

WORD STRUCTURE AND REDUPLICATION IN KOLA

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It is the primary purpose of this paper to describe the morphology and word structure of Kola, an Austronesian language spoken in the northern part of the Aru island group in Maluku. To the best of the author's knowledge, there has been no prior study in any aspect of Kola grammar. Included in the present work are morphological discussions of animate and inanimate noun classes, possessive suffixes, pronouns and demonstratives, numerals, adjectives, prepositions, and verbs. Because reduplication is such an integral part of Kola word structure, a separate section is devoted to the phonological patterns and grammatical functions of reduplication. Since Kola reduplication generally alters either word meaning or word class, discussions regarding the functions of reduplication are grouped into these two categories. Numerous examples are presented to illustrate these reduplication functions.

1 INTRODUCTION

Kola is an Austronesian language of the Central Malayo-Polynesian superstock. The most closely related language is Kompane, with approximately 75% lexical similarity (Hughes 1987). Kola is spoken by nearly 6,000 people in 22 villages on Kola and adjacent islands, and is located in northern Aru of southeast Maluku. The present study is based on data gathered over a three-year period (1988 - 1990) in Marlasi on the east coast of Kola island. According to sociolinguistic and dialect intelligibility testing carried out in Marlasi, Warialau, Berdahan, Godagoda, and Wahayun, the village of Marlasi is the linguistic center of the 22 Kola-speaking villages (Takata 1989).

Prior linguistic research in Kola is almost non-existent. There have been a few cursory surveys and comparative word lists (Collins 1982, Hughes 1987), as well as a summary of Kola phonology (Takata and Takata 1991), but until this paper there has been no study in any aspect of Kola grammar. It is the primary purpose of this paper to describe Kola morphology and word structure. In addition, since reduplication is such an integral part of word structure, a separate section is devoted to describing the various reduplicative patterns and their grammatical functions.

2 WORD STRUCTURE

2.1 Nouns

2.1.1 Noun Classes

Kola nouns are divided into two classes: animate and inanimate. This

classification is foundational to Kola noun-phrase construction. Although most nouns may be intuitively classified either as animate or inanimate, there are some exceptions: several nouns are grammatically classified as animate in Kola even though they would be scientifically classified as inanimate. Examples of these exceptions include **pat** 'stone', **beda** 'knife', and **nasa** 'basket', which are each grammatically treated as belonging to the animate noun class in Kola.

Animate and inanimate noun classes are contrastive in that they occur with different sets of modifiers. Numerals, adjectives, demonstrative pronouns, and demonstrative clitics must be marked to indicate whether the modified noun is animate or inanimate. In the sections which follow, each of the above types of modifiers will be described in relation to the two noun classes.

2.1.1 Possessive Suffixes

There is a subclass of animate nouns which consists primarily of body parts and kin terms.¹ These nouns are classified here as inalienably-possessed nouns, since they are obligatorily suffixed² with possessive markers indicating the person and number of the possessor.² The following Table shows the set of inalienable possessive suffixes.

Table 1. Possessive Suffixes³

	<u>Singular</u>	<u>Plural</u>
1	-ng	-ma (excl) -sita (incl)
2	-m	-mi
3	-∅	-di

Several nouns, appropriately suffixed to show inalienable possession, are shown below:

papa-ng
mouth-1s:P
'my mouth'

mata-m
eye-3s:P
'your eye'

ama-ng
father-1s:P
'my father'

In a few instances **-ka** is used for the 2s possessive suffix instead of **-m**. No phonological or morphological conditioning for this allomorphy is evident. Note, however, that **-ka** is also the 2s adjective person marker (see Table 8). Examples of **-ka** used as the 2s possessive suffix are:

kabehal-ka
tongue-2s:P
'your tongue'

lugi-ka
face-2s:P
'your face'

Although the 3s possessive suffix is **-∅**, there is some data suggesting a historically prior form **-i** in Kola. This can be seen from irregular 3s forms, which contain the vowel /i/, as well as in the languages of West

Tarangan and Dobel, both related languages in Aru, where -i occurs in 3s inalienably-possessed forms. West Tarangan, once a lingua franca on the Aru islands, presently uses -i as the only form for the 3s possessive suffix: for instance, the root **mata** 'eye' is phonetically realized [matai] 'his eye' in 3s possessive form (Nivens 1991). In Dobel, generally the final vowel in an inalienably-possessed noun root becomes /i/ in the 3s possessive form: for instance, the root **sama** 'father' becomes **sami** 'his father' in the 3s possessive form. This same pattern can also be seen in a number of Kola nouns, which are irregular in their 3s forms. Compare the regular 3s forms of the first three nouns below with the irregular forms containing the vowel /i/ in the final five nouns of the list:

	<u>1s form</u>	<u>3s form</u>
father	'ama-ng	'ema
eye	'mata-ng	'meta
mouth	'papa-ng	'pepa
mother	'yina-ng	'yini
hand	'lima-ng	'limi
name	'ngahan-ung	'ngahin
stomach	'tubuh-ng	'tubih
tooth	'nofan-ung	'nofin

Additional evidence of a once productive 3s form -i in Kola can be found in compound nouns, composed of body-part nouns and kin terms. In such cases, the possessive suffix occurs on the first (leftmost) noun. These compound words have preserved the 3s possessive form -i, as shown in the following examples:

	<u>1s form</u>	<u>3s form</u>
grandfather	abu-ng-'fer	abu-i-'fer
grandmother	abu-ng-'siha	abu-i-'siha
leg	ai-ng-'tul	ai-'tul ⁴
calf	ai-ng-'tubih	ai-'tubih
ankle	ai-ng-'meta	ai-'meta
knee	ai-ng-'rey	ai-'rey

2.2 Pronouns

2.2.1 Personal Pronouns

The unbound personal pronouns, referred to as free subject pronouns, are shown in Table 2.

Table 2. Free Subject Pronouns

	<u>Singular</u>	<u>Plural</u>
1	ak	kama (excl) sita (incl)
2	ka	kema
3	ri	iri

Free subject pronouns may be used in addition to the obligatory subject agreement prefixes on verbs, as shown below:

Ak ku-bana aka Dobo.
I 1s-go to Dobo
'I am going to Dobo.'

In such sentences, however, the subject pronouns are often omitted in daily speech because of the redundancy with the verb prefixes. So the previous sentence could also be as follows:

Ku-bana aka Dobo.
 1s-go to Dobo
 'I am going to Dobo.'

Investigation of the alternative forms in a discourse context will be necessary to determine the conditions under which the free subject pronouns appear.

The free (unbound) possessive pronouns are shown in the following table:

Table 3. Possessive Pronouns

	<u>Singular</u>	<u>Plural</u>
1	kanang	kama (excl) sita (incl)
2	kanam	kem
3	na	ida

Both animate and inanimate nouns are alienably possessed with this set of possessive pronouns, as evidenced by the following examples:

ida palaw
 3p:P house
 'their house' (inanimate)

kanam boka
 2s:P canoe
 'your canoe' (inanimate)

na kabaya
 3s:P clothes
 'his clothes' (inanimate)

sita po
 1pi:P dog
 'our dog' (animate)

kem awa
 2p:P snake
 'your snake' (animate)

kanang beda
 1s:P knife
 'my knife' (animate)

2.2.2 Demonstrative Pronouns

There are two sets of demonstrative pronouns: one set is used for animate referents, and the other set for inanimate referents. In addition, there is a further distinction between distal and proximal referents, as shown in the following table:

Table 4. Demonstrative Pronouns

<u>Inanimate</u>	<u>Animate</u>	<u>Gloss</u>
an	(ne)nan	'this (near)'
akin	neakin	'this (far)'
en, arin	nen, nerin	'that (near)'
ekin	nerikin	'that (far)'
ikan	ikar	'these (near)'

ikakin	—	'these (far)'
iken, karin	(n)iker, ken	'those (near)'
iekin, karikin	kekin	'those (far)'

The demonstrative pronouns in Table 4 function as complete noun phrases. Demonstratives which function as specifiers or modifiers of a head noun within a noun phrase are referred to as demonstrative adjectives, and are described in Section 2.3. Examples illustrating the function of the demonstrative pronouns in Table 4 are shown below:

An ye? this what 'What is this?'	(inanimate)
Nan po. this dog 'This is a dog.'	(animate)
Ikar tor. these chicken 'These are chickens.'	(animate)

2.3 Demonstrative Adjectives

Demonstrative adjectives are very similar in form and in meaning to the demonstrative pronouns shown in Table 4. Functionally, however, they are quite different. The demonstrative pronouns are replacive; that is, they replace the head noun and function in its place as an entire noun phrase. Demonstrative adjectives are not replacive; they function as modifiers of the noun, further specifying the noun's number and proximity. Many of the demonstrative adjectives, shown in Table 5, are seen to be shortened forms of the corresponding demonstrative pronouns of Table 4. Note, however, that there is no distinction between animate and inanimate forms of the plural adjectives.

Table 5. Demonstrative Adjectives

<u>Inanimate</u>	<u>Animate</u>	<u>Gloss</u>
a	na	'this (near)'
akin	nakin	'this (far)'
e	ne	'that (near)'
ekin	nekin	'that (far)'
ka	ka	'these (near)'
kakin	kakin	'these (far)'
ke	ke	'those (near)'
kekin	kekin	'those (far)'

Several noun phrases illustrating the function of the demonstrative adjectives are shown below:

palaw e house that 'that house'	(inanimate)
nahak an-mona ne year DUP-front that 'last year'	(animate)
tamata ma-h-nguh kekin person DUP-sick those 'those sick people'	(animate)

Demonstrative adjectives can also function as objects of prepositions or as objects of verbs, usually indicating location, as shown by the demonstratives *e* 'that (near)' and *ekin* 'that (far)' in the following two examples:

Tamata ne a-taler pay e.
 person that 3s-go out from that
 'That person went out from there.'

Tamata ke da-talah ekin.
 person those 3p-sit that
 'Those people sat there.'

2.4 Numerals

There are two sets of numerals, corresponding to the two noun classes (animate and inanimate) which they quantify. Numerals quantifying animate nouns require the suffix *-i*, while those quantifying inanimate nouns do not take this suffix.

The suffix *-i* may have originated from the 3s adjective person marker *-ni* (see Table 8 in Section 2.5). This original form *-ni* is still retained following *ot* 'one' in numerals; for instance, *ot-ni* 'one', *atot-ni* 'first', and *fuf mo atot-ni* 'eleventh'.

Cardinal and ordinal numerals, in both their animate and inanimate forms, are shown in Tables 6 and 7. The ordinal numerals are reduplicated forms, and are discussed in more detail in Section 2.2.

Table 6. Cardinal Numbers

	<u>Inanimate</u>	<u>Animate</u>
1	ot	otni
2	rua	rui
3	las	lasi
4	kafa	kafi
5	lima	limi
6	dum	dubi
7	dubam	dubabi
8	kafarua	kafarui
9	tera	teri
10	fuh	fuhi

Table 7. Ordinal Numbers

	<u>Inanimate</u>	<u>Animate</u>
first	atot	atotni
second	rarua	rarui
third	aslas	aslas
fourth	afkafa	afkafi
fifth	amlima	amlimi
sixth	amdum	abdubi
seventh	dumbam	dubababi
eighth	kafararua	kafararui
ninth	artera	arteri
tenth	ahfuh	ahfuhi
eleventh	fuf mo atot	fuf mo atotni
twenty second	fuhrua mo rarua	fuhrua mo rarui

Examples of numeral quantifiers in noun phrases with animate and inanimate head nouns are shown below:

noham ot
chisel one
'one chisel' (inanimate)

palaw rua
house two
'two houses' (inanimate)

tamata otni
person one
'one person' (animate)

man rui
bird two
'two birds' (animate)

The word-final nasal /m/ in the inanimate numerals **dum** 'six' and **dubam** 'seven' becomes denasalized to form /b/ in the animate numerals, resulting in **dubi** and **dubabi**, respectively. A similar (although somewhat more complicated) pattern of denasalization is also evident in the reduplicated ordinal forms. Note that the animate class form is vowel-final, not consonant-final. Since the consonant /b/ never occurs word-finally in Kola, it might be expected that /b/ would be realized as /m/ in this environment.

2.5 Adjectives

When a subject is an animate pronoun or noun phrase, predicate adjectives are suffixed with the adjective person markers shown in Table 8. These suffixes indicate the person and number of the subject noun phrase which is being modified.

Table 8. Adjective Person Markers

	<u>Singular</u>	<u>Plural</u>
1	-ng	-kam (excl) -sita (incl)
2	-ka	-kem
3	-ni	-yi, -di

The following sentences exemplify the use of these adjective person markers. In each of the cases below, the subject is a member of the animate noun class.

Ka manguh-ka.
you sick-2s:A
'You are sick.'

Ak eta-ng
I tall-1s:A
'I am tall.'

Netak tu-y-bay ne samayah-ni?⁶
axe DUP-new that good-3s:A
'Is that new axe good?'

Ni sowih-ni
He dead-3s:A
'He is dead.'

When the subject is a member of the inanimate noun class, the adjective

person markers of Table 8 do not occur. This is illustrated by their absence in the following sentences.

Nuh ekin eta.
 coconut that high
 'That coconut tree is high.'

Palaw e tubay.
 house that new
 'That house is new.'

2.6 Verbs

2.6.1 Subject Prefixes

Verbs are obligatorily prefixed with subject agreement markers (referred to as subject prefixes) indicating the person and number of the subject. The same set of prefixes is used, regardless of whether the subject is animate or inanimate. In addition, many noun roots become verbs when prefixed with these agreement markers. For instance, **tabah** 'ground' becomes 'to run aground' when prefixed; **tulak** 'hole' becomes 'to have a hole' when prefixed.

Kola verbs occur with the subject prefixes shown in Table 9:

Table 9. Subject Prefixes

	<u>Singular</u>	<u>Plural</u>
1	ku-	ma- (excl) ta- (incl)
2	am, mu-	mi
3	a-	da-

The 2s form **mu-** occurs before the consonant /m/, or preceding an unstressed syllable. In other cases, the variant **am-** occurs. This is shown by the following examples:

am-'bana	'2s-go'	mu-'mel	'2s-laugh'
am-'yuwa	'2s-cut'	mu-ga'wa	'2s-understand'
am-'kaha	'2s-bite'	mu-la'haka	'2s-know'

2.6.2 Intransitivizer

The intransitivizer **h-** may occur immediately preceding a transitive verb root; that is, between the subject prefix and the verb root. The verb with **h-** stresses the action of the verb, and is suggestive of a generic or unspecified object, while the verb without **h-** stresses the action of the verb as applied to a specific object.

Ku-h-nay ika.	
1s-INT-cook fish	
'I cook fish.'	(generic)
Ku-nay ika.	
1s-cook fish	
'I am cooking fish.'	(specific)

Ni takan a-h-dom boka.
 he often 3s-INT-make canoe
 'He often makes canoes.' (generic)

Ni bisa a-dom boka tuybay.
 he can 3s-make canoe new
 'He can make a new canoe.' (specific)

In some cases, it is clearly the difference in transitivity which distinguishes verbs with h- from those without h-. For example, compare the transitivity of the verb fukan 'to move' as it occurs with and without the intransitivizing morpheme h-. The form without h- is clearly a transitive verb, whereas the form with h- is an intransitive verb:

Ku-fukan kaytabi kekin aka ri.
 1s-move board those to there
 'I moved those boards there.'

Ku-h-fukan re palaw tuybay
 1s-INT-move to house new
 'I moved to a new house.'

Another example is:

Ku-diyān pahi.
 1s-weigh rice
 'I weighed rice.'

Ku-h-diyān.
 1s-INT-heavy
 'I am pregnant. (Lit. I am heavy.)'

Certain verbs appear to be obligatorily prefixed with h-. These verbs have a definite intransitive nature:

h-nom	'to take a path'
h-lang	'to speak'
h-ngak	'to cough'
h-yamuh	'to walk'

There are other verbs which have never been observed to occur with the h-prefix:

bana	'to go'	ka	'to eat'
gawa	'to know'	rena	'to hear'
tabah	'to run aground'	wangah	'to wake up'
yula	'to be drunk'	mel	'to laugh'
lay	'to fly'	mil	'to go back'
mina	'to stay'	nan	'to swim'
manam	'to have a meal'	wang	'to have'
ma	'to come'	fuy	'to enter'
talāh	'to sit'	talēr	'to go out'

Although there are some exceptions, these verbs are commonly followed by either objects or complements. For instance, bana 'to go', mina 'to stay', mil 'to go back', fuy 'to enter', and taler 'to go out' are usually followed by locative complements. For example:

Ak ku-bana aka re.
 I I-go to jungle
 'I go to the jungle.'

Ni a-taler pay panua e.
 he 3s-go out from village that
 'He went out from that village.'

Likewise, the verb **taláh** 'to sit' is immediately followed by a noun phrase or a demonstrative:

Tamata ne a-talah e.
 person that 3s-sit that
 'The person sat there.'

Ak ku-talah ur but-tebi tutif.
 I 1s-sit grass DUP-fine surface
 'I sat on the fine grass.'

Other verbs such as **gawa** 'to know' and **rena** 'to hear' are followed by either an object noun phrase or by an entire clause.

Ak ku-gawa barang ekin.
 I 1s-know word that
 'I know that word.'

Ak ku-gawa a-wang na rusa.
 I 1s-know 3s-have 3s:P deer
 'I know that he has his deer.'

2.6.3 Objective Suffixes

Transitive verbs may be suffixed with an object marker if an explicit object noun phrase does not follow the verb. These object suffixes are shown in Table 10.

Table 10. Object Suffixes

	<u>Singular</u>	<u>Plural</u>
1	-ng	-ma (excl) -sita (incl)
2	-m	-kem
3	-ni	-da, -yi

Examples of clauses using these object suffixes are shown below:

Ni a-gur-ng.
 he 3s-hit-3s:O
 'He hits me.'

Tamata ne a-wang-yi.
 person that 3s-sell-3p:C
 'That person sold them.'

Ku-so-ni ku-pu as-bosal-ng.
 1s-see-3s:O 1s-on DUP-small-1s:A
 'I saw it when I was small.'

2.6.4 Derivational yeh-

The derivational morpheme **yeh-** is a nominalizer, resulting in a noun when prefixed to a verb root. This is shown in the following examples:

gola
 'to bury'

yeh-gola
 NOM-bury
 'burial'

payalfil 'to speak'	yeh-payalfil NOM-story 'story'
wang 'to sell'	yeh-wang NOM-sell 'market'
rena 'to listen'	yeh-an-rena NOM-DUP-listen 'faith'
num 'to dive'	yeh-am-num NOM-DUP-dive 'diving'

2.6.5 Irregular Verbs

Some Kola verbs act in an irregular manner, in that they are not affixed with the exact forms of the subject prefixes shown in Table 9. These cases are treated as fused morphological forms of the verb root and the subject prefixes. The following paradigms illustrate the irregular nature of several common Kola verbs.

	1s	2s	3s	1pe	1pi	2p	2p
meet, reach	kit	mit	anit	mi ^t	tit	minit	dit
get	koki	moki	anaki	maki	taki	minaki	daki
wear	ken	men	anen	men	ten	minen	den
do, cause	kom	mom	anam	mam	tam	minam	dam
get	kol	mol	anal	mal	tal	minal	dal
say, want	koka	moka	noka	maka	taka	minoka	doka

These irregular verbs cannot be affixed by the intransitivizer **h-**, nor do they occur with the object pronoun suffixes (with the exception of the verb **anam** 'do, cause' in causative clauses). Because each of these verbs shows a particular exceptional pattern, I will discuss them individually.

One of the main characteristics is that these verbs focus on either specific objects or complements. **Anal** '3s:get' and **anaki** '3s:get' show this character clearly. When either of these two verbs takes an indirect object (in which case the preposition **ka** 'to' introduces the complement) in addition to a direct object, their meaning becomes 'to give' rather than 'to get'. The main difference between the two verbs is that **anak** takes singular direct objects, while **anaki** takes plural direct objects. Although the usual word order in Kola clauses is S+V+O+IO (as illustrated by the first example below with the regular verb **keh** 'give'), the direct objects of the verbs **anal** and **anaki** are often placed in clause-initial position. This is shown in the last two examples of the following set:

Ak koka ku-h-keh ika ku-ka-ka. (S+V+O+IO)
I 1s:want 1s-INT-give fish 1s-to-2s:O
'I want to give you fish.'

Ika ke, Kres anaki ka-ni. (O+S+V+IO)
fish these Kres 3s:give to-3s:O
'These fish, Kres gave to him.'

Ika ne, ak kol ka Kres. (O+S+V+IO)
fish this I 1s:give to-Kres
'This fish, I gave to him.'

The verb **anit** 'meet, reach' can have proper nouns as direct objects, however, the preposition **aka** 'to' must occur when pronouns are used instead of proper nouns. For example:

Ak kit Tina.
I 1s:meet Tina.
'I met Tina.'

Iri dit aka-ni.
they 3p:meet to-3s:0
'They met him.'

The verb **anam** 'do, cause' has many grammatical functions, one of which is as a causative verb. In such a construction **anam** is followed by the direct object; the causative clause word order is S+V+O+V, with the direct object serving also as the subject of the complement verb. Note the following examples:

Ak kom tamata ne a-bana aka Dobo.
I 1s:cause person that 3g-go to Dobo
'I let the person go to Dobo.'

Ni anam na wawa a-pu.
he 3s:cause 3s:P child 3s-fall
'He dropped his child. (lit. He caused his child fall.)

anam 'do, cause' is sometimes suffixed with an object pronoun when the object is obvious in the discourse context and the action of the main verb is focused on the entire complement.

Kema minam-yi da-talah e.
you 2p:cause-3p:0 3p-sit that.
'Let them sit there.'

The verb **noka** '3s:say' also has several grammatical functions, one of which is introducing quotations. For example:

Wawa ne ema noka, "Manguh-ni ban as-bosil-ni."
child that father 3s:say sick-3s:A from DUP-small-3s:A
'That child's father said, "He has been sick from childhood."'

Kema minoka "Ngahin ifa?"
you 2p:say name who
'You said, "What is your name?"'

However, the verbs of communication **yaman** 'inquire', **yaf** 'say', **payfil** 'speak', **pugawal** 'shout', and **yol** 'beg' do not introduce quotations themselves. These verbs occur in construction with **noka** as the complementizer. For example:

Kres a-yaf ka-yi noka "kema mi-ma."
Kres 3s-speak to-3p:0 3s:say "you 2p-come"
'Kres said to them, "Come."'

Iri da-yol doka "kanaka mom-kam ma-bana."
they 3p-beg 3p:say don't 2s:cause-1p 1pe-go
'They begged, "Don't make us go."'

A-h-yaman noka "Ifa a-kapah kanang kabaya?"
3s-INT-ask 3s:say who 3s-touch 1s:P clothes
'He asked, "Who touched my clothes?"'

What appears to be the same verb **noka** is followed also by clauses and used for the expression of wants and desires. This is seen in the following examples:

Ak koka ku-lahaka relih.
I 1s:want 1s-know vernacular
'I want to know the vernacular.'

Ak koka ku-h-keh ika ku-ka-ka.
I 1s:want 1s-INT-give fish 1s-to-2s:0
'I want to give fish to you.'

2.7 Prepositions

Kola prepositions have a verbal character. The basic prepositions are **na** 'at, in', **ka** 'to', **pay**, **ban** 'from' and **wa** 'concerning'. All these prepositions can be optionally prefixed with the subject prefixes of Table 9. For example:

Source:

Kama ma-taler ma-pay panua akin.
we(excl) 1p-go out 1pe-from village this
'We went out from this village.'

Referential:

Iri da-kut da-wa Kres.
they 3p-tell 3p-concerning Kres.
'They told concerning Kres.'

Locative:

Iri da-mina da-na kanang palaw.
they 3p-stay 3p-at 1s:P house
'They stayed at my house.'

Directional:

Iri da-yaf da-ka Tina.
they 3p-speak 3p-to Tina.
'They spoke to Tina.'

When the object is a pronoun rather than a noun phrase, the object suffixes of Table 10 are used:

Source:

A-yol ampung pay-ng.
3s-ask forgiveness from-1s:0
'He asked forgiveness from me.'

Directional:

Iri da-yaf ka-ni.
they 3p-speak to-3s:0
'They spoke to him.'

It is also possible for a preposition to be affixed with both a subject prefix and an object suffix. This is shown in the following examples:

Iri da-kut da-wa-ni.
they 3p-tell 3p-concerning-3s:0
'They told about him.'

Ak ku-yol ku-pay-ka.
 I 1s-beg 1s-from-2s:0
 'I beg you.'

Ak koka ku-h-keh ika ku-ka-ka.
 I 1s:want 1s-INT-give fish 1s-to-2s:0
 'I want to give fish to you.'

The question naturally arises as to whether there is any difference between verbs and prepositions in Kola. The main factor seems to be that Kola verbs are obligatorily affixed with subject markers, while prepositions are affixed only optionally.

Kola prepositions are not combined together into so-called group prepositions, but are always followed by object affixes, noun phrases, demonstratives, or relative clauses. There are several words which show location, such as *abil* 'inside', *mona* 'front', *mawah* 'above' and *mir* 'back'. These words can combine with prepositions giving the impression of a group preposition; for example, *na abil* which literally means 'at inside'. Note, however, that *abil* 'inside' is actually not a preposition, but rather a nominal modifier, since in full noun phrases it follows the noun it modifies: **na abil palaw* is incorrect, but *na palaw abil* 'at the inside of house' is correct.

Beside the previous prepositions, some verbs which are fully prefixed with subject prefixes function also with prepositional meaning in serial verb constructions. Examples are:

<i>tuh</i>	'accompany'	-->	comitative
<i>anal</i>	'to get, take'	-->	instrumental
<i>uk</i>	'to use'	-->	instrumental

anal '3s:take' and *uk* '3s:use' act in an irregular manner, as seen in the following paradigms:

	1s	2s	3s	1pe	1pi	2p	3p
take, get	<i>kol</i>	<i>mol</i>	<i>anal</i>	<i>mal</i>	<i>tal</i>	<i>minal</i>	<i>dal</i>
use	<i>kuk</i>	<i>muk</i>	<i>uk</i>	<i>mak</i>	<i>tak</i>	<i>miuk</i>	<i>duk</i>

Examples are:

Comitative:

Ni a-bana a-ka re a-tuh na wasiha
 he 3s-go 3s-to jungle 3s-accompany 3s:P wife.
 'He went to the jungle with his wife.'

Instrumental:

Ak ku-pu pep kuk beda.
 I 1s-kill pig 1s:use bushknife
 'I kill a pig with a bushknife.'

Instrumental:

Ka mu-h-payfil mol anglang ye?
 you 2s-INT-speak 2s:take language what
 'In which language do you speak?'

Comitative:

Ni a-tawa anal Mina.
 he 3s-marry 3s:take Mina
 'He married Mina.'

3 REDUPLICATION

3.1 Phonological Patterns of Reduplication

The phonological rules for Kola reduplication are discussed in detail in Takata and Takata (1991). They are presented here in summary form as an ordered set of mutually exclusive rules:

- Rule 1. $V'C_1VC_2 \rightarrow VC_2'C_1VC_2$
 Rule 2. else $'(C_1)VC_2 \rightarrow aC_2'C_1VC_2$
 Rule 3. else $'CV \rightarrow Ca'CV$

Reduplicated patterns following Rule 1 are illustrated by the following words:

<u>Root form</u>		<u>Reduplicated form</u>	
tu'bay	'new'	tuy'bay	'new''
bu'lay	'withered'	buy'lay	'withered'
bu'tebi	'gentle'	bub'tebi	'gentleness'
sa'mayah	'good'	say'mayah	'goodness'

Reduplicated patterns following Rule 2 include the following examples:

<u>Root form</u>		<u>Reduplicated form</u>	
'nar	'long'	ar'nar	'long'
'tosi	'short'	as'tosi	'short'
'bosil	'small'	as'bosil	'small'
'eta	'tall'	a'teta	'tall'
ai'ral	'morning'	afal'ral	'early morning'
ah'but	'hard'	ahat'but	'hard'
ah'tada	'3s-throw down'	ahad'tada	'3s-throw down'

Rule 3 is used for root forms to which Rules 1 and 2 are not applicable, as shown by the following examples:

<u>Root form</u>		<u>Reduplicated form</u>	
'pui	'fruit'	pa'pui	'fruits'
'rua	'two'	ra'rua	'second'
'rein	'clever'	ra'rein	'cleverness'
'luan	'load'	la'luan	'loads'
pa'nua	'village'	pana'nua	'villages'
ka'pua	'kapok'	kapa'pua	'kapok'
ta'kuan	'deaf'	taka'kuan	'deaf'
wan'luan	'boy'	wana'luan	'male'

3.2 Grammatical Functions of Reduplication

Some Kola words which have the same meanings as similar words in related languages are found in a reduplicated form in Kola. For instance, Dobel **lopi** 'flag' corresponds to Kola **ap-lopi** 'flag'; Dobel **dala** 'drum' corresponds to Kola **al-dala** 'drum'; and Kei **dor** 'continuously' corresponds to Kola **or-dor** 'continuously'.

Although these reduplicated words show no difference in meaning when compared with the corresponding forms from related languages, it is commonly the case that reduplication in Kola does change word meaning. Since reduplication in Kola generally changes either word meaning or word class, the functions of reduplication will be grouped into these two categories. Section 3.2.1 discusses those functions of reduplication which

affect word meaning but do not alter word class. Section 3.2.2 examines the remaining functions in which word class is altered by the reduplication.

3.2.1 Reduplication Changes to Word Meaning

(a) Reduplication of nouns can add the notion of plurality to the noun. For example:

panua 'village'	-->	pa-na-nua' ---DUP-village 'villages'
palaw 'house'	-->	al-palaw DUP-house 'houses'

(b) Reduplication of nouns and verbs can serve as a means of intensification. For example:

loba 'baby'	-->	ab-loba DUP-baby 'new-born baby'
afral 'morning'	-->	af-al-ral ---DUP-morning 'early morning'

The following sentence is an example of the reduplication of the verb **yebuh** 'to be dirty':

Kali-m a-h-ab-yebuh.
body-your 3s-INT-DUP-dirty
'Your body is very dirty.'

Although **yebuh** 'to be dirty' can also function as an adjective with an adjective person marker from Table 8, **yebuh** in this example is clearly functioning as verb since it is prefixed with the 3s subject prefix **a-** (see Table 9).

(c) Reduplication gives the meaning 'with no purpose' to basic intransitive verbs. The intransitive verb **yamuh** 'to walk' has the reduplicated form **am-yamuh** 'to walk with no purpose, to take a walk':

Ni a-h-yamuh nansin tor.
he 3s-INT-walk like chicken
'He walks like a chicken.'

Ak ku-h-am-yamuh koni.
I 1s-INT-DUP-walk only
'I am just taking a walk.'

(d) Reduplication can also add a reciprocal component to transitive verbs:

Da-h-ar-gur-yi.
3p-INT-DUP-hit-3p:0
'They hit each other.'

(e) Reduplication can form other derived words, for example **ang-tangan** 'ring' is the reduplicated form of the Malay borrowing **tangan** 'hand'.

3.2.2 Reduplication Changes to Word Class

(a) Reduplication of Verbs

Nominalization:

Many Kola intransitive verbs become nouns when reduplicated. For example, the intransitive verb **lang** 'speak' has the reduplicated form **ang-lang** 'words, language':

Ku-h-lang kol relih.
I-INT-speak in vernacular
'I speak the vernacular.'

Ka mu-h-payful mol ang-lang ye?
you 2s-INT-speak in DUP-speak what
'What language do you speak?'

Transitive verbs also have nominalized reduplicated forms. The transitive verb **laku** 'to sweep' becomes **ak-laku** 'broom' when reduplicated:

Ak ku-laku palaw rey.
I 1s-sweep house side
'I sweep the side of the house.'

Ka mu-h-wang ak-laku motak?
you 2s-INT-sell DUP-sweep all
'Did you sell all the brooms?'

Relativization:

Relative clauses may consist of nouns in construction with reduplicated forms of verbs. Relative clauses can function as modifying the subject of a main verb, the object of a main verb, and the object of a preposition. At least in one case (the locative clause preceded by the preposition **na** 'at' in the example below) it also functions as modifier of a verb. The following examples show these various types of relative clauses:

Modifying subject of a main verb:

Tamata-ke da-l-talah e da-manam.
person-PL 3p-DUP-sit there 3p-eat
'The people who sat there ate.'

Modifying object of a main verb:

Ni a-utuh tamata a-l-mala-yi.
he 3s-call person 3s-DUP-want-3p:0
'He called the people whom he wanted.'

Modifying object of a preposition:

Yon a-puraka na doyik-ka aka dokter da-k-wakih-ni.
John 3s-use 3s:P money-PL for doctor 3p-DUP-treat-3s:0
'John used his money for the doctors who treated him.'

Modifying a main verb:

Iri da-talah na Kres a-l-talah ekin.
they 3p-sit PREP Kres 3s-DUP-sit there
'They sat where Kres sat.'

(b) Reduplication of Adjectives

Nominalization:

Kola adjectives become nouns when reduplicated. Several examples are shown below:

rein 'clever'	-->	ra-rein DUP-clever 'cleverness'
butebi 'gentle'	-->	bu-b-tebi ---DUP-gentle 'gentleness'
samayah 'good'	-->	sa-y-mayah --DUP-good 'goodness'

Adverb formation:

All Kola adjectives function as adverbs when they are reduplicated and preceded by the verb **anam** '3s:do'. This verb may be characterized as 'adverb marker' in this case. As mentioned previously, this verb acts in an irregular manner (see paradigm in Section 2.6.5). Examples of reduplicated adjectives functioning as adverbs are shown below:

Ka am-lang mom sa-y-mayah.
you 2s-speak 2s:do ---DUP-good
'You speak well.'

Ni a-h-yamuh anam bu-b-tebi.
he 3s-INT-walk 3s:do ---DUP-slow
'He walks slowly.'

Attributive adjective formation:

Attributive adjectives have forms which are different from those of predicate adjectives, in that the reduplicated forms occur as attributive adjectives. This is shown in the following pairs of examples:

[**ahbut**] vs. [**ah-at-but**] 'hard'

Nuh ekin ahbut.
coconut that hard
'That coconut is hard.'

Ak kufah nuh ah-at-but.
I look for coconut hard
'I look for a hard coconut.'

[**tu'bay**] vs. [**tu-y-'bay**] 'new'

Motor e tu'bay.
motor that new
'That motor is new.'

Ku-Bana aka palaw tu-y-'bay.
1s-go to house new
'I went to a new house.'

[nar] vs. [ar-nar] 'long'

Tol ekin nar.
rope that long
'That rope is long.'

Ku-kel tol ar-nar.
1s-buy rope DUP-long
'I bought a long rope.'

Comparison:

Reduplication of adjectives is used to form statements of comparison between two objects, when the quality being compared is equal for both objects. Although reduplication is sometimes omitted in daily conversation, adjectives are generally reduplicated and occur between the two objects being compared. In addition, the objects are suffixed by adjective person markers (see Table 8) if the objects are animate pronouns or noun phrases.

Ika nekin ar-nar-ni lima-ng.
fish that DUP-long-AN hand-1s:P
'The fish is as long as my hand.'

Ni at-eta-ni ak.
he DUP-tall-AN I
'He is as tall as I.'

However, to show the comparative meaning when one object has more of the quality specified by the adjective than the other, reduplication does not occur, but rather the preposition **pay** 'from' occurs:

Ni eta-ni pay-ng.
he tall-AN from-1s:0
'He is taller than me.'

(c) Reduplication of Nouns

In addition to the changes in word meaning which can occur when nouns are reduplicated (as described in Section 3.2.1), nouns can also be reduplicated (as described in Section 3.2.1), nouns can also be reduplicated to function as modifiers of other nouns. For example, the noun **mona** 'front' has a reduplicated form **an-mona** 'previous'. Consider the following examples:

nahak an-mona ne
year DUP-front that
'last year'

taga ai-a]-tul
shackle 3s:P-DUP-leg
'his leg shackle'

(d) Reduplication of Numerals

Cardinal numbers become ordinal numbers when reduplicated. There are two sets of numerals; one set for use with animate nouns, and the other for use with inanimate nouns.

Table 11. Numerals: Inanimate Nouns

	<u>Cardinal</u>	<u>Ordinal</u>
1	ot	at-ot
2	rua	ra-rua
3	las	as-las
4	kafa	af-kafa
5	lima	am-lima
6	dum	am-dum
7	dubam	dum-bam
8	kafarua	kafa-ra-rua
9	tera	ar-tera
10	fuh	ah-fuh

Table 12. Numerals: Animate Nouns

	<u>Cardinal</u>	<u>Ordinal</u>
1	otni	at-otni
2	ruï	ra-ruï
3	lasi	as-lasi
4	kafi	af-kafi
5	limi	am-limi
6	dubi	ab-dubi
7	dubabi	du-ba-babi
8	kafarui	kafa-ra-ruï
9	teri	ar-teri
10	fuhi	ah-fuhi

tamata ra-ruï ne
 person DUP-two that
 'the second person'

Sida roti dubam.
 rest bread seven
 'Seven pieces of bread are left.'

Kaka-ng rui wanluan-di.
 older sibling-1s:P two male-3p:AN
 'My two older siblings are brothers.'

NOTES

1. Although most body parts and kin terms are grammatically treated as members of the inalienably-possessed noun class, there are some exceptions. A few kin terms do not take the inalienable possessive suffixes, but instead show possession via the use of the general possessive pronouns used with nouns belonging to the alienably-possessed class (see Section 2.2.1). Examples of these exceptions include:

	<u>1s form</u>	<u>3s form</u>
child	kanang wawa	na wawa
husband	kanang warfer	na warfer
wife	kanang wasiha	na wasiha

2. For a discussion of what is referred to here as alienable and inalienable possession, and a survey of possessive forms in Austronesian languages of Maluku, see Laidig (1990).
3. The following is a list of abbreviations used in this paper:

1s	1st person singular
1pe	1st person plural exclusive
1pi	1st person plural inclusive
2s	2nd person singular
2p	2nd person plural
3s	3rd person singular
3p	3rd person plural
A	Adjective
AN	animate
DUP	Reduplication
excl	Exclusive
incl	Inclusive
INT	Intransitivizer
IO	Indirect object
NOM	Nominalizer
O	Object
P	Possessive marker -
PL	Plural marker
PREP	Preposition
S	Subject
V	Verb

4. Kola does not allow geminate vowel clusters (Takata and Takata 1991). It is assumed that /ai-i-tul/ 'leg' is underlying, and that the general degemination rule results in phonetic form [ai'tul]. The same holds true for /ai-i-tubih/ 'calf', /ai-i-meta/ 'ankle', and /ai-i-rey/ 'knee'.
5. Dobel, a related language in Aru, shows the voiced stop corresponding to Kola's nasal: compare Kola **dum** 'six' with Dobel **dubu** 'six' (Hughes 1989).
6. Note that **netak** 'axe' is treated grammatically as an animate noun. Other exceptions are mentioned in the discussion of animate and inanimate noun classes in Section 2.1.
7. The preposition **aka** 'to, for, because of' has not been included in this list since it is never affixed.

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