MOOD AND ASPECT IN KARANG*

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The paper describes the formal and semantic properties of the mood and aspect categories of the Adamawa language, Karang. Three inherent aspect verb classes are established—events, processes, and states—on the basis of semantic and morphological distinctions. A fundamental opposition of the mood—aspect system is between factive and non-factive moods, which distinguish actual and potential situations. Non-factive mood is formally indicated by a high tone and subdivides into the categories subjunctive, predictive, and non-predictive. Verbo—nominals are marked as non-factive. The formal categories of aspect are progressive, habitual, perfect, and non-perfect. When inherent and formal aspect categories with semantically contradictory components are combined, inherent aspect is overriden. The perfective meaning of the perfect category also overrides the imperfective meaning of the progressive.

1. Introduction

The goal of this paper is to present a semantic characterization of the inherent and formal categories which occur in the tense-aspect-mood system of the Karang verb. Having said that much, the next task is to state the ways

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¹Karang is an Adamawa language spoken to the east of Tchollire, Benue Department, North Province, Cameroon. It can be classed in Greenberg's Adamawa Group 6, which has been further refined by Samarin [1971], and especially by Boyd [1974]. Karang corresponds to the language referred to by Boyd as Ndó Mbàlì. There is a detailed discussion of the classification of Karang in the introduction of our phonology [Ubels 1980]. Apart from the information cited above on classification and the mimeographed phonology, there is no other published material on Karang to date. The language most

in which that general goal is restricted. For one thing, the scope is inherently restricted in that Karang has a relatively low number of formal tense-aspect-mood categories. In fact, tense does not figure as a formal category, there is one basic mood opposition, and the large set of derivational affixes found in many Niger-Congo languages does not occur in Karang.

As a further restriction, no attempt will be made in this paper to exhaustively list the pragmatic functions of the different aspects and moods in discourse, since these functions have not yet been systematically studied. It is the premise here that the general semantic function of a category can be stated somewhat independently of its pragmatic functions. Thus, one might characterize "progressive aspect" as viewing a situation dynamically, duratively, and non-habitually. This is different from stating that progressive aspect functions to express background information in narrative discourse. There is, of course, an intimate connection between a specific pragmatic definition and the general semantic definition, since the latter is derived from the observation of language in use.

Finally, the discussion in this paper will be limited by my personal perspective on what is important or interesting. I am of the conviction that the study of the inherent aspectual meaning of verbs is basic to the study of the meaning of syntactic aspect categories. I consider it interesting that inherent events, processes, and states can in fact be morphologically distinguished in Karang. I have chosen to highlight the factive/non-factive mood distinction because it is so fundamental to the Karang system and because of the generalizations which can be made about it. I have given attention to what happens when semantically contradictory categories combine, because I have been interested in the hierarchical ranking of the categories which emerges.

closely related to Karang in which there is published phonological and grammatical information is Mbum, which has been described by Hagège [1970]. The material for the present paper was collected during intermittent periods of field work done in Sorombeo between July 1978 and April 1982.

1.1. Phonology ² and morphology of the verb. Most Karang verb roots are monosyllabic. There are four monosyllabic consonant/vowel patterns: V, VC, CV and CVC. A small class of roots has the shape CVCCV.

Regardless of the CV pattern, every verb root has one tone. Two tone classes, mid and low, are established on the basis of the tone which occurs on the root in its most unmarked form, which is defined as the form occuring when the root functions as the main verb in a negated factive sentence. 3

Reduplication of the root can also occur. The initial CV of the root is reduplicated and preposed to the root. The lexical or replacive tone of the verb is carried by the preposed CV, while the tone of the full root is neutralized to mid. The entire root, rather than just the initial CV, is repeated in the case where a verbal complement occurs between the two forms of the root. The complement may be either a noun or a pronoun (see examples (2) and (28) below).

Colon (:) Indicates that there is not a one-to-one morpheme correspondence between the Karang example and the English morphemes joined by the colon.

	1 " " " " " " " " " " " " " " " " " " "		
2s, 3s	Second person singular	pronoun, t	hird person singular pronoun
3p	Third person plural prop	noun	
ANAPH	Anaphoric particle	NPERF	Non-perfect
FACT	Factive mood	PROG	Progressive aspect
NFACT	Non-factive mood	PRED	Predictive mood
DCOP	Descriptive copula	QM	Question marker
LCOP	Locative copula	SM .	Subordination marker
PERF	Perfect	SUBV	Subjunctive mood

³The tone class of the verb can also be determined in affirmative factive sentences, but it is necessary to know where the basic verb tone occurs in a reduplicated verb. Verb reduplication cannot co-occur with negation.

²Karang phononology is described in Ubels [1980]. All examples of Karang data cited in this paper are written according to standard Karang orthography, except that implosives are represented by C'. Word nasalization is indicated by cedilla (,) below the first vowel of the word. The tone of the morpheme is marked as follows: high ('), low ('), rising ('); mid tone is unmarked. The symbol vb represents a labiodental flap. An h following a vowel represents vowel length. In the interlinear English glosses of Karang examples, the following conventions and abbreviations are used:

Besides reduplication, there is very little to say about Karang verb morphology. Intransitive verbs are nominalized by the derivational morpheme—na suffixed to the verb root with high tone. The only other affixes which occur with the root are the suffixes—u,—u,—u and—u, which function as demonstratives in the noun phrase, and similarly specify the location of the action or state in relation to the speaker and hearer when suffixed to the verb.

2. Inherent Aspect Classes of the Verb

Before looking at the various syntactic aspect and mood categories, it is necessary to examine the lexicon to see how verbs are classified according to inherent aspectual meaning. The inherent aspectual meaning of a verb potentially affects its ability to combine with the syntactic aspect categories. In addition, the meaning for a given category of aspect or mood may depend upon the lexical aspect class to which the verb belongs, or the meaning of the verb may change when it enters into a particular combination. Thus, an inherently stative verb is likely to exhibit different syntactic and semantic behavior from an inherently dynamic verb when the attempt is made to combine it with a progressive aspect marker if part of the function of progressive aspect is to view a situation dynamically.

There are at least three relevant inherent aspect classes in Karang, which will be referred to as "states", "events", and "processes" in accordance with what has come to be practically standard terminology for these categories. In Karang, these classes are in fact morphologically distinct when they occur in affirmative factive sentences. The semantic distinction which will be made between the classes in the following discussion is based largely upon Comrie [1976: Chapter 2].

states are distinguished from both events and processes in that a stative situation lacks dynamic development, and no effort is required to remain in that situation. Karanghas a large number of verbs for which the primary meaning is a stative meaning. In an affirmative factive sentence, a stative

verb occurs in reduplicated form: 4

- (1) ke pò-pokro 'he is old'
- (2) mún bíse míse 'Iam sick' body my hurt me hurt

Some other examples of Karang stative verbs are sù-su 'be good', zà-zaŋ 'be hot', rà-rạh 'be blind', ŋgɪ-ŋgɪ 'be many', tù-tu 'know', yì-yih 'want'.

Events and processes differ from states in that for both events and processes there is dynamic development in the situation. Events differ from processes in terms of an inherent perfective/imperfective distinction. Thus an inherent event verb refers to a dynamic situation as a whole, while a process verb makes reference to the internal structure of a dynamic situation. Within the event class, it is likely that further distinctions could be made, such as between inherently telic verbs, punctual achievements, and punctual non-achievements. For present purposes these distinctions are ignored, since there is no formal difference in factive sentences. The verb occurs in unreduplicated form:

- (3) ke kàh púh 'he arrived home' (punctual) 3s arrive village
- (4) ke mboh vùl 'he built a house' (telic) 3s build house

Process verbs, on the other hand, are formally distinct in a rather interesting way. There is a small class of verbs in Karang which normally occur with what has been traditionally called a "cognate accusative" and is referred to by Welmers [1973:464] as "cognate object". The rules of formation

The function of verb reduplication in Karang is a matter for further study. The situation is very similar to that cited by Welmers [1973:336] for Efik, where he notes two "completely different" functions for verb reduplication, either to mark the verb for stativeness or to give it contrastive force. The question which needs to be studied for Karang is whether verb reduplication has one of these functions or the other, or whether they are always combined, and if so whether one of the functions is primary. Verb reduplication cannot co-occur with negation. Because of this and other facts, my present tendency is to consider the primary function of verb reduplication to be to mark assertive or contrastive focus. The reason that stative verbs are normally reduplicated would then have to be that in a stative sentence there is usually assertive focus on the verb.

are analogous to those for verb reduplication in that only the first CV of the verb occurs when the verb is contiguous to its cognate object, but if non-contiguous, the full form occurs:

- (5) a. ke pa-pay 'he cultivated'
 3s cultivate-cultivation
 - b. ke pah kè ni pày 'he cultivated with it'3s cultivate with it cultivation

The cognate object can be distinguished as a nominal rather than a verb root by its tone. By the rules of verb reduplication, a verb root would have mid tone in place of the low tone on pay. In addition, the full form of the verb in (5b) would have to be pay rather than pah. Examples of verbs with cognate objects are listed below. The high tone nominals with final -na have been derived from verbs by the normal nominalization process:

b'a-b'ày	'talk'	yi-yíhna	'play'
hè-héle	'cough' (more than once)	d'ù-d'úkna	'run'
na-nám ု	'sleep'	si-sina	'walk'
nda-ndày	'dance'	sà-sákna	'laugh'
sà-sàm	'vomit'		
to-tóm	'urinate'		

All of the verbs in this class are inherently durative or iterative, which is why they are classed as process verbs. More precisely, however, they are what Comrie [1976:44] calls "atelic", which contrasts with telic, and means that they refer to situations which have no intrinsic terminal point. In contrast to a telic situation such as "build a house", in which there is a point at which the situation cannot continue because the house is built, an atelic situation can continue indefinitely, or if it is broken off, it can be said that an instance of the situation has already occurred. Thus, if someone laughing is interrupted, it can be said that he has already laughed.

The class of atelic verbs in Karang can be extended to include more and possibly all verbs which require a lexically specified object, whether cognate or not. Some examples are |u mbèrem 'converse', d'i sìn 'sing', ùh mbìh 'swim' (mbìh = 'water'), and a whole set of verbs of saying which take the object b'ày 'word, talk', including gàr b'ày 'boast', fàh b'ày 'argue', dàkla b'ày 'whisper', bàk b'ày 'counsel', and sùr b'ày 'chatter'.

In many cases of atelic verbs, the verb is only attested with its

specific object, cognate or otherwise, or with an even more specific case of that object, as in the (b) examples below:

- (6) a. ke nda-ndày 'he danced (a dance)'
 3s step-dance
 - b. ke ndah s\(\) 'he danced the initiation dance'
 3s step initiation
- (7) a. ke sà -sàm 'he vomited (vomit)'
 3s vomit-vomit
 - b. ke sà sém 'he vomited blood' 3s vomit blood

In some cases, a more generic object may be substituted, in which case the verb loses its atelicity:

- (8) a. ke si-sina 'he walked/he was walking' 3s go-walking
 - b. ke si gèl 'he went somewhere' 3s go place
- (9) a. ke nda -nday 'he danced (a dance)'
 3s step-dance
 - b. ke ndah fè 'he stepped on something' 3s step something

3. Factive and Non-factive Mood

When there is grammaticalization of the speaker's opinion of the degree of actuality of a situation, those distinctions are considered in this paper to be distinctions of mood. Thus, grammatical categories are considered mood categories if they serve to distinguish between meanings like "it is a fact that" to express what is considered to be an actual situation, "it is possible that" to express a non-actual but potential situation, and "if it were possible that" to express a counter-factual situation.

Karang has one very basic mood distinction. The same or a similar distinction has been noted for other Niger-Congo languages, and it has been noted as well in theoretical discussions of mood and modality, but with very little agreement in terminology. It has been talked about in terms of factative/non-factative [Welmers 1973:346], actualized/non-actualized [Hagège 1970:135], real/non-actual [Bearth 1971:284], manifest/imminent [Johnson 1980:277], factive/non-factive [Lyons 1977:816], realis/irrealis, and

non-future/future. I have chosen to use the terms "factive" and "non-factive.

The next problem is to define the semantic function of these two categories in Karang. It is difficult to give a definition which does not make reference to time, even though the basic distinction is considered to be one of mood rather than tense, for a speaker is most likely to assert the factivity of a situation when that situation has taken place in the past or obtains at the present. And situations which the speaker identifies as non-factive, whether the situation is one which might, may, will, ought to, should, could, or must occur, are situations which lie in the future. The basic function, then, of factive mood is to assert the meaning "it is a fact that" in regard to a situation. It can be added that factive mood describes, in general, situations in which there is no further dynamic development at the moment of speaking. The situation is either fully developed at the moment of speaking or has reached a point of stable development at the moment of speaking [Johnson 1980:277]. There is a special case, however, when factive mood describes a situation which is subsequent to the moment of speech, as in (10) below:

(10) mì tòr dá 'I have left'

Sentence (10) is used in a situation of leave-taking, before the speaker actually leaves, when he wishes to assert the absolute certainty of his departure even though it has not yet occurred.

Non-factive mood, as the complement of factive, is used for every situation in which there is further potential for dynamic development, whether the speaker asserts that the development is likely to occur or ought to occur. The universal tendancy to syntactically associate the notion of future possibility with such modal categories as obligation and desire has been pointed out by Ultan [1978:118] and Lyons [1977:817]. Karang data will be presented below in 3.2 to demonstrate the way in which non-factive mood is formally marked, and to indicate the range of subcategories which are grouped together within the notion of potentiality.

3.1. Factive mood with event, state, and process verbs. The inherent perfectivity, stativity, or durativity of a verb affects the way in which the

situation will be temporarily interpreted when factivity is asserted. For an inherently perfective verb, the most likely interpretation is that the situation is fully developed prior to the moment of speaking, so the result is a past tense meaning:

- (11) ke kàh púh 'he arrived home' 3s arrive village
- (12) ke mboh vùl 'he built a house'

Although rest tense is the unmarked reading, the context may require a gnomic or general truth reading which lacks temporal reference (even though it is expressed in English with the so-called "present tense"). Thus, a speaker may use an inherent event verb factively in order to make what Goldsmith and Woisetschlaeger [1976] call a "structural description" of how the world is made, as the following example illustrates;

- (13) a. ku làb' fe kè mól le 'what do they do with bricks?'
 3p do what with brick QM
 - c. ku mboh kè ni vùl 'they build houses with them'
 3p build with it house

The effect of using an event verb in this way, however, is that it loses its inherent perfectiveness, since the sentences in (13) have a customary meaning.

For a stative verb, the most likely interpretation is that the situation is stable at the moment of speaking, so the result is a present tense meaning:

(14) mún bí se mí se 'I am sick' body my hurt me hurt

A present tense reading is not required, however, if the context refers to a stable situation in the past:

(15) kè lew mun bí se mí se 'yesterday I was sick' yesterday body me hurt me hurt

Further, some stative verbs are more of the structural description type, tending to refer to situations which are more or less permanently stable:

(16) hay naymbih ri-ri 'hippo meat is tasty' meat hippo sweet

It is more difficult to assign an unmarked temporal meaning to process

verbs, even though all the examples in section 2 were translated with simple past tense. For some verbs, it seems more natural to understand that the situation is fully developed at the time of speaking, as for example (5a), repeated here as (17a):

- (17) a. ke pa -pày 'he cultivated'
 3s cultivate-cultivation
 - b. Ke pah kè ni pày 'he cultivated with it' 3s cultivate with it cultivation

An equally valid translation would be 'he went on cultivating', which maintains the past time reference, but brings out the durativity of the situation. Example (5b), repeated here as (17b), can similarly be translated 'he went on cultivating with it'. It can also very easily have the structural description reading 'he cultivates with it'. for example as a response to a question like, "What does he do with a hoe?" Such a customary reading is highly compatible with the inherently continuous meaning of the atelic verb. It is also natural for some process verbs like na-nam 'sleep' and yi-yihna 'play' to refer to a situation which is stable at the moment of speaking by virtue of their inherent atelicity. Even though the situation is dynamic. there is no movement toward an intrinsic terminal point. The situation is continuous or repetitive and in that sense can be considered stable. Thus, these verbs can have a present reading, which seems to be about as equally unmarked as a past tense reading. Since there is also the possibility of a structural description reading, there is much ambiguity with regard to the temporal interpretation of these verbs:

- (18) ke na -nám 'he slept, he continued sleeping, he is sleeping,
 3s lie-sleep he sleeps'
- 3.2. Non-factive mood.
- 3.2.1. Rule of formation. The basic generalization concerning formation of non-factive mood is stated in Rule 1:

Rule 1: [non-factive] → H

Rule 1 says that for non-factive mood add a high tone. Where to add the high tone depends upon a further distinction within non-factive mood which is considered here to be a semantic distinction, although the distinction can almost be stated syntactically in terms of subordinate and main clauses. The

opposition will be labelled with the terms "subjunctive" and "non-subjunctive". The following rule locates the placement of high tone for non-subjunctive mood:

Rule 2. [non-subjunctive] $\stackrel{!}{\rightarrow}$ H

Rule 2 says that for non-subjunctive mood, high tone attaches to the verb, replacing the lexical tone. Example (19) contrasts a factive and non-factive, non-subjunctive sentence:

- (19) a. ke mboh $v\dot{u}l$ 'he built a house' 3s build house
 - b. ke mbóh vùl 'he will/might build a house' 3s build:NFACT house

The tone placement rules for subjunctive mood are as follows:

Rule 3 says that for subjunctive mood, high tone attaches to the particle b'a if the subject of the clause is a noun. If the subject noun is replaced by a pronoun, b'a drops out and the high tone replaces the lexical tone of the pronoun. When the subject of the subjunctive clause is the same as the matrix clause, the pronoun drops out and high tone attaches to the verb, so that the distinction between subjunctive and non-subjunctive is neutralized. Example (2) illustrates an embedded subjunctive clause with noun, pronoun, and zero subjects:

- (20) a. mì yìh b'ày Gama b'á òh pínna yé
 I want that Gama SUBV finish work his
 'I want Gama to finish his work'
 - b. mì yìh b'ày ké bh pínna yé I want that 3s:SUBV finish work his 'I want him to finish his work'

- c. mì yìh b'ày òh píhna bí I want that finish:SUBV work my 'I want to finish my work'
- 3.2.2. The meaning and use of subjunctive mood. Subjunctive and non-subjunctive are both moods of potentiality as subcategories of non-factive mood. The semantic distinction between them rests in the notions of possibility and will. In non-subjunctive mood, the speaker simply asserts the possibility or likelihood of the situation, as in (19b) above. In subjunctive mood, there is the added semantic component that the potential situation may be outside the control of the speaker. An example is the use of subjunctive in imperative and hortative clauses to express the speaker's desire that the situation occur:
- (21) a. mú hị mí mbìh. 'give me some water'
 2s:SUBV give me water
 - b. Ŋgérmbáy b'á kòr mú 'may God protect you'
 God SUBV guard 2s

Another common use of subjunctive is in the complement clause with modal verbs expressing various kinds of volition as in (20) above. Karang modal verbs which take the subjunctive are listed below:

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yìh b'ày 'want, wish that'
vbi b'ày 'ask that' (request)
gòn b'ày 'beg that' (request, demand)
hị b'ày 'give that' (command, permission)
màh b'ày 'be sufficient that' (necessity, obligation)
sù b'ày 'be good that' (preference, obligation)
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With verbs of volition, the subjunctive expresses potential lack of control by the subject of the matrix verb rather than by the speaker, as example (22) illustrates:

(22) ke yìh b'ày Gama b'á ɔ̀h pìhna yé 3s want that Gama Subv finish work his 'he wants Gama to finish his work'

Here the speaker is reporting the modal viewpoint of the subject of the matrix verb, just as the mood of a complement clause in reported speech records the viewpoint of an embedded speaker who is the subject of the matrix clause:

(23) ke b'àh se ke mbóh vùl 'he said that he will build a house' 3s say that 3s build:NFACT house

With the verbs man b'ay 'be sufficient that' and sù b'ay 'be good that', used for necessity or obligation, there is no overt matrix subject, and it is the viewpoint of the speaker of the main discourse that is registered:

(24) sù b'ày ké pòn píhna yé 'he ought to stop working' good that he:SUBV cease work his

There is intended or desired potentiality in the expression of purpose, so the subjunctive is used in purpose clauses:

(25) ke hị nàn hị wúy yé b'ày ké d'ùh 3s give grain give wife his that 3s:SUBV pound 'he gave his wife grain for her to pound'

A final use of subjunctive mood is in the subordinate clause of contrary-to-fact conditions:

(26) ké si rá lekol le,ke tú fè
3s:SUBV go PAST(?) school SM 3s know:NFACT thing
'if he had gone to school, he would know something'

The combination of potentiality with past time results in counter-factive meaning. The use of subjunctive in the subordinate clause adds the additional meaning that the situation referred to there is in a world outside that over which the speaker has no control.

- 3.2.3. <u>Predictive mood</u>. It was stated that in non-subjunctive non-factive mood, the speaker simply asserts the possibility or likelihood of the potential situation, whereas subjunctive adds the notion of lack of control of the potential situation. Within non-subjunctive mood, the semantic distinction between possibility and likelihood is grammaticalized in Karang, as illustrated below:
- (27) a. ke mbóh vůl 'he will/might build a house' 3s build:NFACT house
 - b. ke b'ày mbón vùl 'he is going to build a house'
 3s PRED build:NFACT house

The distinction between the two examples is that in (27b) the speaker is asserting a higher degree of certainty that the potential situation will

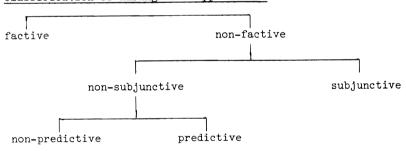
actually occur. The grammatical category which formalizes the assertion of a likely potentiality will be called "predictive mood", and is marked by the preverbal element b'ày. The non-factivity of predictive mood is indicated by the presence of a high tone. The occurrence of the high tone on the verb distinguishes predictive from subjunctive. Predictive mood is often used in the context of an imminent situation, since the speaker is most likely to assert a high degree of certainty that the situation will occur precisely in such a context. That the function of predictive mood is to assert likelihood rather than imminence, however, is illustrated in the following example:

(28) ke b'ày d'ún nàn d'uh 'she is surely going to pound grain' 3s PRED pound:NFACT grain pound

The likely context in which (28) would be used is for a small girl who is observed imitating her mother. The speaker is asserting that the child will perform the activity when she grows up.

The basic mood categories of Karang may now be schematized as follows:

Table 1. Classification of Karang mood oppositions



- 3.2.4. <u>Nominalization and non-factive mood</u>. Example (29) illustrates the derivation of a nominal from the verb kan 'arrive' by the addition of the nominalizing suffix -na and the replacement of the lexical tone of the verb with high tone:
- (29) a. mì kàn lew sá 'I arrived a long time ago' I arrive ago distant
 - b. káhna bí lew sá 'my arrival was a long time ago' arriving my ago distant

In Karang there is no way to formally distinguish different kinds of verbonominals such as infinitives, participles, and gerunds. There is only one basic category which includes all three. The basic rule of formation is stated as follows:

Rule 4 says that to derive a verbo-nominal from a verb, replace the lexical tone of the verb with high tone. A further rule can be stated for intransitive verbs which suffixes -na to the verb.

For transitive verbs, however, there is no nominalizing suffix, as (30) illustrates:

(30) ke b'a nzùk mbóh vùl 'he is a house-builder' 3s be person building house

Rule 4 is identical to the tone placement rule for a finite verb in non-factive non-subjunctive mood. For transitive verbs, verbo-nominals and finite verbs are formally indentical, and it is necessary to depend upon the syntactic context to distinguish the two. There are contexts, however, in which it is difficult to decide which it is. In (20c), repeated here as (31), it was noted that the contrast between subjunctive and non-subjunctive mood is neutralized in the embedded clause. In fact, the embedded verb could also be a verbo-nominal, just as the English translation uses an infinitive:

(31) mì yìh b'ày śh píhna bí 'I want to finish my work'
I want that finish:NFACT work my

When an intransitive verb is substituted in the embedded clause, the verbonominal form occurs:

(32) mì yìh b'ày tórna 'I want to leave'
I want that leaving

There are some contexts where it is possible to interchange a finite verb and verbo-nominal form with no apparent change in meaning:

- (33) a. mì tớr wàra 'I'm leaving right now'
 I leave:NFACT immediately
 - b. mi tórna wàra 'I'm leaving right now'
 I leaving immediately

There are two possible explanations for the fact that verbo-nominals can function in the same environments as finite non-factive verbs: either the factive/non-factive opposition is neutralized when verbs are nominalized. or nominalized verbs are non-factive. If there is neutralization, then high tone on the verb has two different functions in environments which can be very difficult to distinguish: sometimes it marks nominalization, and other times non-factivity. If verbo-nominals are non-factive, the generalization concerning high tone is complete: high tone marks non-factivity. Since in non-factive mood the situation is viewed as a potentiality, in cases where verbo-nominals are used, the notion of potentiality ought to be asserted. This condition holds in (31) - (33), where verbo-nominals substitute for finite verb forms, and also in (30), where the meaning can be restated as 'he is a person who potentially builds houses'. A more difficult case is (29b), where the situation has already occurred. There is not the same factive assertion that the event has occurred as in (29a), but at the same time the notion of potentiality has been cancelled by the combination with a past time reference. Because the idea of potentiality is usually present, and because of the correspondences in form and usage to non-factive verbs, verbo-nominals are considered to fall within the non-factive mood category.

4. Aspect

In addition to the grammaticalization of the speaker's point of view concerning the actuality or potentiality of a situation through categories of mood, different points of view of the internal constituency of the situation may also be formally distinguished as categories of "aspect". Even though a situation may consist of distinct phases, the speaker may have access to grammatical devices which allow him to either present the situation in its entirety without referring to its duration, or to focus attention upon the situation as a durative process. In a way, the inherent durativity

of static and atelic situations is grammaticalized in Karang since stative and atelic verbs can be formally identified, at least in certain contexts, as was noted in section 2. But there is another kind of formal marking of aspect in Karang of a more general nature, not necessarily restricted to certain lexical classes as the formation of a cognate object can only apply to atelic verbs. At the same time, there may be restrictions, or at least effects, upon the combination of a formal aspect category with a lexical class, since the lexical classification is itself based upon aspectual distinctions. The formal aspect categories of Karang and the effects of combining categories with each other and inherent aspects is the topic of this section.

- 4.1. <u>Progressive</u>. Progressive aspect in Karang is formally marked by the auxiliary verb yò, which has as its literal meaning 'stand' or 'stop', and also functions as a locative copula:
- (34) ke yò vùl 'he is in the house' 3s LCOP house

For progressive aspect, the nominal indicating location in the locative clause is replaced by a verb-nominal:

- (35) a. ke yò gína 'he is coming' 3s PROG coming:NFACT
 - ke yò mbóh vùl 'he is building a house'
 3s PROG building:NFACT house

As an auxiliary verb, yò carries mood specification by virtue of its tone. In (35) above, the low tone specifies factive mood. At the same time, the high tone of the verbo-nominal specifies non-factive mood. The result of the combination of factive and non-factive mood is that the situation is viewed both as actual and as potential. The speaker is asserting that at least one phase of the situation has occurred, but that there is potential for further dynamic development. It is also possible to specify non-factive mood for the auxiliary, locating all phases of the situation in the domain of potentiality:

(36) ke yố mbốh vùl 'he will be building a house' 3s PROG:NFACT building:NFACT house

It is further possible to combine progressive aspect with other subcategories of potentiality, both predictive and subjunctive:

- (37) a. ke b'ày yố mbốh vù!

 3s PRED PROG:NFACT building:NFACT house
 'he is certainly going to build a house'
 - b. sù b'ày ké yò mbóh vùl good that 3s:SUBV PROG building:NFACT house 'I prefer that he be building a house'

Part of the meaning of Karang progressive aspect can be deduced from the fact noted above that different phases of the situation are implied. tuation is being viewed in its duration, which is to say that reference is being made to its internal temporal constituency. So one component of progressive aspect is durativity. But durativity is a component shared by all the subcategories of imperfective aspect, whether habitual, continuous stative, or continuous dynamic (cf. Comrie [1976:Section 1.2]). That progressive aspect is more limited than imperfectivity as a whole is demonstrated by the fact that Karang utilizes a separate construction to explicitly indicate a habitual situation, which will be presented in 4.2 below. That progressive aspect is more limited than continuous aspect as a whole is demonstrated by the fact that there are stative verbs which cannot combine with progressive aspect, notably yi-yih 'want' and tù-tu 'know'. The basis for the incompatibility is that progresseive aspect has non-stative meaning. In summary, the function of progressive aspect in Karang is to explicity view a situation as durative, non-habitual, and dynamic.

Although there are a few inherently stative verbs which cannot combine with progressive aspect, for most the combination is possible:

- (38) a. mbih zà-zaŋ 'the water is hot' water hot
 - b. mbìh yò zánna 'the water is becoming hot' water PROG heating:NFACT

What is noteworthy about (38b), however, is that the combination has affected the meaning of the verb: it has lost its inherent stativity. The situation

is dynamic. 5

The same type of effect occurs when progressive aspect is combined with inherent event verbs. The inherent perfectiveness of the verb is cancelled out by the meaning of progressive aspect, so that the situation is viewed as a durative process:

- (39) a. ke mboh vùl 'he built a house'
 - b. ke yò mbóh vùl 'he is/was building a house'3s PROG building:NFACT house

Since process verbs are inherently dynamic and durative, they are highly compatible with progressive aspect. The effect of using a formal grammatical category to make these meanings explicity is that a perfective reading is excluded as a possibility:

- (40) a. ke pa -pày 'he cultivated, he was cultiva-3s cultivate-cultivation ting'
 - b. ke yò pá -pày 'he is/was cultivating' 3s PROG cultivating:NFACT-cultivation
- 4.2. <u>Habitual</u>. Habitual aspect has not yet been sufficiently studied to make a detailed statement of its formalization and meaning. In the discussion on the meaning of event, state and process verbs with factive mood in section 3.1, one of the possible readings for all three types of verbs was that of reference to a customary situation. So a simple non-habitual form does not exclude habitual meaning as long as the context permits it, just as the non-progressive form of a process verb still permits a progressive meaning. But just as it is possible to make the progressive meaning explicit through the use of a formal construction, it is also possible to make explicit by formal means that the situation is habitual. The constructions is illustrated in (41):
- (41) ke si wáka b'a sí -ú kpàrvbàw kè típele zày
 3s go field DCOP going:NFACT-there always with morning early
 'he always goes to the farm early in the morning'

See example (53) below for further effects of aspectual marking on inherently stative verbs.

The construction consists of the verb followed by what is referred to as the "descriptive copula" b'a and the verbo-nominal form of the same verb. The combination of the verb with the verbo-nominal in the above example again combines factive and non-factive mood. The device for combining the moods is formally different from progressive aspect, but the effect is the same. The situation is viewed in one of its phases as actual, and in another as potential. Again, the situation is viewed in its duration, as repeated over a long period of time. Thus, habitual aspect also has durativity as part of its meaning. Another part of the meaning is, of course, that the situation is habitual.

It is possible to combine habitual and progressive aspects, in which case the repetitive meaning of habitual combines with the continuous or "in-process" meaning of progressive:

(42) mì gi tàw yế le, ke yò b'a kí mbete kpàrvbàw I come vicinity his SM 3s PROG DCOP reading:NFACT book always 'whenever I go to his place, he is always reading a book'

Example (42) is different from (41) formally in that only the nominalized form of the verb kį occurs. The marking for mood which had been carried by the finite verb in (41) has been taken over by the progressive auxiliary yò, allowing the verb to drop out.

4.3. <u>Perfect and non-perfect</u>. Several languages in the approximate geographic vicinity of Karang have a particle which occurs at the end of the clause which is usually translated "already". Other Adamawa languages for which it is reported are Mbum [Hagège 1970:315] and Duru [Bohnhoff 1972:172]. It is also reported for Jukun in Benue Congo [Welmers 1973:410], Sara-Ngambay in Chari-Nile [Thayer 1971:36], and Lele in Chadic (Pam Simons, personal communication). The forms in the different languages are as follows:

Karang	dá	Sara-Ngambay	ŋgà
Mbum	wâ	Lele	ď'è
Duru	só'ó		
Jukun	ra		

The meaning of the particle in the tense-aspect-mood system is generally given as "completed action". In Sara-Ngambay and Lele there is a second

particle translated 'still' or 'yet' which forms an opposition pair with 'already'. This particle also occurs in Karang. The forms are as follows:

Karang b'áy Sara-Ngambay b'ei Lele b'ey

The meaning given for Sara-Ngambay is "non-completed action". Example sentences with the use of the forms in Karang are given in (43):

- (43) a. ke mboh vùl dá 'he has built the house' 3s build house PERF
 - b. ke mboh vùl rá b'áy 'he is still building that house' 3s build house ANAPH NPERF

One of the differences in the examples above is clearly aspectual in that it concerns the way in which the internal temporal consituency of the situation is being viewed. In (43a) the situation is viewed as a whole, that is, perfectively, while in (43b) the situation is viewed in its duration, that is, imperfectively. Part of the meaning assigned to the category marked by dá is therefore perfectivity. That the meaning of the category of imperfective is supported by the fact that it includes repetetive as well as continuous action. Another possible reading for (43b) besides the continuous reading is 'he is building that house again'.

There is a further difference in these two categories, however, which goes beyond the way in which the internal time of the situation is viewed in that it involves the locations of the situation in reference to an external point of time, the moment of speech. In (43a) it is understood that the situation has occurred prior to the moment of speech, while in (43b) the situation overlaps with the moment of speech. A further implication in (43a) is that the result of the past situation is still effective at the moment of speech, in this case, that the house is still standing. This is especially clear with a stative verb:

(44) mbìh rá zàn dá 'the water has become hot' water ANAPH hot PERF

The meaning of (44) is that a situation has occurred prior to the moment of

speech--the heating of the water--and that the effect of this situation continues--the water is still hot.

The point of reference to which the situation is related does not have to be the moment of speech. It is also possible for the speaker to establish a reference point in the past or future, or a completely relative time point, which the situation either precedes or overlaps:

(45) gèlké ke èl púh dá le, ke sự fè when 3s return village PERF SM 3s eat thing 'when he had returned home, he had something to eat'

In (45), a reference point has been established in the past, and the use of dá indicates that the action of returning home had occurred prior to that reference point. It is also possible for (45) to have the general truth reading 'when he has returned home, he has something to eat', in which case the reference point is completely relative rather than related to real time, but the function of dá is unchanged, still indicating the occurrence of a situation prior to the reference point with a continuing effect. The point of reference can also be located in the future:

(46) pele dá rakegi b'áy tomorrow PERF SM 3s come:NFACT NPERF 'he will be coming tomorrow'

An expanded translation of (46) would be 'when tomorrow has arrived, he will be coming'. The reference point is 'tomorrow'. The use of dá indicates that the arrival of the time period precedes the time period, but that the result is still in effect, namely, it is still tomorrow. The use of b'áy indicates that the action of coming overlaps with the time period.

The semantic function of the category indicated by dá, then, is to combine the aspectual notion "perfective" with the temporal notion that the situation occurs prior to an established reference point but the effect of the situation overlaps with the reference point. The label given to the Karang category is "perfect". The label for the opposing category, which combines the aspectual idea "imperfective" with the temporal notion that the situation overlaps with an established reference point, is "non-perfect".

Perfect and non-perfect can both combine with any mood category, either factive as in (43), or any of the categories of non-factive:

- (47) a. ke d'úh mbìh dá 'he will have drawn water' 3s draw:NFACT water PERF
 - b. ke d'úh mbìh b'áy 'he will draw water again' 3s draw:NFACT water NPERF
- (48) a. Ke b'ày d'ún mbìh dá 'he will certainly have drawn water'
 3s PRED draw:NFACT water PERF
 - b. ke b'ày d'ún mbìh b'áy 'he will certainly draw water again' 3s PRED draw:NFACT water NPERF
- (49) a. mì yìh b'ày ké d'úh mbìh dá 'I want him to have drawn water'
 I want that 3s:SUBV draw water PERF
 - b. mì yìh b'ày ké d'úh mbìh b'áy 'I want him to draw water again' I want that 3s:SUBV draw water NPERF

Perfect and non-perfect can also combine with progressive aspect:

- (50) a. ke yò mbóh vù l dá 'he has started building a
 3s PROG build:NFACT house PERF house'
 - b. ke yò mbóh vùl rá b'áy 'he is still building a house' 3s PROG build:NFACT house ANAPH NPERF

The compatibility of progressive and non-perfect in (50b) is not surprising because both categories view the situation imperfectly. Example (50a) is more interesting. It illustrates the effect of combining perfect with the progressive of an inherent event verb. The meaning of an event verb is inherently perfective:

(51) ke mboh vùl 'he built a house'
3s build house

When combined with progressive aspect, the inherent perfective aspect of the verb is cancelled by the imperfectiveness of progressive:

(52) ke yò mbóh vùl 'he is/was building a house' 3s PROG build:NFACT house

Finally, in (50a) the perfectiveness of perfect cancels the imperfectiveness of progressive to yield a resultant inceptive meaning: the beginning of the situation is viewed as having occurred prior to the moment of speech.

The same ranking of categories is manifested with an inherently stative verb:

(53) a. mbìh zà-zaŋ water hot

- 'the water is hot'
- b. mbìh yò zánna water PROG heating:NFACT
- 'the water is becoming hot'
- c. mbìh yò zánna dá 'the water has started getting hot' water PROG heating:NFACT PERF

In (53b), the dynamicness of progressive has cancelled out the inherent stativeness of the verb. In (53c), the perfectiveness of perfect has cancelled out the imperfectiveness of progressive, again yielding an inceptive meaning.

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