the three environments in which tone perturbation has been observed, the tone of the verbal form (whether the entire root, an affix, or the second syllable) has been raised to high when followed by a low tone pronoun.

4.1.5 Summary: verbal inflection. Verbal inflection in Koh is limited to the domain of tone and is used to make one basic mood distinction: factive versus non-factive. Factivity, which refers to the actuality/reality of a given situation, is indicated by base tone on the verb. Base tone, either mid or low, is the lexical tone of the verb and can be most readily seen in a negated factive sentence. The complementary mood distinction of non-factivity refers to the possibility/potentiality of a given situation. It is indicated by a high tone on the verb.

Both factivity and non-factivity are notions that can be further subdivided semantically. In the absence of contextual factors imposed by adverbials or aspectual markers, the inherent aspect of the verb will strongly influence how a factive or a non-factive is understood. Thus, factivity may be variously understood as referring to past completed acts, past continuous, present acts, present continuous, habitual, or general truth, depending on the inherent aspect of the verb which bears the factive marking.

Non-factivity may refer to possibilities, desire or purpose, obligation, contrafactual situations, or hortatives and imperatives, again, depending on the inherent aspect of the verb which bears the non-factive marking. Imperatives are analyzed as non-factive. Although they do not always involve high tone on the verb, there is a raising of the tone on some clausal constituent, and their meaning is non-factive as defined here.

Base tone and high tone are the inflectional forms that appear on the verb. A rising tone sometimes occurs. It has been analyzed not as a third inflectional form but as a combination of factivity and non-factivity on one verb. Under certain conditions tone perturbation from mid to high occurs. In these instances the tone changes without a corresponding change of mood category.

4.2 Auxiliaries and aspect distinctions

In addition to the formal marking of mood through verbal inflection, Koh has access to certain grammatical devices that express formal categories of aspect. Aspectual categories refer to "different ways of viewing the internal constituency of a situation" (Comrie 1976:3). By means of syntactic aspect markers, the speaker may either focus upon the entirety of a situation without referring to its duration or internal phases, or focus upon the internal process of the situation. Formal aspect markers indicate how an event is realized. Aspectual distinctions in Koh are indicated by two auxiliaries (Sect. 4.2) and two aspectual particles (Sect. 4.3). Syntactic aspect interacts with the inherent aspect of the verb. The inherent telicity and/or stativity of a verb affects the interpretation of the aspect markers. In this and the following sections I will examine the formal categories and their meaning as they are combined with inherent aspects of the verb.

4.2.1 ddò and 'PROGRESSIVE'. The auxiliary verb **ddò** indicates progressive aspect. As the main verb of a clause, **ddò** is the locative copula meaning 'to be located' or 'to stay'.

(84) mǐ ddò púoo bbi
 I LOC house my
 'I'm home.'

When **ddò** is used as an auxiliary, its complement is a verb obligatorily bearing a high tone.

(85) mǐ ddò mbúo hùl
 I PROG build:NONF house
 'I'm building a house.'

In (85) the low tone of **ddò**, indicating factive mood,

asserts that the situation is real and has reached a certain point of development at the time of the utterance. It is also possible for the auxiliary to carry a high tone, as in (86). In this case the entire situation is placed in the realm of the potential.

- (86) mǐ ddó mbúo hùl
 I PROG build:NONF house
 'I will be building a house.'

The pattern for indicating progressive is as follows:

$$x + ddò/ddó + \check{V} + y$$

The progressive aspect **ddò** marks a subcategory of imperfectivity in that it focuses attention upon the internal temporal constituency of the situation.¹⁴ The use of **ddò** asserts the durativity of a situation, as do all subcategories of imperfective aspect. Progressive aspect is further distinguished within imperfectivity in that it does not imply habituality. It is non-habitual in the sense that the auxiliary **ddò** does not in itself signal an habitual situation, although it can co-occur with an adverbial (phrase) indicating habituality.

- (87) mǐ ddò mbúo hùl bbarjguoo
 I PROG build house always
 'I'm always building houses.'
- (88) bbày féw lèw tédd, múnu ká póla ná mǐ ddò
 with moon ? cold like as before here I PROG
- mbúo hùl
 build house
- 'In January, I'm usually building houses.'

In summary, the primary meanings of the progressive aspect, marked with **ddò**, are durative, non-habitual, dynamic, and progressive.

When **ddò** occurs with verbs which are inherently stative or telic (events), there are resultant changes either in the interpretation of progressive or in the meaning of the verbs. Even with process verbs, which are inherently durative and dynamic, the addition of **ddò** limits the possible rendering of the verb. We examine now the restrictions of effects of combining progressive aspect with the inherent aspectual classes of states, events, and processes.

It would be expected that progressive aspect, which includes a meaning of non-stative, would be incompatible with inherently stative verbs. There are in fact a few verbs which cannot have a progressive form, as in (89).

- (89) *mì ddò hính fè
 I PROG want thing
 *'I'm wanting something.'

Other inherently stative verbs co-occur with the progressive aspect marker, but their meaning is then changed. Thus, in (90a) **koo** may mean either 'to know' or 'to see', but with the progressive in (90b) it can only mean 'to see'.

- (90) a. mì koo fè
 I know thing
 'I see something' or 'I know something.'
- b. mì ddò kóo fè
 I PROG see thing
 'I'm looking at something.'
- *'I'm knowing something.'

In (91a) and (91b) the meaning of **tậ-tậ** changes when it occurs in the progressive construction.

- (91) a. mì tậ-tậ
 I RED-tired
 'I'm tired.'
- b. mì ddò tậ-tậ
 I PROG RED-tired
 'I'm resting.' ? 'I'm still tired.'

When other stative verbs are put into the progressive construction, this overrides their inherent stativity, and the situation becomes dynamic, as in (92) and (93).

- (92) mbính ddò zǎnǎ
 water PROG hot
 'The water is becoming hot.'
- (93) mì ddò nǵgǵoǵnǵ-nǵgǵoǵnǵ
 I PROG strong
 'I'm becoming strong.'

With certain stative verbs it is difficult to determine when **ddò** is an auxiliary, marking progressivity, and when it is the locative in a purpose clause in which **bbây** is optionally deleted. When **bbây** is present, as in (94a), **ddò** is the locative copula, but without **bbây** the function of **ddò** is unclear, as in (94b).

- (94) a. mì ddò bbây tậ-tậ
 I LOC that RED-rest
 'I'm staying to rest.'
- b. mì ddò tậ-tậ
 I LOC/PROG RED-rest
 'I'm resting' or 'I'm staying to rest.'

The preferred construction with the lexical class of intransitive stative verbs is **ddò** with **bbà̀y**. This construction is clearly a purpose clause with a locative copula. This indicates that progressivity is marginally compatible with inherently stative verbs.

In summary, then, progressive aspect may not be used with all inherently stative verbs. When it does occur with these, it overrides the verb's inherent stativity.

When progressive aspect is combined with event verbs, the inherent perfectivity of the verb is overridden by the progressive. The situation is thus viewed dynamically and duratively. The verb remains telic, but the 'built-in' termination point has not been reached, as in (95b).

- (95) a. ka mboŋ lédd
 she birth child
 'She gives/gave birth.'
- b. ka ddò mbóŋ lédd
 she PROG birth child
 'She is giving birth.'

Certain event verbs, when combined with the progressive, can be interpreted iteratively (96).

- (96) ka ddò íka nà̀y
 he PROG kill animal
 'He is killing animals.'

Even here the emphasis is not upon the individual acts but upon the fact that these acts span a period of time.

Process verbs, which are inherently dynamic and durative, readily accept progressive aspect. Marking a process verb as progressive makes explicit the durativity of the situation and excludes a perfective meaning.

- (97) ka ddò rúka sùnum
 he PROG plant peanuts
 'He is planting peanuts.'
- *'He plants/planted peanuts.'

In summary, **ddò** is an auxiliary which indicates progressive, and by implication a situation that is durative, non-habitual, and dynamic. When the progressive appears with an inherently stative (non-dynamic) verb, either the meaning of the verb is changed, or the verb loses its stativity and the situation is viewed dynamically. When combined with an event verb, the progressive aspect causes the verb to lose its inherent perfectivity. Progressive aspect combines naturally with process verbs and excludes a perfective interpretation of the verb.

4.2.2 bba and 'HABITUAL'. In discussing the possible interpretations of state, event, and process verbs in the factive mood with no aspect marked, I stated that, as the context allows, the verb may have an habitual sense (Sect. 4.1.1). There is a formal construction in Koh that explicitly indicates habituality. The descriptive copula **bba** 'to be' (Sect. 3.1) is also used as an aspect auxiliary with the general meaning of 'HABITUAL'. The same construction is found in Karang (Ubels 1983:25-26). But whereas this construction is commonly used in Karang (Ubels, personal communication), in Koh it is limited to contexts relating to giving counsel or instruction to children.

The habitual construction consists of the verb in the factive mood followed by **bba** (glossed HAB) and the same verb in the non-factive mood. If an object is present, it is repeated after **bba** and before the verb in the non-factive (98) and (99).

(98) mù ddah fè bba fè ddáh bugru ya ndáw
 you do:F thing HAB thing do:NONF unjust NEG also
 'Don't be doing things unjustly.'

(99) mù bbah bbày bba bbày bbáh ríbbā-rì ya
 you talk:F word HAB word talk:NONF thief-PL NEG
 'Don't be talking like thieves.'

By using this construction it is possible to form many sentences that are grammatical and refer to an habitual situation. However, they are not commonly used by the Koh. Perhaps the habitual construction had a much wider usage in times past, as it continues to have in Karang, but its usage has narrowed to formal contexts of giving counsel.

4.3 Aspectual particles

In the previous section we have examined the formal aspect categories of progressive and habitual as they are marked by the use of auxiliary constructions. We now turn our attention to a set of two particles which occur at the end of a clause and formally mark an aspectual opposition between imperfective and perfective or non-perfect and perfect. We examine first the particle **bbáy** which is the imperfective marker, although it also carries a non-perfect meaning. Imperfective makes "explicit reference to the internal temporal constituency of a situation" (Comrie 1976:24). The non-perfect indicates that "the situation overlaps an established reference point" (Ubels 1983:29). The second particle of this set is **ró**; it combines perfective aspect with the perfect. Perfective aspect views the situation in its entirety without reference to the internal temporal constituency. The perfect "tells us nothing directly about the situation itself, but rather relates some state to a preceding situation" (Comrie 1976:52).

4.3.1 **bbáy** and 'IMPERFECTIVE'. Part of the meaning of **bbáy**, 'imperfective aspect', is that the situation is "unfolded into its component parts" (Comrie 1976:23). When **bbáy** is used the situation is being viewed imperfectively. **bbáy** is usually translated as 'still' or 'yet'. In (100) we see **bbáy** with a process verb and in (101) with a stative.

- (100) ka ru sùnnum bbáy
 he plant:F peanuts IMPFT
 'He is still planting peanuts.'
 *'He planted peanuts.'

- (101) mì hì-hìee bbáy
 I RED-fear:F IMPFT
 'I'm still afraid.' *'I was afraid.'

The situation is durative, but differs from progressive in that the situation is not necessarily dynamic. It may be a continued state as seen in (101). **bbáy** is not simply continuous since the situation may be repetitive. Example (100) could also be translated as, 'He is planting peanuts again.' When an event verb, which is inherently perfective, appears with the imperfective particle **bbáy**, the resultant meaning is often repetitive, as in (102) and (103).

- (102) ka mborj lédd bbáy
 she birth:F child IMPFT
 'She is having a child again.'

- (103) ka mbuo hùl bbáy
 he build:F house IMPFT
 'He is building again.'

bbáy, therefore, represents imperfectivity. It refers to a state or action which is continuous, durative, and in some instances repetitive. It can co-occur with either the factive or non-factive mood. Lacking any further specification from the context, **bbáy** appearing with the non-factive mood is usually interpreted as referring to a continued state/action in the future (104) and (105).

- (104) ka mbúo hùl bbáy
 he build:NONF house IMPFT
 'He will be building (other) houses again.'

As seen in (105), this future continued state/action may either be the continuation of a present state/action into the future or be another instance of the state/action started in the future.

- (105) ka ddí sìm bbáy
 he sing:NONF song IMPFT
 'He'll be singing again' or 'He'll still be singing.'

Imperfectivity, then, is the principal meaning of the aspect particle **bbáy**. **bbáy** also has a non-perfect aspectual component to its meaning, in that it locates the situation in temporal reference to some external time point.¹⁵ Thus, **bbáy** functions in opposition to the particle **ró** (cf. Sect. 4.3.2). In marking the non-perfect, **bbáy** is used in relation to an established reference point that may be the moment of speech, a time in the past or future, or even a completely relative time, as seen in the following examples:

(106) Moment of speech:

púoo ddò bbáy kère bbáy
village LOC with good IMPFT
'The village is still fine.'

(107) Relative time:

bbe rǎo, mù kǎwke waqa bbáy
that then you rest a:little IMPFT
'With that (by doing that) you will be resting secure.'

(108) Future:

nàŋ, à gǎŋ bbà póla bbáy
millet it grow:NONF to advance IMPFT
'The millet will continue to grow.'

The particle **bbáy**, then, combines the aspectual categories of imperfective and non-perfect.

4.3.2 ró and 'PERFECT'. Where **bbáy** marks imperfective and non-perfect, **ró** marks perfective and perfect. In marking perfectivity, **ró** is completive and presents the situation as a whole, without reference to any internal phases of that situation. It refers to a "complete situation with beginning, middle, and end" (Comrie 1976:18). In the following sentences the entire act is in focus and not simply the termination of the act.

(109) mì mbuo hùl ró
I build house PERF
'I've already built a/the house.'

(110) ka mborŋ lédd ró
she birth child PERF
'She has already had a/the child.'

The perfective form may in fact indicate the completion of an act/state, as when an inherently perfective form in the factive mood with the particle **ró** indicates a fully developed situation in the past. But there are instances when the perfective form actually has an inceptive meaning.

This is the case with certain stative verbs in the factive mood. Example (111) illustrates this.

- (111) mǐ hjee ndà y rǒ
 I fear:F cow PERF
 'I began to fear cattle.'

While the perfective of some stative verbs indicates entry into that state, for other statives it describes a state which has been fully developed in the past, as with the verb *kèr* 'to think' in (112)

- (112) mǐ kèr bbà y rǒ
 I think:F word PERF
 'I've already had an idea' or 'I've already
 thought of that.'

When the perfective marker *rǒ* is combined with a process verb in the factive mood, the resultant meaning is that an instance of that verb has been accomplished in the past. In (113) the entire act is past.

- (113) ka ddaŋ mbìh rǒ
 she draw:F water PERF
 'She has already drawn water.'

It is more difficult to ascertain the sense of *rǒ* when it is combined with the non-factive mood. In a simple clause I have not found an instance where non-factivity and *rǒ* co-occur on stative verbs. With event and process verbs, high tone and *rǒ* seldom appear together in a simple clause. When they do it is with the sense that an instance of the given situation will certainly recur. As noted below (114, 115), *rǒ* does co-occur with verbs in the non-factive mood in certain types of complex clause constructions.

In each of the examples given above, *rǒ* not only refers to the whole of a situation, but it also refers to that situation as occurring prior to a specific reference point of time but still affecting that reference point. The reference point above is the moment of speech. Thus, in (109) the house still stands, in (110) she still has a child, in (111) I still fear cows, etc. *rǒ* in this manner marks the perfect. When the point of reference is the moment of speech, *rǒ* expresses the relation between the present state and the past situation. As the perfect marker, *rǒ* can also mark the relation between a past state and an even earlier situation or between a future state and an earlier situation (Comrie 1976:53). It is in the last relationship that we often find *rǒ* appearing with non-factivity. In (114) and (115) the action of the main clause modified by *rǒ* will occur in the future, but before the action expressed in the subordinate clause.

- (114) zàddká mì yìh, mí vi lee, Serafine,
 when I return:F I come:F CONJ Serafine

 à zínj lédd-pyanj rǒ
 she find:NONF child-baby PERF

 'When I return, Serafine will already have had
 her baby.'
- (115) zàddká mù ddò kǎ bbày lee, bbi, mì bbáh
 when you PROG think word CONJ me I talk:NONF

 bbày rǒ
 word PERF

 'When you are still thinking, I will already have
 finished talking.'

In summary, the particle *rǒ* combines the aspectual notions of perfective and perfect.

5 Complex constructions: complement-taking verbs and serial verbal constructions

Having described the formal TAM categories of Koh in Sect. 4, I turn now to the consideration of two complex verbal constructions that occur very frequently: complement-taking verbs and serial verbal constructions. In Sect. 5.1 I examine the two types of complement-taking verbs and the sentence constructions in which they occur. In Sect. 5.2 serial verbal constructions are examined.

5.1 Complement-taking verbs

There are two types of complement-taking verbs: those taking object complements and those taking complements that are not objects. Object complement-taking verbs have an overt subject which is the agent of the complement-taking verb. Non-object complement-taking verbs have no nominal functioning as subject. The verbal elements (aspectual particles, adverbs, and the negation marker) are obligatorily clause final in object complement-taking verbal constructions, but may occur in non-final position in non-object complement-taking constructions. These distinguishing features can be seen in the examples that follow in this section.

5.1.1 Equi-construction. In this first type of construction, which is restricted to object complement-taking verbs, there is no overt subject in the complement clause, but the subject of that clause is understood to be co-referential with the subject of the matrix clause. The subordinate verb is always in the non-factive mood, indicating a potential but unrealized situation in relation to the complement-taking verb in the

matrix clause. In (116) and the following examples the complement clause is introduced with the complementizer **bbày** 'that'.

- (116) mì hìh bbày séke zìnj ni
 I want:F that go:NONF with him
 'I want to go with him.'

Aspectual particles, adverbs, and the negation particle are clause final. It may occasionally be unclear which verb is being modified, as illustrated in the glosses of (117).

- (117) mì hìh bbày séke zìnj ni ròobbáy
 I want:F that go:NONF with him again
 'I want again to go with him (may never have gone
 before)' or 'I want to go with him again.'

5.1.2 Manipulative with bbày. When the speaker/subject desires another person to do something, another construction is used as follows:

- (NP) + V + bbày + há + NP + V +/- NP +/- x
 COMP give:NONF +F

Either an object complement-taking verb (118) or a non-object complement-taking verb (119) may occur in the matrix clause.

- (118) mì hìh bbày há mù kaw
 I want:F that give:NONF you stay:F
 'I want you to stay.'

- (119) ndàdd bbày há mù kaw
 good:F that give:NONF you stay:F
 'It's good that you stay.'

In a sentence using a complement-taking verb the speaker/subject is attempting to influence or manipulate a situation over which he may have little or no control. This may account for the indirectness manifested in the subordinate clause, which means literally, 'give/cause or let x do y.' **hà** in an independent clause is the verb 'to give' and is used here as a form of causality. We will see in Sect. 5.2.1 that **hà** is often used in Koh in conjunction with another verb with the meaning of 'permit' or 'oblige/make'. When **hà** functions as the main verb of the subordinate clause, it is always non-factive while the second verb is factive. Although it is rarely seen, it is possible to omit **hà** and use only the other verb, which is then always non-factive. Example (120a) is the more frequent construction with **hà**. In (120b) **hà** is omitted.

- (120) a. ndàdd bbamba bbày hă mù bbo
 good very that give:NONF you counsel:F

vu-oo
 son-your

‘It’s good that you counsel your son.’

- b. ndàdd bbamba bbày bbóko vu-oo
 good very that counsel:NONF son-your
 ‘It’s good that you counsel your son.’

In the subordinate clause the object of **hă** is always the same referent as the subject of the second verb. If the object of **hă** in the subordinate clause is the second person singular (**ni**) or plural (**ri**) or the third person plural (**ri**) pronoun, a problem arises since these pronouns have separate forms for the subject or object. We find in this case that the object pronoun is used and that the corresponding subject pronoun may optionally follow, as in (121) and (122).

- (121) à ndádd bbamba bbày hă ni
 and good:NONF very that give:NONF her

(à) vi
 she return

‘It will be important that she return.’

- (122) liee, mì vi mí kèr bbày hă ri (i)
 yesterday I come I desire that give them they

kpà (i) kpà mì làri
 loan they loan me money

‘Yesterday I came, wanting them to loan me money.’

Since the subordinate clause verb is always non-factive, the temporal reference point of the verb is ambiguous unless specified by a temporal adverb or phrase. When the action expressed in the subordinate clause is subsequent to the time of the complement-taking verb, temporal phrases can be used to specify the relationship. In (123), for example, the desire expressed by the complement-taking verb is present, but the desired action is for a future time. The action expressed by the complement-taking verb may also be unrealized at the moment of speech and the action desired be at an even further unrealized time, as in (124).

- (123) mì hinh bbày hă mù vi rúo
 I want:F that give you come tomorrow
 ‘I want you to come tomorrow.’

- (123) mǐ hǐh bbày há mù vi rúo
 I want:F that give you come tomorrow
 'I want you to come tomorrow.'
- (124) ka vbíka mù tílaw káy bbày há mù se
 he ask:NONF you evening this that give you go

 nzáh-mbìh rúo
 river tomorrow

 'He will ask you this evening to go to the river
 tomorrow.'

Whereas verbal elements only occur clause finally with object complement-taking verbs, they may occur immediately after non-object complement-taking verbs (125a) or sentence finally (125b), depending on the intended meaning.

- (125) a. ndàdd bbamba ròbbáy bbày há rì zùo zìŋ kị
 good very still that give them place with REFL

 zìŋ kị
 with REFL
 'It's still good that they agree together.'
- b. ndàdd bbamba bbày há rì zùo zìŋ kị
 good very that give them place with REFL

 ròobbáy
 still

 'It's good that they still agree together.'

5.1.3 Manipulative with zàddká. This construction occurs only with non-object complement-taking verbs and is formed as follows:

V + zàddká + Complement Clause

zàddká is a subordinating conjunction which may be translated as 'if', 'when', or 'that'. It can introduce a conditional clause (126), a temporal situation (126), or a general truth statement (127).

- (126) Conditional or temporal:

 ndàdd bbamba zàddká mù se hùl sàw-pùh
 good very CONJ you go:F house root-wood
 'It is good when/if you go to the dispensary
 (specific situation).'

(127) General truth:

ndàdd bbamba zàddká máy-rì ddah mbìh sì hùh
 good very CONJ woman-PL do:F water on fire
 'It's good that women boil water.'

In this construction there tends to be agreement of factivity/non-factivity between the complement-taking verb and the subordinate verb. Thus, in (128) both verbs are non-factive, whereas in (126) they are both factive.

(128) à ndádd bbamba zàddká mù séke hùl
 and good:NONF very that you go:NONF house
 sàw-pùh
 root-wood

'It will be good/better when you go to the dispensary.'

There are exceptions to this tendency, as in (129).¹⁶

(129) à ndádd bbamba zàddká ka yìh, à
 and good:NONF very CONJ she return:F she
 vi
 come:F

'It will be important that she return.'

5.1.4 Explicit benefactor and ká. In contexts other than with complement-taking verbs **ká** is used straightforwardly as a relativizer, introducing either a subject relative clause

(130) or an object relative clause (131).

(130) ka bba lédd ká kàw zìŋ yù-míee
 she DCOP child REL stay with brother-mother:her
 'She was a child who stayed with her uncle.'

(131) mbána ká mì mgbà ku ná, mì ddah pédd...
 engagement REL I take there here I do work
 'The engagement that I entered, I worked. . .'

There is a special usage of **ká** with complement-taking verbs, where **ká** is used rather as a complementizer 'that' to introduce a subordinate clause. The matrix clause includes either a subject with an object complement-taking verb or a non-object complement-taking verb and a benefactive phrase. The function of this construction is to make explicit the beneficiary of the desired action of the subordinate verb.

- (132) ndàdd bbamba bbày púo ká mì se ddi
 good very for village COMP I go:F there
 'It's good for the village that I go there.'

It is possible for the beneficiary to be the subject of the subordinate clause, in other words, the agent who performs an action from which he is the beneficiary (133).

- (133) ndàdd bbamba ró bbày nzòbb-rèw-púo-rì
 good very PERF for person-eat-village-PL

 ká i mạy bbày zìŋ kị
 COMP they talk word with REFL

 'It's good for the authorities that they discussed together.'

Contrary to what is seen in the other complement-taking verbal constructions, in the case of these *ká* complements the verb may be factive or non-factive, and such mood marking is based solely on the semantic-pragmatic factors relating to the *ká* clause itself, independent of the factivity marking in the matrix clause. Thus, as (132) above indicates a realized situation, (134) indicates a potential situation.

- (134) ka hìh bbày púo ká mì séke bbà bbàddi
 he want for village COMP I go:NONF to there
 He desires for the village that I would go there.'

5.2 Serial verbal constructions

Serial verbal constructions (henceforth SVC) are another phenomenon occurring in the Koh verbal system. A. Bambose (1974:17) defines SVCs or "serial verbs" as a term applied "to the combination of verbs found in many West African languages where all the verbs share a common subject in the surface structure." An SVC is a construction in which two or more verbs appear within a single simple clause in which there is only one subject. In Koh, the first verb in an SVC carries the TAM distinctions while the following verb(s) is/are marked as factive by the base tone.¹⁷ While in some African languages there is a wide range of verbs which appear in SVCs, the number of verbs in Koh which admit serialization with other verbs is restricted. It is thus feasible to state a closed list of verbs which occur in serial constructions.

On the basis of semantic distinctions, it is possible to speak of two basic types of SVCs in Koh. These two types are referred to by Bambose (1974:18) as **linking SVCs** and **modifying SVCs**.¹⁸ In linking SVCs each verb retains its own meaning (although this meaning may be modified slightly), and there is present in the verbal string the idea of simultaneity, sequence, and/or consequence. Modifying SVCs, on the other hand, lack sequentiality or consequentiality.

Modifying serial verbs function "merely to modify the meaning of the other verbs with which they occur" (Bamgbose 1974:33). In the following two sections (5.2.1 and 5.2.2) we will examine the principal verbs which occur with these two types of SVCs and which exemplify the types of constructions which are found within each type of SVC.

5.2.1 Linking SVCs. In this section I examine three verbs that occur frequently in linking SVCs. These are **hà** 'to give', **vi** 'to come', and **vă** 'to go'.

5.2.1.1 **hà 'to give' - 'benefactive/causal'.** In a simple clause **hà** as a main verb means 'to give', as seen in (135).

- (135) mĩ **hà** mù fè
 I give you thing
 'I give/gave you something.'

In SVCs **hà** may be used to indicate a benefactive relationship. In this function **hà** is always the second verb in the verbal string, as seen in (136) and (137).

- (136) ka zùo ngáw **hà** bburu
 she make food give us
 'She is making food for us.'

- (137) i yàh mǎy **hà** ni
 they take wife give him
 'They took (found) a wife for him.'

This same construction is found in sentences with bitransitive verbs when the indirect object becomes the direct object. Example (138a) shows the normal order in bitransitive clauses. Example (138b) shows the corresponding clause using **hà**.

- (138) a. mù kíee mĩ nzáh Koh
 you teach me language Koh
 'You are teaching me Koh.'
- b. mù kíee ni **hà** mĩ
 you teach it give me
 'You are teaching it to me.'

We have already noted in the discussion on complement-taking verbs (Sect. 5.1.2) that **hà** can be used to indicate causality. **hà** also has this function in serial verbal constructions of consequence. When one action results in another action, this is often expressed in Koh with an SVC using **hà** and another verb.

- (139) lee, làw-ee ví fah ni púh h̃a ni zo
 and heart-his come anger him a:lot give him jump
 zo kuruk
 jump far

'And becoming very angry, he jumped a long way.'

- (140) mù se, mú ṽa yah fè nzòbb h̃a mboolke
 you go you go take thing person give debt
 ka ddò túl-a ya
 it LOC head-your NEG

'Don't go take something from someone so that a debt is over your head.'

h̃a appearing in an SVC, then, has the function either of indicating a benefactive relationship or of indicating causality.

5.2.1.2 vi 'to come'. A very common SVC involves the verb vi 'to come' followed by another verb in a sequential relationship. Sequentiality of action is the interpretation of vi when it is followed by an active verb, either an event (141) or a process (142).

- (141) mì vi mbuo hùl
 I come build house
 'I came and built a house.'

- (142) mì vi ru sùnnum
 I come plant peanuts
 'I came and planted peanuts.'

When vi is followed by a stative verb, two interpretations are possible. First, if the idea of movement is still present, the second verb can describe the state of the subject who is coming. Thus, in (143) the state of being tired is simultaneous to the action of coming.

- (143) mì vi t̃a-t̃ah
 I come tired
 'I came tired' or 'I was tired when I came.'

Second, with verbs describing mental activities/perceptions, when the idea of movement is excluded, vi is used to describe a recent past occurrence. The semantic content of vi meaning a movement in space toward a location is metaphorically extended to mean a movement in time toward a moment.

- (144) ka vi yìŋnra
he come forget
'He just forgot.'
- (145) para nún-i ví koo fè
seed eye-my come see thing
'My eyes are just starting to see (understand).'

In SVCs with **vi** the point of time of reference is the location of the speaker or the moment of speech, unless otherwise specified.

5.2.1.3 **vă** 'to go'. The verb **vă** contrasts with **vi** in SVCs. While **vi** + **V** means 'come and do', **vă** + **V** means 'go and do'. SVCs with **vă** are illustrated with an event (146) and with a stative verb (147).

- (146) ka vă mbuo hùl
he go build house
'He left and built a house.'
- (147) mì vă hị-hịee
I go fear
'I left and was afraid.'

The verb **vă** here represents a displacement in space from the location in which the statement is made to or towards another place. It is difficult to find a statement in which the idea of movement is not present, as evidenced by the fact that **vă** is interpreted spatially even with most stative verbs, (147). When the idea of movement is not made explicit or is excluded, **vă** takes on a secondary meaning of immediacy in the future. Here it represents a displacement in time from the moment of speech to or towards another moment. In (148) **vă** may mean 'go' or 'immediacy'.

- (148) ka vă ru sùnnum
he go plant peanuts
'He is leaving to plant peanuts' or 'He will plant peanuts.'

The status of **vă** as a verb is problematic in that it never occurs as an independent verb in a simple clause. The active verb form **se** 'to go' is used in simple clauses to depict movement away from a source. In spite of this, **vă** is interpreted as an anomalous verbal form in SVCs for the following reasons:

The form **se** never occurs in an SVC. It is always replaced by **vă**. **se** and **vă** may co-occur in a multiple clause (cf. Sect. 1.5.2.2).

- (149) mĩ se, mĩ vǎ ddaŋj mbĩh
 I go I go draw water
 'I went and drew water.'

vǎ is rejected as an auxiliary form since the following verb carries a factive (base) tone, whereas with known auxiliaries the following verb is always non-factive.¹⁹ For the same reason **vǎ** cannot be part of the modal system (marking likelihood/near future possibility), since one would in such a case expect **vǎ** to be combined with high tone/non-factivity. In addition, if **vǎ** were to be a particle representing likelihood in the modal system, one would expect it to be able to modify any verb of movement. In fact, it cannot co-occur with verbs of movement toward something. This same fact is easily explained if **vǎ** is a verb indicating movement away from something.

vǎ can also not be interpreted as part of the aspectual system, since it can occur with any of the established aspect markers.

- (150) a. ka vǎ mbonj lédd ró
 she go birth child PERF
 'She already left to have a child.'
- b. ka vǎ mbonj lédd bbáy
 she go birth child IMPFT
 'She left again to have a child.'
- c. ka vǎ ddò kér bbáy
 he go PROG think word
 'He left thinking.'

Thus, **vǎ** cannot be accepted as an auxiliary or part of the modal or aspectual systems. In most instances **vǎ** carries the meaning of directional movement away from something. In cases where movement is excluded as a possible sense of **vǎ**, it carries the idea of immediacy in the future, parallel to the usage of **vi** as recent past. **vǎ** functions as a replacement for **se** 'to go' in serial constructions. For these reasons **vǎ** is interpreted as a verb that occurs in linking SVCs.

5.2.2 Modifying SVCs. Unlike linking constructions in which each verb retains its meaning in the "linking" or combining of two or more actions, modifying verbs in SVCs cannot be interpreted according to their meaning as main verbs in a simple clause. In the modifying SVC the sentence has only one verbal action which is modified by a second verb. In this section two verbs that commonly occur in modifying SVCs are considered: **òò** 'to be finished' (5.2.2.1) and **màh** 'to be sufficient' (5.2.2.2). They are representative of a small class of verbs that occur in typically serial constructions with the function of modifying another verb. I have analyzed these forms as

verbs, although they may be in the process of losing their verbal characteristics and beginning to function more like adverbs. A third construction involving the verb **ddah** 'to do', which has some of the characteristics of a modifying SVC, is considered in Sect. 5.2.2.3.

5.2.2.1 òò 'to be finished'. òò in a simple clause is the verb 'to be finished'. Used in an SVC as a post-verbal modifier, it indicates the termination of the action of the verb.

(151) i sa gbána òò ríw bele
they extend net finish all together
'They all finished extending their nets.'

(152) ka kàh hùl bbe ná òò ya bbáy
he roof house his there finish NEG IMPFT
'He hasn't yet finished roofing his house.'

When òò is used in an SVC, there are no two other phrases that would have the equivalent meaning of the one sentence with the SVC. That òò simply modifies the action of the first verb and cannot be regarded as a separate clause is confirmed in that negation of the modifier (as in 152) is in fact negation of the SVC. It would be impossible to negate the verb and retain the sense of òò 'finish'.

5.2.2.2 màh 'to be sufficient'. Another post-verbal modifier is the verb **màh**, which as a main verb means 'to be sufficient/enough' or 'to be able', as seen in (153).

(153) pédd màh mì ró
work:N sufficient me PERF
'I have sufficient work already.'

When **màh** appears in an SVC following the main verb, it must have an overt object, although **màh** itself modifies the preceding verb. As with òò above, negation of the modifier **màh** is sentence negation.

(154) mbàm síwni too màh fè ya hóy
rain:N year:this rain:V enough thing NEG only
'It hasn't yet rained enough this year.'

The SVC in which **màh** occurs can be used in Koh to express equative, and with the negative particle to express the comparative 'less than'. In both cases **màh** is followed by a nominal.

(155) ka sù fè màh mù
he eat thing equal you
'He eats as much as you.'

- (156) ka ddah pédd màh bieee ya
 he do work equal father:his NEG
 'He works less than his father.'

The verb **màh** co-occurs with **fè** 'thing' in an SVC to express the sufficiency of an action, as seen in (154) and the following examples:

- (157) ka kèr bbày màh fè
 he think word enough thing
 'He thinks enough.'
- (158) ka ddò bbáy wáh màh fè
 he LOC with field enough thing
 'He has enough fields.'
- (159) zàddká à ngooŋ màh fè lee, à sé kɪni
 when he grow enough thing CONJ he go hunting
 'When he is big enough, he'll go hunting.'

In each of these SVCs **màh** does not have an active verbal sense but is merely serving to modify the action described by the first verb.

5.2.2.3 ddah 'to do'. In a simple clause **ddah** as a main verb means 'to do', as seen in (160).

- (160) mì ddò ddáh pédd
 I PROG do work
 'I am working.'

When **ddah** appears with another verb in a single clause, the clause has the following construction:

NP + ddah + NP + V

In this construction **ddah** carries the TAM distinctions, and the second verb is always factive (161a) and (161b).

- (161) a. mì ddáh gári ngádd
 I do:NONF clothes hang:up:F
 'I will hang up the clothes.'
- b. *mì ddah gári ngádd
 I do:F clothes hang:up:NONF

There are certain verbs in Koh which obligatorily occur with **ddah** when the action is not reflexive with the subject. Examples are **ddah** . . . **ndùò** 'to bury', **ddah** . . . **mu** 'to hide', **ddah** . . . **zuoo** 'to place', and **ddah** . . . **ngádd** 'to hang up'.

- (162) a. bburu mu-mu
 we RED-hide
 'We hide ourselves.'
- b. bburu ddah ndàw-hùh mu
 we do trap-fire hide
 'We hide the weapons.'
- (163) a. bburu ndùo lúoo
 we enter hole
 'We enter the hole.'
- b. bburu ddah pùh ndùo lúoo
 we do stick enter hole
 'We bury the stick.'

Syntactically, **ddah** does not appear to function as an auxiliary in this construction, since the following verb is marked for the factive mood. Likewise, it does not appear to be a complement-taking verb, since it is never followed by the complementizer **bbày**. In addition, the complements of **ddah** in this construction are very different structurally from complements of complement-taking verbs.

As with the modifying serial verbal constructions discussed above, **ddah** does not retain its own verbal meaning. But it does not have a modifying function that is similar to **òo** or **màh**. It functions, rather, as a causative with inanimate objects and with only a limited set of verbs. The linking SVC with **hə** (Sect. 5.2.1.1) is the primary causal construction in Koh.

ddah also differs from **òo** and **màh** in that it is the first verb in a clause, while **òo** and **màh** both occur after the verb they modify. Bangbose (1974:34,36) makes the observation, though, that modifying verbs may either precede or follow another verb in serial constructions. He cites several African languages that have both types of modifying verbs. I do not have sufficient data in Koh to establish whether or not other "pre-verbal" modifying verbs occur.

It will be necessary to investigate further the use of **ddah** with a second verb before making a final conclusion as to its status. Because it has certain syntactic and semantic properties that are characteristic of modifying serial verbal constructions, I have made the preliminary analysis that **ddah** here is acting as a verb in a modifying SVC.

5.2.3 Summary. While serial verbal constructions occur in Koh, they are less numerous and less complex than in some African languages. Several of the main SVCs which occur frequently have been discussed above. Both linking and modifying SVCs occur in Koh. Linking SVCs which occur frequently have been discussed above. Both linking and

modifying SVCs occur in Koh. Linking SVCs of high-frequency occurrences are those which include verbs carrying meanings of beneficiary, causality, and direction (both "coming" and "going"). Post-verbal (*òo* and *màh*) modifying serial verbs occur. Pre-verbal *ddah* also occurs in a serial construction, where it functions as a causative. In modifying SVCs there is only one action expressed in the clause, whereas in linking SVCs two or more actions are linked together.

6 Summary of verbal forms and their primary meanings

In the analysis of the Koh verbal system, I have attempted to describe the grammatical forms used and their syntactic properties, and to define the basic functions or meanings of each form. I have also attempted to describe some of the interdependencies among inherent aspectual properties of the verb, mood categories, and aspect categories. The base of study has been the sentence. I have emphasized TAM categories in the verbal system and two complex verbal constructions: complement-taking verbs and serial verbal constructions.

This study should provide a foundation for further study. There are two areas of the verbal system that require further investigation: a) the interrelationships of TAM categories between themselves and with other verbal and non-verbal categories, and b) the systematic study of verbal forms and constructions in discourse.

In speaking of the categories of tense, aspect, and mood, Wallace (1982:202) states, "It is an arbitrary division of verbal semantics into compartments which are not quite as easily separable as one is led to believe. Time, aspectuality, and modality--the semantic fields to which the formal categories of tense, aspect, and mood are supposed to refer--are almost inextricably scrambled together." In categorizing forms as "aspect" or "mood," I am stating that their most salient features are within these categories. There is no question that there is considerable overlap among time, modality, and aspectuality in Koh. Much more study needs to be done to identify the semantic properties of verbal categories and their interaction with each other.

In this paper I have described the semantic and syntactic functions of verbal categories independently of their pragmatic functions in discourse, since I haven't yet systematically studied discourse structures. I agree with Wallace (1982:207): "Verbal categories are important components in the structure of discourses, and indeed, that one does not truly understand 'the meaning' of a verbal category in a particular language unless one understands its place in discourse." The analysis of the verbal system which has been presented here is a base from which a discourse perspective may proceed.

In what follows, I summarize the verbal categories and their basic meanings and interrelationships in order to provide an overview of the Koh verbal system.

6.1 Terms and definitions of Koh verbal categories

6.1.1 Inherent aspectual classes

States: non-dynamic, durative situations

Events: viewing a situation perfectly; limited in this study to telic situations, whether these are punctual or durative; dynamic

Processes: viewing a situation imperfectly; dynamic; durative; atelic

6.1.2 Mood categories

Factive: a real situation--fully developed or at a stable point of development

Non-factive: a possible or potential situation

6.1.3 Aspect categories

Progressive: marking a situation as dynamic, durative, and non-habitual

Habitual: marking a situation which is characteristic of an extended period of time

Imperfective: marking a situation as continuous, durative, and in certain cases repetitive; includes as a special case habituality; includes the temporal notion of non-perfect

Perfect: viewing the situation in its entirety, complete; includes the temporal notion of perfect

6.2 Interaction of mood and aspect with states, events, and processes²⁰

The following three charts show some of the interpretations given to states, events, and processes when they are combined with formal aspect and mood categories.

STATES

	FACTIVE (BASE TONE)	NON-FACTIVE (HIGH TONE)
	Primary meaning: a present reality; a stable state	Primary meaning: possibility (often with a future meaning)
UN-MARKED	Other: past state, a general truth	Other: desire/purpose (following complement-taking verbs); obligation; contra-factual in the past; hortative; imperative
	Incompatible with certain states (e.g., hɪh 'to want')	
	Changes the meaning of certain verbs to denote a process (+dynamic)	
PROG	ddò Cancels the stativity of certain verbs	
		Unrealized
	A continued state	A continuous state in the future
IMPFT		a) Continuous from the present
bbáy		b) Continuous from an unrealized time
	Other: coincides to a point in time	
	Inceptive (i.e., entry into a state still in effect at the moment of speech)	No forms found
PERF	Other: fully developed state in the past (-durative)	
ró	Precedes a point in time	

EVENTS

	FACTIVE (BASE TONE)	NON-FACTIVE (HIGH TONE)
	Primary meaning: an accomplished fact (i.e., past action)	Primary meaning: possibility (often future)
UN-MARKED	Other: present action; habitual; general truth (-perfectivity)	Other: (cf. stative non-factive)
	Special: imminent event	
	Causes the verb to lose its inherent perfectivity; the situation becomes durative, and the termination of the event hasn't occurred (-perfectivity)	
PROG ddò	Iterative for certain verbs Realized	Unrealized
	Repetitive	Future repetition of an act that has occurred before
	Other: an action in process	Other: certainty that the action will recur
IMPFT bbáy	(-perfectivity) Coincides to a point in time Special: with ddò, 'is still V + ing'	
	Completed act in the past Other: indicated completion of termination point	"Future perfect" in a co-ordinating clause (i.e., 'will already have + V')

PERF
ró

precedes a point in time

Special: with **ddò**--inceptive
 and progressive, 'has started
 V + ing'

PROCESSES

	FACTIVE (BASE TONE)	NON-FACTIVE (HIGH TONE)
	Primary meaning: either a past or present continuous situation	Primary meaning: possibility (often future)
UN-MARKED	Other: past action; present action; general truth: habitual	Other: (cf. stative non-factive)
	Excludes a perfective meaning	
PROG ddò	Realized	Unrealized
	Continuous action (current or in the past)	Future continuous action a) Continuous from the present b) Continuous from a future point
IMPFT bbáy	Other: repetitive	
	Coincides to a point in time	
	An instance of the verb has occurred in the past (-imperfectivity)	"Future perfect" in a co-ordinate clause (-imperfectivity)
PERF ró	Other: precedes a point in time	

Notes

1. The phonological analysis of Koh is being done by my colleague, Ms. J. Camburn.

2. By saying that Koh is an SVO language, I mean that it has an SVO basic clause order and that it has most of the word order properties of VO languages as established by Venneman and discussed by Comrie (1981:80-96): that is, Koh has prepositions, genitive following the noun, modifiers following the noun, and pre-verbal auxiliaries.

3. The simplest way of finding the most unmarked form of the verb in Koh is in the negated factive sentence because a verb root cannot be reduplicated in a negated clause. In order to establish a verb's lexical tone in an affirmative sentence, it is necessary to know where the base tone occurs in a reduplicated verb.

4. Ubel (1983).

5. **-ka** is subject to vowel harmonization by the following rule:

-ka	->	kV	/	(C) V	(C)
		-hi		-hi	
		bac		bac	
		lo		lo	

In addition, since nasalization is a word level function, **-ka** becomes **-ŋa** when it is affixed to a nasalized verb root.

6. A small class of bitransitive verbs (+O,+IO) are included within the discussion of transitive verbs since they function in an identical manner within the verbal system.

7. It is clear that reduplication has more than one function, since it is also possible to retain an object and reduplicate the verb. Thus, **mì sɿ fè sɿ** 'I'm eating something.' However, that it has a grammatical function is indicated in that an object cannot be deleted without reduplication taking place.

8. Strictly speaking, inherent aspectual distinctions refer not simply to a verb, but to a verb and its complements, i.e., to a situation. For example, a verb may in certain situations be telic ('to plant a tree') and in others be atelic ('to plant peanuts'). When I refer in this paper to the inherent aspect of the verb, it should be understood that the verbal complements are specifically chosen so as to insure the given aspect.

9. For the formation of these three classes in Koh I have

benefitted greatly from the work of Ubels (1983). We have both been guided by Comrie (1976).

10. The verb **koo** can also mean 'to see'. I've chosen to use **koo** in examining the relationships between inherent and syntactic aspect since certain syntactic markers require **koo** to be interpreted non-statively.

11. As Welmers (1973:345) points out, 'He plants' is not an acceptable English phrase in and of itself. One must say, 'He is planting' or 'He plants every year at this time.' The difficulty is in finding an English phrase for an acceptable concept in Koh that distinguishes continuous from present where English does not, at least for this type of verb. Koh does have a distinct aspect marker which excludes a simple present action rendering. But a verb in the factive mood without explicit aspect markers can have either a continuous or a "point of action" meaning.

12. In contrast to the Koh situation, in Karang all verbs, whether the base tone is low or mid, form the imperative by raising the tone of the pronoun to high without modifying the base tone on the verb. In addition, non-factive formation in subordinate clauses with a pronominal subject follows the same pattern (Ubels, personal communication). In both Koh and Karang the pronoun is optionally deleted. In this case the tone of the verb is still guided by the rules of imperative formation.

13. There is only one phonemic tone per morpheme, on the first syllable, and this is marked in the orthography. The change in tone caused by perturbation is marked in the text of this paper, but it does not appear in the orthography, since it is predictable.

14. In the following discussion of aspectual categories in Koh, we proceed from a basic classification of aspectual oppositions as given by Comrie (1976:25):

Perfective	Imperfective
Habitual	Continuous
Non-progressive	Progressive

15. We are accepting here the position and reasoning of Comrie (1976:52f.) that the perfect/non-perfect category may be called an aspectual category "in a rather different sense" from other aspects already discussed.

16. Example (129) is also the construction used for the formation of contrary-to-fact conditions in the past. Thus, it could have the meaning, 'It would have been good if she

has come. I lack specific examples in my data to confirm this analysis.

17. In a purpose clause of the structure, **bbày + V**, the **bbày** may be optionally deleted giving a construction in which two verbs co-occur in one sentence with the second verb carrying a high tone. Purpose clauses with **bbày** deleted may be distinguished from SVCs grammatically by the presence of this high tone and semantically by the meaning of purpose which is always present in purpose clauses but absent in SVCs.

18. Bamgbose distinguishes these two types grammatically by saying that linking SVCs are derived from two or more underlying sentences while modifying SVCs are derived from a single underlying sentence.

19. **vǎ** does occasionally occur in purpose clauses with **bbày** deleted, as described in note 17. In this case, the verb following **vǎ** is non-factive. In all other occurrences of **vǎ + V** the second verb is factive.

20. In the summary charts the habitual aspect is not considered because of its restricted use in the language and the lack of examples of habitual aspect with various types of verbs.

Appendix A Conventions and Abbreviations

COMP	complementizer
CONJ	conjunction
DCOP	descriptive copula
dual	dual
excl	exclusive
F	factive
FOC	focus
HAB	habitual
IMPFT	imperfective
LOC	locative copula
N	noun
NEG	negation marker
NFAC	non-factive
OBLM	oblique marker
PERF	perfective
PL	plural
POSS	possessive
PROG	progressive
QM	question marker
RED	reduplicated verb root
REFL	reflexive
REL	relativizer
sg	singular
TOP	topic marker
V	verb
1,2,3	first, second, third person
* (asterisk)	indicates an ungrammatical sentence
: (colon)	indicates a lack of one-to-one correspondence between the Koh example and the English morphemes
- (hyphen)	indicates a one-to-one correspondence

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