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Kimaragang

1. Introduction

Kimaragang is a Dusunic language spoken by approximately 10,000 people living in the state of Sabah, East Malaysia. The Dusunic family, together with Murut-Tidong, Paitanic, and Bisayan, comprise the Northeast Borneo subgroup (Wurm & Hattori 1983; Smith 1984). The wider genetic classification of this stock is a debated issue which will not be discussed here (see Blust 1998 and Adelaar, this volume). The Dusunic languages share many lexical and phonological features with various Philippine languages; but the most striking parallels are found in morphology and syntax, where Dusunic shows a very high degree of similarity to languages of the central Philippines such as Tagalog and Cebuano.

Kimaragang is spoken in the Kota Marudu and Pitas districts of Sabah, near the northeastern tip of Borneo. The Kimaragang dialects spoken in these two districts are distinguished by a significant number of lexical differences, as well as a smaller number of morphological and phonological differences, but remain fully intelligible to each other. The Sonsogon dialects, spoken in the highland areas to the south and east, are closely related to Kimaragang but exhibit major phonological differences. The Kimaragang view Sonsogon as an extremely low-prestige speech variety.

The Kimaragang are a small minority in the Pitas district; but in the Tandek subdistrict of Kota Marudu they constitute the largest single ethnic group. Kimaragang functions as a local *lingua franca* in contexts such as the Tandek weekly market. A local variety of Sabah market Malay has long been used for interactions with local officials and people from other districts. Standard Malay is now the language of education, mass media, and government.

The Kimaragang were originally swidden rice farmers. After the British administration put an end to head-hunting and tribal warfare, some Kimaragang began to move down out of the hills onto the eastern edge of the large flood plain which lies immediately to the south of Marudu Bay. These people now farm wet rice on the plain, although most families continue to plant some dry rice and other crops in hillside gardens, and traditional religious beliefs are still centered on the dry rice farming cycle.

This chapter is based on the dialect spoken on the plain around Tandek.

- (2) /monudɔŋ/ ‘look down’ vs. /monudɔŋ/, ‘chop wood’.
 /tadaw/ ‘day, sun’ vs. /kadaw/ ‘banana species’
 /todon/ ‘enter’ vs. /todɔŋ/ ‘nose’
 /obuli/ ‘can’ vs. /obutak/ ‘muddy’
 /bas/ ‘bus’ vs. /ɓaju/ ‘shirt’

The glottal stop is generally optional in non-final position, e.g. [raʔat] ~ [ra:t] ‘sea’. The word-final glottal stop, which is highly contrastive in the Pitas dialect, is only marginally contrastive in the Tandek dialect. Most words which end with a vowel in the Pitas dialect are pronounced with a final glottal in Tandek, so that final (open) vowels are quite rare. All examples of open final vowels which have been identified so far are in functors, pronouns, question words, etc. (though many other words in these categories do have the final glottal). However, even in Tandek a few minimal pairs can be found:

- (3) /ko/ ‘you (sg.)’ vs. /koʔ/ ‘or’
 /kito/ ‘we (dual)’ vs. /o-kitoʔ/ ‘see’

2.1.2 Syllable structure

The basic shape of a syllable in Kimaragang is (C)V(C). Consonant clusters occur only word-medially, and the first element in the cluster is always a nasal or voiced stop. The second element is generally a homorganic obstruent, though across morpheme boundaries certain other combinations are possible. The allowable morpheme-internal clusters are illustrated below:

- (4)
- | | | |
|------|-----------|-----------------------------|
| -mp- | pampaŋ | ‘stone’ |
| -nt- | puntiʔ | ‘banana’ |
| -ns- | nansak | ‘ripe’ |
| -ŋk- | kaŋkab | ‘chest’ |
| -mb- | simbar | ‘answer’ |
| -nd- | tandus | ‘spear’ |
| -ŋg- | taŋgaʔ | ‘bamboo water
container’ |
| -bp- | tobpineeʔ | ‘sibling’ |
| -dt- | lodtuŋ | ‘swell up’ |
| -ds- | podsuʔ | ‘bathe’ |
| -gk- | lagkaw | ‘hut’ |

Kimaragang follows the general Austronesian pattern in that root forms are usually two syllables long. Roots of three or more syllables are generally derived historically from disyllabic roots through infixation, reduplication, or some other morphological process.

Each syllable normally contains a single vowel. Thus vowel sequences are normally disyllabic, with each of the two segments functioning as nuclei in adjacent syllables. A glottal stop is optionally inserted within such sequences. However, when geminate vowel

sequences are followed by one or more other syllables, the two vowels are shortened so that both together are only slightly longer than one normal vowel. No glottal stop can be inserted within these non-final geminates, and (at least in terms of the surface phonology) one must say that the two vowels have merged to form the complex nucleus of a single syllable with the non-standard shape CVV(C). This process leads to contrastive length in non-final syllables, as illustrated in the following examples:

(5)	taŋ.kap	‘sheath for parang’	taaŋ.kap	‘sling for baby’
	to.luʔ	‘three’	too.luʔ	‘pestle’
	tu.kad	‘ladder, stairs’	tuu.kad	‘spade, trowel’
	ko.yu.wan	‘body’	ko.yuu.wan	‘able to part with’

2.1.3 Stress

Stress is not contrastive on the word level, but it is difficult to determine what rules govern the distribution of phonetic stress. Native speakers seem to have no intuitions about stress, being unaware of stress placement in their own pronunciation and often accepting variable stress patterns for the same word as being equally correct. Marked intonational (or focal) stress can be placed on different syllables within the same word, e.g. when a story teller repeats a particular phrase or clause for emphasis. Moreover, it is not uncommon for trained linguists listening to the same data to disagree about the position of stress in a particular word.

No detailed acoustic study has yet been attempted, but my impressionistic observations support the following basic generalizations. Normal stress may occur on the final or penultimate syllable of the word, or the last two syllables may receive equal stress. Final open syllables are generally unstressed, while words ending with the suffixes *-an* or *-on* tend to have final stress.

There are a few forms in which a marked focal stress seems to have become lexicalized, leading to some apparent “minimal pairs”. The marked stress in the following examples differs from normal stress, in that it is signaled by a definite rise in pitch and a slight lengthening of the vowel. These same features (sometimes greatly exaggerated) are used to mark intonational (sentence level) focal stress.

(6)	/toʔon/	‘year’	vs.	/tóoʔon/	‘next year’
	/mantad/	‘from’	vs.	/máantad/	‘previous’
	/banar/	‘true, very’	vs.	/báanar/	‘for no reason, in vain’

The pattern illustrated in these examples can also be used to modify words borrowed from Malay. For example, /skáaraŋ/ is used in Kimaragang to mean ‘later; some time today’ and is derived from *sekarang* /skaraŋ/, which means ‘now’ in standard Malay.

2.2. Orthography

At the present time there is no officially recognized standard orthography for Kimarag

ang. The practical orthography described here and used in later sections of this chapter is specific to the Tandek dialect. The general design strategy has been to conform with the official orthography of the national language, Bahasa Malaysia, as far as possible. Only deviations from that norm will be discussed in this section.

A medial glottal stop is written with an apostrophe, as in the older Malay orthography. Since there are very few words in the Tandek dialect which end in a vowel, compared to the very large number that end in glottal stop, it is more economical to mark final open vowels rather than to write the final glottal stop. Following an orthographic convention formerly used in Penampang Kadazan, the letter *-h* is used to indicate the absence of a glottal stop (i.e. a final open syllable).

The official Malay orthography forbids the use of the letters *w* and *y* at the end of a word. The vowel sequences /-ai-/, /-oi-/, /-au-/ and /-ou-/ do not occur in Kimaragang, having merged diachronically to /-ee-/ and /-oo-/ (see also section 2.3.2). For this reason, the word final sequences /-ay/, /-oy/, /-aw/ and /-ow/ can be written as *-ai*, *-oi*, *-au* and *-ou* (as in Malay) without confusion. Where there is a contrast between a final glide and the corresponding high vowel, however, *-y* and *-w* are written as in *tikuw* ‘tail’.

The letters *b* and *d* represent implosives /b/ and /d/ in word-initial or intervocalic position, and regular voiced stops /b/ and /d/ word-finally or following a nasal (environments where the contrast is neutralized). In the rare words where /b/ and /d/ occur in intervocalic position, they are written as *-bb-* and *-dd-* respectively, as in *taddau* ‘day, sun’.

2.3. Morphophonemic alternations

2.3.1. Nasal Merger and Nasal Assimilation

Like most Western Austronesian languages, Kimaragang has a verbal prefix (*poN-*) ending in a nasal which merges with, or replaces, a following voiceless obstruent. In Kimaragang the process of Nasal Merger also affects the voiced labials /b,bb,w/. This alternation is illustrated in the following examples (the merger of the prefix /m-/ with the /p-/ of *poN-* will be discussed below; see §2.3.3 for the assimilation of /o/ to /a/):

- (7) (a) $-N + k \rightarrow /ng/$
 as in: m-poN- koruang → /mongoruang/ ‘to accompany’
- (b) $-N + \{s,t\} \rightarrow /n/$
 as in: m-poN- siddang → /moniddang/ ‘to dry in the sun’
 m-poN- tibas → /monibas/ ‘to slash’
- (c) $-N + \{p,w,b,bb\} \rightarrow /m/$
 as in: m-poN- panau → /mamanau/ ‘to walk’
 m-poN- waal → /mamaal/ ‘to make’
 m-poN- boli → /momoli/ ‘to buy’

Before vowels, *-N* is realized as a velar nasal /ng/, as in the following examples:

- (d) m-poN- irak → /mongirak/ ‘to laugh’
 m-poN- akan → /mangakan/ ‘to eat/.

Before {d,dd,g,j,r,l}, an epenthetic vowel /o/ is inserted, and -N is again realized as a velar nasal /ng/:

(e)	m-poN- duat	→	/mongoduat/	‘to ask’
	m-poN- guring	→	/mongoguring/	‘to harrow’
	m-poN- jaga	→	/mangajaga/	‘to guard’
	m-poN- ragus	→	/mangaragus/	‘to plow’
	m-poN- lumbid	→	/mongolumbid/	‘to roll a cigarette’

Another sort of nasal merger is triggered by the actor voice marker (see section 3.1.1). It is this process which gives rise to the initial /m-/ in the preceding examples. Actor voice is marked by the prefix /m-/ before vowel-initial stems (8a). Before non-labial consonants it is marked by the infix /-um-/, which is inserted immediately following the initial consonant of the stem (8b). Before labial consonants, however, the /m-/ replaces the initial consonant of the stem, as (8c).

(8) a.	m-ogom	→	mogom	‘sit’
	m-uli	→	muli	‘return’
b.	m-toyog	→	tumoyog	‘swim’
	m-sobu	→	sumobu	‘urinate’
c.	m-podsu	→	modsu	‘bathe’
	m-waliw	→	maliw	‘move’
	m-bubus	→	mubus	‘spill’ (intrans.)

Other prefixes which end in nasals do not trigger nasal merger, but the prefix nasal does (in most cases) assimilate to a following obstruent. The behavior of these nasal elements before vowels and sonorants varies considerably from one prefix to another, and is beyond the scope of the present study.

2.3.2. Vowel merger

As mentioned in section 2.2, the vowel sequences *-ai- and *-oi-, *-au- and *-ou- have merged diachronically (following the loss of Proto-Dusunic *h) to /-ee-/ and /-oo-/ respectively. The same merger operates synchronically where the sequences /o+i/ or /o+u/ occur across a morpheme boundary. Some examples are given in (9):

(9)	po- + uli + -on	→	/poolion/	‘allow to return’
	noko- + ulok	→	/nokoolok/	‘accidentally stepped on’
	ko- + uma	→	/kooma/	‘enough; able to fit’
	no- + igit + -an	→	/neegitan/	‘accepted proposal of marriage’
	noko- + idu	→	/nokeedu/	‘has escaped’
	po- + inum + -on	→	/peenumon/	‘give someone a drink’

2.3.3. Vowel harmony

Vowel harmony in Kimaragang spreads from right to left, changing /o/ to /a/ when the vowel in the following syllable is an /a/. The following examples illustrate the effect of vowel harmony:

- (10)
- | | | | |
|--|---|--------------|---------------------------------|
| noko-dagang | → | nakadagang | ‘sold’ |
| poN-omot-an | → | pangamatan | ‘harvest time’ |
| po-ogom-an | → | paagaman | ‘place where you set something’ |
| poN-tanom-an | → | pananaman | ‘time/place of planting’ |
| ondom-an | → | andaman | ‘remember’ |
| -in-poN-olos-an
(olos ‘borrow’) | → | pinangalasan | ‘the person you borrowed from’ |
| -in-poN-asok-an
(asok ‘plant rice’) | → | pinangasakan | ‘the place you planted’ |

The reverse process does not apply; that is, /a/ does not spread from left to right, nor does /o/ spread to the left when preceded by /a/, as shown by examples like the following:

- (11)
- | | | | |
|--------------|---|----------|---------|
| dagang + -on | → | dagangon | ‘buy’ |
| surat + -on | → | suraton | ‘write’ |
| lapak + -on | → | lapakon | ‘split’ |

High vowels neither trigger nor undergo vowel harmony. In fact, the process is blocked when a high vowel intervenes between the /a/ and a preceding /o/. The /o/’s in the following examples do not undergo vowel harmony, even though a suffix containing an /a/ is added, because they are “shielded” by an intervening high vowel:

- (12)
- | | | | |
|-------------|---|---------|-----------|
| sogit + -an | → | sogitan | ‘cold’ |
| sobu + -an | → | sobuan | ‘urinate’ |
| oling + -an | → | olingan | ‘forget’ |

Another interesting fact about vowel harmony in Kimaragang is that the process does not apply to mono-morphemic geminate vowels. This “geminate inalterability” effect is illustrated in (13). Note that a sequence of identical vowels across a morpheme boundary does undergo vowel harmony in the normal way, as seen in *paagaman* (example 10).

- (13)
- | | | | |
|---------------------------------|---|--------------|----------------------------|
| woog-an | → | woogan | ‘wash’ |
| poN-woog-an | → | pomoogan | ‘washing place’ |
| no-loot-an | → | nolootan | ‘covered with sand/dirt’ |
| o-toor-an | → | otooran | ‘clutch’ |
| toboong-an | → | toboongan | ‘tie the mouth (of a dog)’ |
| poN-in-loow-an
(loou ‘call’) | → | ponginloowan | ‘term of address’ |

2.3.4. Vowel neutralization

The examples in (11) above demonstrate that “reverse vowel harmony” does not occur; that is, /a/ does not change to /o/ when the following vowel is /o/. However, there is another context in which the change from /a/ to /o/ can be triggered. This process is illustrated in the following examples:

- (14)
- | | | | |
|----------------|---|---------|---------------|
| a. talib + -an | → | toliban | ‘pass by’ |
| b. lasu + -an | → | losuan | ‘to feel hot’ |
| c. anu + -on | → | onuwon | ‘take’ |
| d. sawo + -on | → | sowoon | ‘marry’ |

In these examples, /a/ is the first vowel in a disyllabic root whose second vowel is not /a/. When a suffix is added, the /a/ changes to /o/. If the suffix is /-an/, which would

trigger vowel harmony, this change is only observed when the second root vowel is high, as in (14a-b). If the suffix is /-on/, which cannot trigger vowel harmony, the change is observed even when the second root vowel is not high, as in (14d). In general, any /a/ which would otherwise occur in pre-penultimate position (i.e. more than two syllables from the end of the word) is neutralized to /o/, unless it is preserved by vowel harmony.

2.3.5. Particle infixation

The unstressed aspectual particles *noh* ‘completive’ and *poh* ‘incompletive’ sometimes merge with pronouns which end in a semivowel (/w/ or /y/). More precisely, when the aspectual particle is immediately preceded by such a pronoun, the particle is inserted (or “infixated”) into the last syllable of the pronoun, just before the final semivowel. This infixation occurs only in the Tandek dialect, and not in the Pitas dialect. Some examples are given below:

- (15) /muli okoi no/ → /muli okonoi/ ‘we (excl.) are going home now’
 /muli tokou no/ → /muli tokonou/ ‘we (incl.) are going home’
 /muli tokou po/ → /muli tokopou/ ‘let’s (incl.) go home’

2.4. Reduplication

Reduplication in Kimaragang exhibits a number of phonological complications which have not yet been investigated in any systematic way. But in simplest terms, we can identify three basic patterns of reduplication: CV-reduplication, full root reduplication, and vowel lengthening (which can be viewed as reduplication of a single vowel).

CV-reduplication is used to mark a number of different morphological categories, including reciprocal actions, intensification or diminution of stative predicates, and repetitive, habitual or progressive aspect. When the root begins with a consonant and the word contains no infix, the first consonant and vowel of the root are copied, as in (16a). When an infix is present, the first CV of the infixed stem is copied, as in (16b). (Note: “UR” = “Underlying Representation”.)

(16) a.

ROOT	Underlying Representation	OUTPUT	GLOSS
gayo <i>big</i>	o-RDP-gayo	agagayo	<i>a little bigger</i>
bisa <i>potent</i>	o-RDP-bisa	obibisa	<i>very powerful</i>
patai <i>die/kill</i>	m-pi-RDP-patai	mipapatai	<i>kill each other; wage war</i>
boros <i>speak</i>	ko-RDP-boros	koboboros	<i>reason for speaking</i>

b.

ROOT	Underlying Representation	OUTPUT	GLOSS
laga <i>come</i>	RDP -um- laga	lulumaga	<i>always coming around</i>
talib <i>pass</i>	RDP -um- talib	tutumalib	<i>keep passing by</i>
goroi <i>tear</i>	RDP -in- goroi	giginoroi	<i>torn into little pieces</i>
tanom <i>plant</i>	RDP -in- tanom	titinanom	<i>being planted</i>

When the root begins with a vowel and the form includes a suffix, CV copying begins with the second syllable of the root, as in (17a). When there is no suffix, the full root is normally copied, as in (17b).

(17) a.

ROOT		Underlying Representation	OUTPUT	GLOSS
igit	<i>betroth</i>	RDP-igit-an	igigitan	<i>getting engaged</i>
ansak	<i>cook</i>	pi-RDP-ansak-an	piansasakan	<i>cook quickly</i>
ilug	<i>snare</i>	RDP-ilug-on	ilulugon	<i>trying to snare</i>
ampas	<i>imply</i>	RDP-ampas-on	ampapason	<i>speaking indirectly</i>

b.

ROOT		Underlying Representation	OUTPUT	GLOSS
uli	<i>return</i>	pi-RDP-uli	piuli-uli	<i>return it quickly</i>
ondom	<i>remember</i>	pi-RDP-ondom	piondom-ondom	<i>keep remembering</i>
owit	<i>carry</i>	n-RDP-owit-Ø	nowit-owit	<i>always carried</i>
imbas	<i>show</i> <i>ability</i>	m-RDP-imbas	mimbas-imbas	<i>compete</i>

Full root reduplication with consonant-initial roots is quite rare; Jim Johannson (p.c.) suggests that the attested forms may in fact be borrowings or calques. Forms exhibiting this pattern frequently involve an irregular alternation, with even non-labial initial consonants being replaced by the *m*- which marks Active Voice. Some examples are given in (18).

(18)

ROOT		Reduplicated form	GLOSS
panau	<i>walk</i>	manau-panau	<i>take a walk</i>
kombit	<i>touch</i>	mombit-kombit	<i>touch repeatedly</i>
sayau	<i>dance</i>	mayau-sayau	<i>go on dancing</i>

The lengthening of the first vowel in the word is used to mark habitual actions. It is most common with actor voice forms, but can also be used in other voices:

(19)

ROOT		BASE FORM	HABITUAL	GLOSS
inum	<i>drink</i>	m-poN-inum	moonginum	<i>drunkard</i>
patai	<i>die/kill</i>	m-poN-patai	maamatai	<i>habitual killer</i>
wudut	<i>tell lies</i>	m-poN-wudut	moomudut	<i>habitual liar</i>
iit	<i>bite</i>	m-poN-iit	moongiit	<i>habitually bites (of dog)</i>
anu	<i>take</i>	m-poki-anu	mookianu	<i>always asking for something</i>
intong	<i>watch</i>	m-pog-intong	moogintong	<i>seer, diviner</i>
siddang	<i>sun dry</i>	po-siddang-an	poosiddangan	<i>place for sun-drying things</i>
uli	<i>return</i>	uli-an	uulian	<i>normal time for coming home</i>

3. Basic Morphosyntax

3.1. Verbal clauses

3.1.1. Voice and case marking

A basic verbal clause consists of a verb plus one or more arguments. One of these arguments has unique morphological and syntactic properties which identify it as the subject of the clause. These properties include: (a) nominative case marking when overtly expressed, whether by a pronoun or a full NP; (b) the argument's semantic role is indicated by the voice marking affix on the verb; (c) it is the obligatorily plural argument of a reciprocal verb (see section 4.5.2); (d) eligibility to be relativized or clefted; (e) eligibility to launch floating quantifiers; (f) eligible target (or controllee) in the Equi construction (unlike Tagalog). See chapter ??, this volume, for further discussion and references.

The patterns of case and voice-marking in Kimaragang are illustrated in the following examples. In each sentence, the subject is underlined:

- (20) a. Mangalapak okuh do niyuw
 m-poN-lapak okuh do niyuw
 AV-TR-split 1s.NOM GEN coconut
I will split a coconut / some coconuts.
- b. Lapak-on kuh it niyuw
 split-OV 1s.GEN NOM coconut
I will split the coconut(s).
- c. Lapak-an kuh do niyuw it wogok.
 split-DV 1s.GEN GEN coconut NOM pig
I will split some coconuts for the pigs (to eat).
- d. Nokuroh.tu n-i-lapak nuh do niyuw
 why PST-IV-split 2s.GEN GEN coconut
- inoh dangol kuh?
 MED.NOM bush.knife 1s.GEN
Why did you use my bush knife to split coconuts?

In example (20a), the actor voice marker (*m-*) signals that the agent is the subject, and so the agent pronoun ('I') appears in NOM case. In example (20b), the objective voice marker (*-on*) indicates that the patient is the subject. In example (20c), the dative voice marker (*-an*) indicates that the subject is a beneficiary. In example (20d), the instrumental voice marker (*i-*) indicates that the subject is an instrument.

Subjects are normally definite (note the glosses of *niyuw* in (20a-b) above). Any argument of the verb can in principle be selected as subject; but the preferred subject in a simple declarative sentence is the patient or Undergoer. A definite Undergoer will

normally be selected as subject unless some other argument of the clause is fronted or extracted.

Actor voice is used when the Actor (i.e., the most prominent semantic role) of a clause is selected as subject. Objective voice is used primarily when the subject of the sentence is the patient. Note that in the past tense, or in potentive aspect (see sec. 4.2), the OV suffix *-on* is replaced by a zero allomorph. Instrumental voice is used not only for instrumental subjects, as in (20d), but also when the subject corresponds to the displaced theme of verbs such as ‘give’, ‘throw’, ‘hang up’, ‘plant’, ‘put away’, etc.

Dative voice has a very wide range of uses in Kimaragang. Its primary use is to mark the subject as the goal or recipient of a ditransitive verb, or as the beneficiary of a transitive verb. Dative voice is also used when the subject is the goal or stimulus of a verb of cognition, such as ‘know’, ‘remember’, ‘feel’, etc. It is used when the subject is the Undergoer of actions whose effect is distributed over a wide area, e.g. sweeping, washing, burning, flooding, etc.; and it is also used for the adversative, as in *n-a-patay-an do tanak* (PST-POT-die-DV GEN child) ‘suffered the death of a child’.

A fifth voice category, not illustrated in (20), is locative voice. The locative voice marker is homophonous with the objective voice suffix *-on*. The two forms are distinct only in the past tense, where the objective voice marker becomes $-\emptyset$ while locative voice retains the *-on*. Locative voice is used primarily when the subject of the sentence is the location or destination of an intransitive verb of motion, posture or position. It is also used with verbs denoting infestation or affliction, e.g. *g-in-iyuk-on* ‘attacked by maggots’ from the root *giyuk* ‘maggot’; *gorigit-on* ‘suffering from *gorigit*’ (i.e. ringworm).

Kimaragang, like most Philippine-type languages, distinguishes three morphological cases: nominative, genitive and dative. As the examples in (20) illustrate, overt subjects always appear in nominative case while non-subject arguments carry semantically determined case marking. Dative case is used for goals, recipients, and locations, while genitive case is used for possessors, Actors, and instruments.

In some Philippine languages, non-subject Undergoers may be marked with either genitive or dative case depending on factors like definiteness and animacy. In Kimaragang, non-subject pronominal Undergoers take dative case while other non-subject Undergoer NPs (including personal names) are marked with genitive case.

The case-marking particles used for non-pronominal NPs are listed in (21). See Kroeger (1996b) for a discussion of the origins and distribution of the “moveable *-t*” in these forms. As the table shows, the case markers have distinctive definite vs. indefinite forms (which are usually not distinguished in the glosses). Apart from existential clauses (section 3.2), the subject is rarely if ever indefinite. Thus the “indefinite” nominative marker *o(t)* is most commonly used for generic subjects, as illustrated in (22), or in cleft sentences (see section 3.1.4).

(21)	NOM	GEN	DAT
Personal name markers	i	di	sid+i
Common nouns (definite)	i(t)	di(t)	sid
Common nouns (indefinite)	o(t)	do(t)	sid
Common nouns (unique ref.)	a(t)	da(t)	ad

- (22) Mangakan do tinanom ot giyuk.
 AV:TR:eat GEN crops NOM maggot
Worms eat up our crops.

The paradigm of pronominal forms is listed in (23). The “emphatic” forms are used primarily in pre-verbal or other contrastive positions. They function as a special kind of NOM case. (The 1st person dual inclusive forms *toh* and *ditoh* are rarely used in the Tandek dialect.)

(23) **Pronominal forms**

	Emphatic	NOM	GEN	DAT
1 sg.	yokuh	okuh	kuh	dogon
2 sg.	ikau	ikau/koh	nuh	dikau
3 sg.	yalo	yalo	yoh	dialo
1 dual incl.	ikitoh	kitoh	(toh)	(ditoh)
1 pl. incl.	itokou	tokou	daton	daton
1 pl. excl.	yokoi	okoi	yah	dagai
2 pl.	ikoo	ikoo/kou	duyuh	dikoo
3 pl.	yaalo	yaalo	daalo	daalo

3.1.2. Word order

The examples in (20) and (22) illustrate several facts about normal word order in basic verbal clauses: the verb always comes first, pronouns almost always precede full NPs, and NP subjects tend to occur in clause-final position. The position of pronominal elements is fairly strictly determined by various constraints which will be discussed below. The relative order of full NPs, on the other hand, is relatively free. Some general preferences are noted here, but these can often be overridden by discourse effects.

There is a general tendency for NPs to precede PPs, and for genitive NPs to precede dative NPs. When the verb is marked for actor voice, the nominative Actor NP may either occur in final position, as in (22), or immediately after the verb, as in (24a). In other voices, the Actor NP normally precedes all other non-pronominal elements of the clause (24b). But non-human Actors, as well as inanimate effectors, may also occur after the subject (24c).

- (24) a. Minangagamit i mama do karabau.
 PST:AV:catch NOM daddy GEN buffalo
Dad went to catch a buffalo.
- b. S-in-unsub-Ø di tama i Dondomon.
 PST-drive.out-OV GEN father NOM Dondomon
Dondomon was driven away (from home) by his father.
- c. N-o-soruwang-Ø i botung yah do karabau.
 PST-POT-invade-OV NOM rice.field 1pe.GEN GEN buffalo
A/some buffalo got into our paddy field.

3.1.3. Second position clitics

First and second person nominative and genitive pronouns are second-position (or “2P”) elements; that is, they must always follow the first constituent in their clause. In a normal verb-initial clause, this means following the verb, as illustrated in (20a-d): all four of those examples contain a pronominal Actor immediately following the verb.

When a negative or other adverbial element is fronted to pre-verbal position, 2P clitics will also precede the verb; this is exemplified in (25). In addition to pronouns, a variety of other particles also occur in this position, as seen in (25c):

(25) a. Suwab-suwab okuh manalu do pulut.
 every.day 1s.NOM AV:TR:tap GEN rubber
Every day I tap rubber.

b. Sid tana yah n-odop-on.
 DAT earth 1pe.GEN PST-sleep-LV
We slept on the ground (after the house burned down).

c. Amu okuh poh dati ko-guli dot suwab
 NEG 1s.NOM yet probably POT.AV-return ADV tomorrow
 sitih kumaraja.
 PRX.LOC AV:work
Tomorrow I probably cannot return to work here.

Sentence-level conjunctions do not function as a part of the minimal clause, and so do not affect clitic placement. In the following example, the clause begins after the conjunction *bang*, and the 2P clitic pronoun occurs after the fronted location phrase *id tana*.

(26) Bang [id tana koh monumpa ...]
 if DAT earth 2s.NOM AV:TR:swear
If it is on the ground that you swear (an oath)...

In Kimaragang, as in Tagalog, genitive pronouns always precede nominative pronouns. But unlike Tagalog, in Kimaragang a first person pronoun always precedes a second person pronoun. When these two principles are in conflict, e.g. when the subject is first person and the genitive Actor is second person, the ordering of first person before second person takes precedence, and the Actor is expressed in the dative rather than the genitive as in the following examples:

(27) a. Ong taak-an okuh dikau do siin,
 if give-DV 1s.NOM 2s.DAT GEN money
 potolibon tekaw(<kuh-ikau).
 CAU:pass.by:OV 1s.GEN-2s.NOM
If you give me money I will let you go past.

- b. Tulung-ai okuh poh dikoo ...
 help-DV.IMP 1s.NOM yet 2p.DAT
Help me, all of you, ...

3.1.4. Topicalization and clefting

The examples in (25) and (26) involve clause-internal fronting, which can be identified by the pre-verbal position of the 2P clitics. There are also several different constructions which involve fronting an element to a position outside the clause. One of the most common is the TOPICALIZATION of the subject NP. The topic phrase is often followed by the particle *nga* ‘but’, as illustrated in (28), but this is not obligatory.

- (28) a. It bowang nga l-um-aga sid dogon.
 NOM bear but AV-come DAT 1S.DAT
As for the bear, he came after me.
- b. It tulun kikiawi dirih nga noko-ongoi sirih manabang.
 NOM people all ANAPH but AV.POT-come there AV:TR:help
All the people went there (to the burning house) to help out.
- c. It tiwanon kuh dirih nga sampai m-in-ulau.
 NOM father.in.law 1S.GEN ANAPH but until AV-PST-crazy
As for my father-in-law, he went crazy (from grief).

Another common subject-initial construction is the CLEFT SENTENCE, illustrated in (29). This construction is a special type of equative clause (see sec. 3.2), i.e. a clause in which both subject and predicate are NPs. The subject NP appears in initial position, followed by a headless relative clause which functions as the predicate.

- (29) a. Korikot it koturu taddau,
 arrive NOM seventh day
- i Sompuun dirih ot mongoi mongomot.
 NOM Sompuun ANAPH NOM AV:go AV:TR:harvest
When the seventh day came, it was Sompuun who went out to harvest.
- b. Doyokuh nogi o sowo-on.
 1s.EMPH then NOM marry-OV
I was the one who was to be married (i.e. the bride).

A third sentence pattern which involves a pre-clausal NP is the EXTERNAL TOPIC construction. This sentence type features a topic NP which is not the subject and need not be an argument of the main clause at all. In (30a), which contains an external topic followed by a cleft sentence, the topic phrase corresponds to the theme of the following verb. In (30b) the external topic is not an argument of the following clause but a possessor. This pattern is quite similar to the so-called “double subject” construction found in many languages of east and southeast Asia.

- (30) a. Kikiawi dit tarata di moleeng yoh,
 all GEN property GEN parents 3s.GEN

yalo ot p-in-a-taak-an.
 3s.NOM NOM PST-CAU-give-DV

As for all of his parents' property, he was the one it was caused to be given to.

- b. Kikiawi do tulun nga duwo noh ot mato.
 all GEN person but two FOC NOM eye

All people have two eyes.

3.2. Other clause types

In addition to the verbal clauses discussed in section 3.1, there are three other principal clause types in Kimaragang: (a) STATIVE clauses, in which the predicate is an adjective, common noun or locative phrase; (b) EQUATIVE clauses, in which the predicate is another NP; and (c) EXISTENTIAL clauses, which involve a special existential predicate.

Examples of the three kinds of stative predicates are given in (31a-c). In example (31d) the subject of a stative clause has been topicalized, while in (31e) the subject has been clefted.

- (31) a. A-wagat itih kadut.
 ST-heavy PRX.NOM sack

This sack is heavy.

- b. Kusai ot tanak
 man NOM child

The baby was a boy.

- c. Sid sarayo it walay yah.
 DAT up.stream NOM house 1pe.GEN

Our house is up the river.

- d. It tongondu nopoh dirih nga bambarayon.
 NOM woman only ANAPH but rice.spirit

As for those women, they were really rice spirits.

- e. It tagad daalo noh ot a-gayo.
 NOM field 3p.GEN FOC NOM ST-big

It was really their rice field that was the big one.

As mentioned above, the EQUATIVE clause is one in which both subject and predicate are NPs. There is no copular verb in Kimaragang; the two NPs are simply juxtaposed, as in the following examples:

- (32) a. I Pawai noh ot orang.tua sitih.
 NOM Pawai FOC NOM head.man PRX.LOC

Pawai is the head man here (i.e., of this village).

- b. Ikau gaam ot tanak gulu?
 2s.NOM Q NOM child eldest
Are you the eldest child?

Kimaragang has three existential predicates. Two of these are positive (*waro* and *ki-*, both meaning ‘exist’ or ‘have’) and one negative (*aso*, or more rarely *amuso*, meaning ‘not exist’ or ‘not have’). *Waro* and *ki-* appear to be semantically interchangeable, but *waro* is a free form while *ki-* is a prefix which must attach directly to the noun which heads the subject NP. These existential predicates may express either existence or possession.

- (33) a. Waro noh iso kusai, tanak do raja ...
 exist FOC one man child GEN king
There was once a man, the son of a king, ...
- b. Aso tulun sitih.
 NEG.exist person PRX.LOC
There is no one here.
- c. It tongo torigi dirih nga aso noh.
 NOM PL house.post ANAPH but NEG.exist already
Even the house posts were gone (burned up).
- d. Waro tanak nuh oy?
 exist child 2s.GEN Q
Do you have any children?
- e. Ki-anak nuh oy?
 exist-child 2s.GEN Q
Do you have any children?
- f. Aso si-siin kuh ditih.
 NEG.exist RDP-money 1s.GEN PRX
I don't have any money.

3.3. Noun phrase structure

The basic order of elements in a Noun Phrase is given by the following rule:

- (34) NP → Determiner (number) N (Possessor) (Modifier)

where “Determiner” may be either a case-marker or a demonstrative (which also marks case; see below); and “Modifier” may be an adjective, PP, or relative clause. Plural number is optionally indicated by the particle *tongo*.

Post-nominal possessor phrases, whether pronouns or full NPs, appear in the genitive as in (35a-b). Possessors may also be expressed by a pre-nominal dative pronoun followed by the linking particle *do*, as in (35c-d):

- (35) a. it tanak di Ampalan ‘Ampalan’s child’
 NOM child GEN Ampalan
- b. it paray yah
 NOM rice 1pe.GEN ‘our (excl.) rice’
- c. dogon do tanak (1s.DAT LK child) ‘my child’
- d. dagai do paray (1pe.DAT LK child) ‘our (excl.) rice’

As illustrated in (31a, e), most adjectives require the stative prefix *o-/a-* (see section 2.3.3 for a discussion of vowel harmony). When these adjectives occur as post-nominal modifiers, an additional prefix *t-* is added before the stative prefix (Kroeger 1996b). Note the contrast between the predicative and modifying forms of the adjectives in the following examples:

- (36) a. O-kodok itih walai kuh.
 ST-small PRX.NOM house 1s.GEN
 My house is small.
- b. walai t-o-kodok
 house LK-ST-small
 small house
- (37) a. A-gayo ilo tanak nuh.
 ST-big DIST.NOM child 2s.GEN
 Your child is big.
- b. tanak t-a-gayo
 child LK-ST-big
 big child

The Kimaragang demonstratives are listed in (38). In addition to the familiar three-way distinction in terms of distance from the speaker (proximal, medial and distal), Kimaragang also employs a fourth demonstrative *irih* to mark an NP which is a current topic of discussion. Demonstratives may either replace the case marker in NP-initial position, as indicated in (34) and illustrated in (36a) and (37a), or may appear at the end of the NP, as in (39). When the demonstrative introduces the subject NP, the nominative form is used. In all other contexts, the “general” form is used. Each demonstrative also has a corresponding locative form.

(38)

	NOM	GENERAL	LOC
PRX: <i>this</i>	itih	ditih	sitih
MED: <i>that (near)</i>	inoh	dinoh	sinoh
DIST: <i>that (far)</i>	ilo	dilo	silo
<i>the aforementioned</i>	irih	dirih	sirih

- (39) it tanak nuh dilo
 NOM child 2s.GEN DIST
 that child of yours

In fact the pattern in (39) is relatively rare. It is much more common for a single NP to contain two copies of the same demonstrative, one at the beginning and one at the end:

- (40) a. itih sada ditih ‘this fish’
 PRX.NOM fish PRX

- b. ilo tanak nuh dilo ‘that child of yours’
 DIST.NOM child 2s.GEN DIST

3.4. Relative clauses

A relative clause construction is a noun phrase which contains a clausal modifier. The modifying clause in Kimaragang always follows the head noun, as indicated in (34), and is introduced by the linker *dot*, glossed as REL for ‘relativizer’ in the examples below.

The most important restriction on relative clauses in Kimaragang, as in most languages of the Philippines and northern Borneo, is that only subjects can be relativized; that is, the head noun of the matrix NP must be interpreted as the subject of the modifying clause. This is indicated by the use of the appropriate voice marker on the verb, as well as the lack of any overt subject NP within the modifying clause. Thus example (41a), in which the relativized argument is the subject, is fully grammatical, while the corresponding example (41b) ungrammatical because the relativized argument is not the subject. Similarly, in example (42a) the head noun ‘son’ must be understood as the agent of the modifying clause, because the subordinate verb ‘slash’ is marked for actor voice; but in (42b), the head noun can only be understood as the patient because the subordinate verb is marked for objective voice.

- (41) a. Lingkосу-on duyuh=i oi
 boil-OV 2p.GEN=EMPH Q
 [it we'eg dot [inum-on duyuh?]]
 NOM water REL drink-OV 2p.GEN
Do you boil the water that you drink?
- b. *it we'eg dot [monginum ikoo]
 NOM water REL AV:TR:drink 2p.NOM
 (for: *the water that you drink*)
- (42) a. Ontok nopoh dit tanak dot [minonibas dit tidi yoh] ...
 about only GEN child REL PST:AV:TR:slash GEN mother 3s.GEN
As for the son who slashed (i.e. murdered) his mother, ...
- b. Ontok nopoh dit tanak dot [t-in-ibas-Ø dit tidi yoh] ...
 about only GEN child REL PST-slash-OV GEN mother 3s.GEN
As for the son who was murdered by his mother, ...

The modifying clauses in the preceding examples are verbal, but stative clauses are also common in this context. This stative type of relative construction is frequently used instead of a modifying adjective; compare the relative construction in (43a) with the equivalent modifying adjective in (43b):

- (43) a. kayu dot a-sawat ‘tree that is tall’
 tree REL ST-high

- b. kayu t-a-sawat 'tall tree'
tree LK-ST-high

Relative clauses are frequent in natural discourse, and carry a large amount of the information content in some texts. Nested relatives, in which the modifying clause itself contains another relative clause construction, and serial relatives like that in (44), in which a single head noun is modified by a sequence of two or more modifying clauses, are not uncommon. The example in (44) also illustrates the normal method of introducing a new participant into a narrative discourse, through the use of an existential predicate plus relative clause construction.

- (44) Waro noh tulun sirih [dot sinumambat di Majabou]
exist FOC person ANAPH.LOC REL PST:AV:meet GEN Majabou
[dot amu mongoo mindakod i Majabou sirih].
REL NEG AV:TR:agree AV:climb NOM Majabou ANAPH.LOC

There were people there who met Majabou and wouldn't allow him to climb up there.

3.5. Lexical categories (word classes)

“Major class” categories are often defined as those whose members function as heads of phrasal constituents. By this definition, the only major class categories in Kimaragang would be Noun and Verb. Nouns can head Noun Phrases, as discussed in section 3.3, and verbs can function as clausal heads.

It is not easy to distinguish between these two categories on the basis of distribution, for two main reasons. First, since Kimaragang has no copula, nouns can function as clausal predicates (sec. 3.2). Second, the headless relative construction allows verbal clauses to appear in NP positions with the verb occupying the position of the head noun (at least in terms of surface word order). However, nouns and verbs can be distinguished from each other on morphological grounds in that verbs always carry some kind of voice marking (except for intransitive imperatives, where actor voice is marked by \emptyset -; see section 4.1.3). Further, only verbs can be inflected for tense, aspect, and mood. Another basis for distinction is that nouns are negated by *okon* ‘not’, while verbs and adjectives are negated by *amu* ‘not’.

We have been speaking thus far of actual words. It is somewhat more difficult to distinguish noun roots from verb roots, because a number of noun roots can also be used as verbs. However, this is by no means true for all nouns; and in the cases where it is allowed, the meanings of these derived verbal forms are semantically unpredictable. The surest way of classifying roots seems to be that only noun roots can appear without affixation, especially in an NP position where \emptyset -marked imperatives would be impossible.

It is not yet clear whether there is a distinct category of adjectives, or whether adjectives are simply a special kind of intransitive verb. Virtually all adjective roots seem to allow productive verbal affixation to produce verbs meaning ‘to become X’ or ‘cause to become X’. The same stative prefix which occurs with adjectives in their most basic

usage is also used with unaccusative verbs (i.e. intransitive verbs with Undergoer subjects; see also section 4.2). The only way to distinguish these two classes seems to be that unaccusative verbs are frequently marked for past tense, whereas “true” adjectives are not. It remains to be investigated to what extent this difference is predictable from the inherent semantic content of the root, and whether it is possible for native speakers to assign any interpretation to adjectives which do bear the past tense marker.

In any case, there is no constituent corresponding to an Adjective Phrase (like the English phrase *very big*) which can appear within an NP. Adverbs of intensity, such as *banar* ‘really, very much’ or *sabat* ‘a little’, only modify clausal predicates, whether verbal or adjectival. Many adjectives can also be used as adverbs of manner, subject only to semantic plausibility. Other adverbial elements include time words, the negative elements mentioned above, etc.

Some words which correspond to English prepositions have verbal morphology, e.g. *mantad* ‘from’ and *kuma'a* ‘to’, and might plausibly be analyzed as serial verbs. Others are clearly nominal and are normally preceded by the dative case marker, e.g. *pialatan* ‘(space) between’, *toning* ‘(space) beside’, *saralom* ‘(space) inside’, *siba* ‘(space) below’ etc. Only a few Malay loan words (e.g. *sampai* ‘until’, *masam* ‘like’) would justify the existence of a distinct Preposition category.

Kimaragang has a very large inventory of “particles” expressing various concepts relating to aspect, mood, modality, evidentiality, discourse prominence, speaker’s attitude, etc. Some of these are second position elements, as mentioned in section 3.1.3, others occur in sentence-final position, and others have a variable distribution. The two most common members of this class are the aspectual particles *noh* ‘completive’ and *poh* ‘incompletive’. The completive particle *noh* is also used as a focus marker, e.g. to mark foregrounded events in narrative (Kroeger, 1991) and fronted NPs in a cleft sentence.

Conjunctions, including words such as *nga* ‘but’, *jadi* ‘so’, *tu* ‘because’, *om* ‘and’, *ko* ‘or’, *kadung* ‘if, when’, *pagka* ‘since, because’, *insan ko* ‘even, although’, appear to form a distinct category. Words in this class have unique distributional properties, in that they occur at the beginning of the sentence or clause which they introduce but do not “count” as part of the clause for purposes of 2P clitic placement.

Kimaragang possesses a fairly typical range of basic question words, including *isay* ‘who’, *nunuh* ‘what’, *sera* ‘when’, *piroh* ‘how many’, etc. But in addition there is an interrogative verb root *kuroh* which is used productively to derive more question words. Some of the most commonly occurring forms include: *nokuroh* ‘why’, *kukuroh* ‘how’, *kumuroh* ‘what time, what age’, *songkuroh* ‘how much’, *monguroh* ‘doing what’, *mikukuroh* ‘how related’ (e.g. kinship), *kumukuroh* ‘how in the world’, *okukuroh* ‘what conditions’ (in place), *pengkukuroh* ‘in what manner, like what’.

4. Verbal affixation

Voice is in many ways the pivotal category of Kimaragang verb morphology, and interacts with every other category. The table in (45) summarizes the forms of the voice markers in the main tenses and moods. The declarative past and non-past forms were

already discussed in section 3.1.1. The imperative and subjunctive moods are discussed in 4.1.3, the potentive in 4.2. Tense marking affixation is discussed in 4.1.1.

(45)

Voice Category	Non-past	Past	Imperative/ subjunctive	Potentive
Actor (AV)	m- / -um-	m-in- / -in-um-	Ø-	(no)ko-
Objective (OV)	-on	-in-__-Ø	-o?	(n)o-
Dative (DV)	-an	-in-__-an	-ai	(n)o- -an
Instrument (IV)	i-	n-i-	---	(no)ko-
Locative (LV)	-on	-in-__-on	---	---

Section 4.3 discusses the “transitivity” prefixes, which index the affected argument of the clause, and sections 4.4 and 4.5 discuss some of the very rich inventory of derivational affixes.

4.1 Tense/aspect and mood

4.1.1. Tense

Kimaragang exhibits a simple two-tense system, past vs. non-past. The past tense marker is the infix *-in-*, inserted after the initial consonant of the base form (i.e., the stem plus all other affixes). Before vowel-initial forms, this infix reduces to a prefixed *n-*. Verb forms which lack this tense marker are interpreted as non-past, i.e. either present, future, or unmarked for time reference. The following examples illustrate this contrast.

- (46) a. M-in-ongoi oku sid talob.
 AV-PST-go 1s.NOM DAT market
I went to the market (some time in past).
- b. M-ongoi oku sid talob (ditih).
 AV-go 1s.NOM DAT market PRX
I am going to the market (right now).
- c. M-ongoi oku sid talob suwab.
 AV-go 1s.NOM DAT market tomorrow
I will go to the market tomorrow.

In addition to these two basic tenses, there is a prefix *koo-* which marks immediate past tense, i.e. events which have only just taken place. Some examples:

- (47) koo-susu 'just newly born'
 koo-rikot 'only just arrived'
 kaa-tanom 'only just planted'

These immediate past forms are usually unmarked for voice and often seem to function as gerunds, appearing in clauses which lack any nominative NP. However, immediate past forms are occasionally marked for objective or dative voice, taking the subjunctive form of the voice suffix (see section 4.1.3) as in the following example.

- (48) Koo-boli-yai kuh yalo dot sigup,
 IMM.PST-buy-DV.SUBJ 1s.GEN 3s.NOM GEN tobacco
 moki-boli kembagu.
 AV:RQV-buy again

I only just bought him some tobacco and he asks me to buy for him again.

4.1.2. Repetitive/Iterative/Habitual aspect

As mentioned in section 2.4, vowel lengthening (or copying) is used to mark habitual aspect (see examples in (19)), while CV-reduplication is used for a variety of aspectual senses which I will subsume under the cover term ITERATIVE. This category is used for actions which are distributed in time or space. Most frequently it signals that the action is repeated many times or performed by many Actors, but it has several other uses as well. In the following example, the reduplication indicates not a series of repeated events but a single on-going activity, i.e. continuous aspect:

- (49) Subai.ko ipapat-an inoh parai tu
 necessary RDP-guard-DV MED.NOM rice because
 a-awi-Ø dati do manuk moninduk.
 POT-finish-OV likely GEN bird AV:TR:peck

You must continually guard the rice, otherwise the birds may eat it all up.

The iterative form can also be used to signal progressive aspect. In the following examples, reduplication is used in the second clause to mark an event that was taking place at some prior time specified in the first clause. These examples also illustrate contexts in which Kimaragang employs relative tense marking, since the reduplicated verb is not marked for past tense but takes its time reference from the preceding clause.

- (50) a. Neemot-Ø kuh i baju kuh,
 PST:see-OV 1s.GEN NOM shirt 1s.GEN
 bobuju-on di Medol.
 RDP:shirt-OV GEN Medol

I saw my shirt being worn by Medol.

- b. I noko-rikot okuh,
 NOM PST.AV.POT-arrive 1s.NOM
- boboyuk-on dialo i tanak yoh.
 RDP:swing-OV 3s.DAT NOM child 3s.GEN
- When I arrived, she was swinging her child (in a sarong sling).*

(Note: third person agent pronouns sometimes appear in the dative form, as in (50b), rather than the expected genitive.)

4.1.3. Imperative and subjunctive moods

Imperative mood is indicated by reduced or modified forms of the voice markers, as shown in (45). When used in a command, the imperative verb is usually followed by an aspectual particle: either *poh* ‘yet’, which marks polite commands or requests, or *noh* ‘already’, which marks more abrupt or urgent commands. The addressee of an imperative sentence (the participant to whom the command is addressed) is normally a second person pronoun, which need not be overtly expressed if it is singular. The addressee is always the Actor of the sentence, but it need not be the subject. The choice of subject (normally the Undergoer if definite) is indicated by the voice marking of the imperative verb. Some examples are given below.

- (51) a. Ø-Uli noh!
 AV.IMP-return already
 Go home now!
- b. Pomo’og poh!
 Ø-poN-wo’og poh
 AV.IMP-TR-wash yet
 Wash (your hands)!
- c. Lapak-o poh itih niyuw!
 split-OV.IMP yet PRX.NOM coconut
 Split this coconut!
- d. Boli-ai okuh poh do tasin!
 buy-DV.IMP 1s.NOM yet GEN salt
 Buy me some salt!

In addition to imperative sentences, the reduced voice markers listed in table (45) have two other principal uses. We will refer to these forms as SUBJUNCTIVES when they are used in non-imperative contexts. The first important use of the subjunctive form is as a “narrative tense”, i.e. to mark verbs expressing the main events in a narrative discourse. This usage is illustrated in the following sentence, taken from a folk-tale:

(52) Ongoy-o noh di tasi-asi om patay-o noh
 go-OV.SUBJ FOC GEN orphan and kill-OV.SUBJ FOC

om tunuw-ai noh.
 and roast-DV.SUBJ FOC

The orphan boy fetched (the lizard) and killed it and roasted it.

The other main use of the subjunctive is following the auxiliary verb *mangan*. This verb, often shortened to *maan*, with past tense forms *minangan*, *minaan*, or *naan*, is sometimes used alone as a kind of pro-verb meaning ‘do something’. Its most frequent use, however, is as an auxiliary introducing a transitive action verb marked for objective or dative voice. In this construction the main verb must appear in the subjunctive form, as illustrated in the following examples.

(53) a. Minaan akan-o do tusing ilot sada.
 PST.AUX eat-OV.SUBJ GEN cat DIST.NOM fish
That fish was eaten by a cat.

b. Naan okuh iit-ai do tompolulu’u.
 PST.AUX 1s.NOM bite-DV.SUBJ GEN scorpion
I was stung by a scorpion.

4.2. Potentive mode

The POTENTIVE mode is used primarily to encode a possible action, an unintended result, or unspecified time. It is indicated by the use of two markers, both of which have past vs. non-past tense forms: *(n)o-* (a specialized use of the stative prefix) for objective and dative voice, and *(no)ko-* for actor and instrumental voice. (As mentioned in section 3.1, objective voice is realized by a zero-allomorph in the presence of the potentive prefix.) No examples of potentive verbs bearing locative voice have been found.

When focusing on the contrast between potentive forms and verbs which are unmarked for modality, I will refer to the unmarked verb forms as INTENTIVE. Sample verbs showing the contrast between intentive vs. potentive mode for each voice category are given in (54).

(54)	INTENTIVE FORM		POTENTIVE FORM		GLOSS
	Non-Past	Past	Non-Past	Past	
ACTOR	<i>mang-akan</i>	<i>m-in-ang-akan</i>	<i>ka-akan</i>	<i>naka-akan</i>	‘eat’
OBJECTIVE	<i>lapak-on</i>	<i>l-in-apak-Ø</i>	<i>a-lapak-Ø</i>	<i>n-a-lapak-Ø</i>	‘split’
DATIVE	<i>t-aak-an</i>	<i>t-in-aak-an</i>	<i>a-taak-an</i>	<i>n-a-taak-an</i>	‘give’
INSTRUMENTAL	<i>i-taak</i>	<i>n-i-taak</i>	<i>ka-taak</i>	<i>naka-taak</i>	‘give’

All of the verb roots in (54) are transitive. Intransitive verbs have only a single core argument, so in the unmarked intentive mode all intransitives take actor voice affixation. When they are marked for potentive mode, however, a split emerges. One group, the

UNERGATIVE type, take the actor voice form (*no*)*ko-*; this group includes verbs meaning ‘run’, ‘fly’, ‘bathe’, ‘swim’, ‘sit’, ‘sleep’, etc. The other group, the UNACCUSATIVE type, take the stative or objective voice marker (*n*)*o-*; this group includes verbs meaning ‘fall’, ‘drift’, ‘die’, ‘be born’, ‘break’, ‘split’, ‘collapse’, ‘dissolve’, etc. Various other morpho-syntactic differences correlate with this split; see Kroeger (1990) for details.

There are two crucial semantic contrasts between potentive and intentive verbs. First, the unmarked intentive form of the verb entails that the Actor intended to perform the described action, while potentive verbs are neutral with respect to intention or volitionality. Thus in the following example, the potentive form in (55a) allows the accidental interpretation shown in the gloss, which in most contexts would be strongly preferred as the most plausible reading. The corresponding intentive form in (55b) does not allow this accidental reading, and can only be interpreted to mean that the poison was eaten intentionally. This contrast in volitionality is further illustrated in (56).

(55) a. Naka-akan do rasun i tanak kuh.
 PST.AV.POT-eat GEN poison NOM child 1s.GEN
My child accidentally swallowed some poison.

b. Minangakan do rasun i tanak kuh.
 -in-m-poN-akan do rasun i tanak kuh
 PST-AV-TR-eat GEN poison NOM child 1s.GEN
My child intentionally swallowed some poison.

(56) a. N-o-lo’o yalo mantad sid sawat do kayu.
 PST-OV.POT-fall 3s.NOM from DAT high LK tree
He fell out of a high tree.

b. L-in-um-o’o yalo mantad sid sawat do kayu.
 PST-AV-fall 3s.NOM from DAT high LK tree
He jumped down out of a high tree.

Second, the potentive form of a verb entails that the described event has actually taken place, that the result-state has actually been achieved. The intentive form, in contrast, is neutral with respect to the outcome of the action. In most contexts the intentive form creates a pragmatic implicature that the event actually took place, but this implicature can be denied as in (57a). However, with the corresponding potentive form this negation would lead to self-contradiction, as in (57b).

(57) a. Minamatay okuh do wulanut nga amu minatay
 -in-m-poN-patay okuh do wulanut nga amu -in-m-patay
 PST-AV-TR-die 1s.NOM GEN snake but NEG PST-AV-die
I (tried to) kill a snake, but it didn't die.

b. *Naka-patay okuh do wulanut nga amu minatay.
 AV.POT-die 1s.NOM GEN snake but NEG PST:AV:die
**I killed a snake but it didn't die.*

In addition to marking non-volitional actions, potentive mode is also commonly used to encode possibility or potentiality, as in the following examples:

- (58) a. Amu ka-akan yalo tu o-ruol it nipon yoh.
 NEG AV.POT-eat 3s.NOM because ST-hurt NOM tooth 3s.GEN
He cannot eat because his tooth hurts.
- b. Amu a-akan itih sada ditih, n-a-pasa noh.
 NEG OV.POT-eat PRX.NOM fish PRX PST-OV.POT-rot already
This fish cannot be eaten, it is rotten.

Another important use is to indicate non-specific time reference. The following pair of examples provide a minimal contrast. When the question is asked using the potentive form (59a), the time reference is not specified; the addressee would be expected to answer ‘yes’ if he had ever in his life climbed the mountain. When the question is asked using the intentive form (59b), a specific time reference is implied which would be identified in the discourse context, e.g. a recent visit to Sabah. The addressee would be expected to answer ‘no’ if he had not climbed the mountain at the time under discussion, even if he had climbed it any number of times on other occasions.

- (59) a. Naka-takad koh noh ad limpapak dat Nabalu oy?
 PST.AV.POT-climb 2s.NOM already DAT peak GEN Kinabalu Q
Have you ever climbed to the top of Mt. Kinabalu?
- b. T-in-um-akad koh ad limpapak dat Nabalu oy?
 PST-AV-climb 2s.NOM DAT peak GEN Kinabalu Q
Did you climb to the top of Mt. Kinabalu?

In a usage which seems related to indefinite time reference, the potentive mode is often used in adverbial time clauses in narrative or procedural discourse, referring back to the main verb of the preceding sentence: ‘Having done X, ...’

4.3. Affectedness

As mentioned in section 3.1.1, the Undergoer (i.e. the affected argument, or the argument which the speaker views as being acted upon) is the preferred choice of subject when it is definite. When the Undergoer is not selected as subject, the verb must carry an additional prefix which I will refer to as a TRANSITIVITY PREFIX.

The transitivity prefix indicates something about the semantic features of the Undergoer. The most common prefix, *poN-*, is used when the Undergoer corresponds to the patient, recipient or goal of the action. The prefix *po-* is used when the Undergoer is a displaced theme or instrument. (This prefix is homophonous with the causative prefix discussed in section 4.4 below, but I analyze them as being two distinct morphemes. In some closely related languages, it appears that both of these prefixes can co-occur in the same word.)

The prefix *poG-* is used only with a limited set of verb roots, and generally marks the Undergoer as being plural, non-individuated, or indefinite. For example, words for

hunting and fishing usually take the prefix *poG-*, as illustrated in (60), because the hunted object cannot be specified (which wild pig? which fish?) while the action is taking place.

- (60) m-pag-asu *go hunting (with dog)*
 m-pag-urab *go hunting (with blowgun)*
 m-pag-apon *go fishing (with hook)*

For some roots there is a minimal contrast between *poN-* and *poG-*, with *poN-* being used when the action is directed at a specific object, e.g. *mong-inum* ‘to drink (something)’, while *poG-* is used when the object is indefinite or non-individuated, e.g. *mog-inum* ‘drink to get drunk (e.g. at a drinking party)’. But overall the semantics of *poG-* is complex and somewhat irregular, and will not be discussed further here. Rather, we will focus on the contrast between *poN-* and *po-*.

Where there are more than two participants involved in a given situation, the speaker may choose to adopt different “perspectives” on the same action. In a certain context, the speaker may view one participant as being primarily affected or acted upon (e.g. *John loaded the hay on the cart*), while in a different context the speaker may view another participant as being primarily affected or acted upon (e.g. *John loaded the cart with hay*). The choice of transitivity prefix in Kimaragang reflects this same kind of alternation in the speaker’s perspective, that is, an alternation in the identity of the Undergoer. Consider the following examples, based on the root *ta’ak* ‘give’ (note that actor voice is always expressed by a \emptyset -allomorph before *po-*):

- (61) a. \emptyset -pa-ta’ak okuh do siin sid tanak kuh.
 AV-TR-give 1s.NOM GEN money DAT child 1s.GEN
I give money to my child.
- b. Mana’ak okuh di tanak kuh do siin.
 m-poN-ta’ak okuh di tanak kuh do siin
 AV-TR-give 1s.NOM GEN child 1s.GEN GEN money
I give my child money.

The act of giving involves three participants: an actor (the giver), a theme (the gift), and a recipient. In (61b), with the prefix *poN-*, the Undergoer is the recipient; the action is viewed as primarily affecting, or being directed towards, the recipient. This event must involve a change of ownership: the actor (giver) must be the original owner, and the recipient (i.e. the child) must become the new owner. In (61a) on the other hand, with the prefix *po-*, the Undergoer is the theme, i. e. the money. In this case there need not be any change of ownership, but there must be a physical transfer of possession. This change in perspective is also reflected in the case marking of the recipient: dative in (61a), but genitive in (61b).

The semantic contrast is illustrated more clearly in (62). The noun *tana* is ambiguous between the meanings ‘land’ and ‘dirt’. Thus example (62a) could mean either ‘I will give you some land’ or ‘I will give you some dirt’; but the former meaning is more likely, since the *poN-* form implies change of ownership and dirt is seldom given as a gift. However, the *po-* form in (62b) implies a physical transfer of possession. Since a piece

of land cannot be physically moved (at least, not by human agency), example (62b) can only mean ‘I will give you some dirt’.

- (62) a. Mana’ak okuh dikau do tana.
 m-poN-ta’ak okuh dikau do tana.
 AV-TR-give 1s.NOM 2s.DAT GEN earth
I will give you some land.
- b. Ø-pa-ta’ak okuh dikau do tana.
 AV-TR-give 1s.NOM 2s.DAT GEN earth
*I will hand you some dirt (*land).*

A similar alternation is observed in the following pair of examples. Sentence (63a) implies that there is one fish, or at least some definite number of fish; and the basket need not be completely filled. Sentence (63b) implies that the basket is completely filled, but there is an indefinite number of fish.

- (63) a. Ø-po-suwang okuh ditih sada sid pata’an.
 AV-TR-enter 1s.NOM PRX fish DAT basket
I will put this fish in a/the basket.
- b. Monuwang okuh do pata’an do sada.
 m-poN-suwang okuh do pata’an do sada.
 AV-TR-enter 1s.NOM GEN basket GEN fish
I will fill a basket with fish.

The more common type of transitive verb (e.g. ‘hit’, ‘break’, ‘cut’, ‘build’, ‘pound’, etc.) involves minimally an actor and a patient, but may also involve an instrument. Normally the Undergoer will correspond to the patient. In this case the prefix *poN-* must be used whenever the subject is some argument other than the Undergoer, e.g. in actor voice (64a-b) or instrumental voice (64c). (Compare example (20b) above, which has the Undergoer as subject.)

- (64) a. Mangalapak okuh do niyuw.
 m-poN-lapak okuh do niyuw.
 AV-TR-split 1s.NOM GEN coconut
I will split a coconut / some coconuts.
- b. Monibas yalo do kayu.
 m-poN-tibas yalo do kayu.
 AV-TR-slash 3s.NOM GEN wood
He is chopping wood.
- c. Tongoh ot pangalapak nuh dilo niyuw?
 tongoh ot Ø-poN-lapak nuh dilo niyuw?
 what NOM IV-TR-split 2s.GEN DIST coconuts
What will you split those coconuts with?

But under certain special circumstances the action may be viewed as affecting, or being directed at, the instrument rather than the patient. In such cases the instrument can be encoded as the Undergoer, as illustrated in (65). Sentence (65a) carries the implication that the speaker wants to test the sharpness or strength of the instrument (the axe), while sentence (65b) implies that the speaker is threatening to damage the instrument. Example (20d) above shows an instrument Undergoer as subject, i.e. with the verb marked for instrumental voice.

(65) a. Ø-pa-lapak okuh poh ditih kapak nuh do niyuw.
 AV-TR-split 1s.NOM yet PRX axe 2s.GEN GEN coconut
I will (or 'Let me') split some coconuts with your axe.

b. Ø-po-tibas okuh poh ditih dangol nuh
 AV-TR-slash 1s.NOM yet PRX bush.knife 2s.GEN
 do pampang.
 GEN stone
I will slash a stone with your bushknife.

In this section we have considered primarily examples in the actor voice. However, the transitivity prefixes *poN-* and *po-* function in much the same way in other voices, whenever the Undergoer is not selected as subject. Moreover, these prefixes also play a role in certain transitivity alternations, e.g. the contrast between *m-ongoy* 'go' vs. *m-poN-ongoy* 'fetch'. See Kroeger (1996a) for a more detailed discussion of these issues.

4.4. Causative constructions

Causative verbs in Kimaragang are formed by adding the causative prefix *po-*. As is true in virtually all languages which have morphological causatives, the CAUSER becomes the Actor of the causative verb. Note the use of actor voice when the causer is selected as subject, as in (66). (Recall from section 4.3 that actor voice is always expressed by a Ø-allomorph before *po-*). The CAUSEE in Kimaragang, i.e. the original Actor of the root verb, assumes the status of a patient. This is reflected in the use of objective voice when the causee is subject, as in (67).

(66) a. Ogom poh sinoh, Ø-po-odop okuh poh ditih tanak.
 sit yet MED.LOC AV-CAU-sleep 1s.NOM yet PRX child
Have a seat while I put the baby to sleep.

b. Kadung aa kou pendakod dogon, tibas-on tekoo
 Kadung aa kou Ø-po-indakod dogon, tibas-on kuh-ikoo
 if NEG 2p.NOM AV-CAU-climb 1s.DAT slash-OV 1s.GEN-2p.NOM
If you don't let me climb up there, I'll slash you all to pieces!

(67) a. Po-odop-on kuh poh inoh tanak om mituturan nogi.
 CAU-sleep-OV 1s.GEN yet MED.NOM child and AV:RECIP:story then
I will put the baby to sleep first, then we'll talk.

- b. Ilo sawo nuh poolion yah noh.
 Ilo sawo nuh po-uli-on yah noh.
 DIST.NOM spouse 2s.GEN CAU-return-OV 1pe.GEN already
As for your wife, we are already allowing her to go home.

All of the above examples involve intransitive verb roots. When a causative verb is derived from a transitive root, there is a potential conflict between the causee, as derived patient of the causative, and the original patient of the root predicate. This conflict is resolved by “demoting” the original patient to instrumental status.

The following examples illustrate the voice marking possibilities with transitive causatives. When the causee is selected as subject (68), the verb takes objective voice. When the original patient is selected as subject (69), the verb takes instrumental voice. As noted above, the causer functions as Actor of these causative structures. But Kimaragang systematically prohibits the use of actor voice with causative verbs derived from transitive roots; thus the causer cannot be selected as subject in these examples.

- (68) a. Pa-akan-on kuh poh i Jaiwan tu wilton.
 CAU-eat-OV 1s.GEN yet NOM Jaiwan because hungry
I'll have Jaiwan eat something (i.e. give him something to eat) first, because he's hungry.

- b. Peenumo i tanak nuh ditih tubat.
 po-inum-o i tanak nuh ditih tubat.
 CAU-drink-OV.SUBJ NOM child 2s.GEN PRX medicine
Get your child to drink this medicine.

- (69) a. Nunuh ot i-pa-akan nuh do tanak dot s-um-usu poh?
 what NOM IV-CAU-eat 2s.GEN GEN child REL AV-nurse yet
What will you feed a child that is still nursing?

- b. Nipeenum di Majabou dit tanak yoh it gatas,
 n-i-po-inum di Majabou dit tanak yoh it gatas
 PST-IV-CAU-drink GEN Majabou GEN child 3s.GEN NOM milk

 it nan urud-o dit sawo yoh sid mangkuk.
 NOM AUX express-OV.SUBJ GEN spouse 3s.GEN DAT bowl
Mjabou let the child drink the milk which his wife had squeezed into the bowl.

These examples accurately illustrate the voice marking patterns for transitive causative verbs. However, they are misleading in one respect: the pattern *po-V-on* illustrated in (67) and (68) is characteristic of causatives derived from (a) intransitive roots or (b) transitive roots belonging to the INGESTIVE class. Ingestive verbs are a special class of transitive roots whose Actor is in some way affected by the action. The class includes verbs of eating, drinking, smoking, etc. as well as certain verbs of perception and cognition. Some further examples are given in (70):

- (70) Po-sigup-o okuh poh!
 CAU-smoke-OV.IMP 1s.NOM yet
Give me a cigarette.
- b. Pentongo poh i Janama do gambar nuh.
 po-intong-o poh i Janama do gambar nuh.
 CAU-look.at-OV.IMP yet NOM Janama GEN picture 2s.GEN
Show Janama your pictures!
- c. Pelo'on okuh poh...
 po-ilo-on okuh poh...
 CAU-know-OV 1s.NOM yet
Please inform me ...

With all other transitive roots, however, the causative prefix *po-* gets replaced by *poN-* when the causative verb is marked for objective voice (i.e. when the causee is subject). This pattern is illustrated in (71). But in instrumental voice the causative prefix is retained; thus the examples in (72), with root verb's patient selected as subject, involve the same affixation as those in (69).

- (71) a. Pangalapako yalo dinoh niyuw.
 poN-lapak-o yalo dinoh niyuw.
 TR-split-OV.IMP 3s.NOM MED.GEN coconut
Get him to split those coconuts.
- b. Isai ot pong-owit-on nuh ditih surat?
 who NOM TR-carry-OV 2s.GEN PRX letter
Who will you get to carry this letter?
- (72) a. N-i-pa-lapak kuh di ama it niyuw tu
 PST-IV-CAU-split 1s.GEN GEN father NOM coconut because

 amu l-in-apak-Ø di iyai.
 NEG PST-split-OV GEN mother
I got Dad to split the coconut, because Mom wouldn't split it.
- b. N-i-po-owit kuh di Janama inoh surat.
 PST-IV-CAU-bring 1s.GEN GEN Janama MED.NOM letter
I had Janama deliver the letter.

Semantically, causative verbs are potentially ambiguous between a coercive reading, as suggested for (71a) above, and permission, as in (66b) and (67b). The following example highlights this fact, since it allows only a permissive reading:

- (73) Pa-ansak-on poh ilo punti om akan-on nogi.
 CAU-ripe-OV yet DIST.NOM banana and eat-OV then
Let those bananas ripen first and then eat them.

4.5. Other derivational morphology

4.5.1. Requestives (*poki-*)

The prefix *poki-* forms REQUESTIVE verb stems. It has the basic meaning ‘ask for’, but can also be used with related meanings such as ‘look for’, ‘want’, etc. Within this range of meanings, the specific meaning assigned to the combination of *poki-* with a particular root is often somewhat idiosyncratic. Some roots unpredictably fail to combine with *poki-*; but on the whole the prefix is quite productive.

The Actor of the derived verb (the participant who does the asking or seeking) corresponds to the recipient, beneficiary or goal of the basic predicate. For example, the predicate *tuduk* ‘show, teach’ takes an agent, a theme and a recipient. The derived form *mokituduk* can be translated ‘ask someone to teach you something’. As the translation suggests, the Actor of the derived form is the recipient of the base verb, i.e. the one to whom something is taught.

- (74) a. Mokituduk okuh do boros do momogun siddi Pangadap.
 m-poki-tuduk okuh do boros do momogun siddi Pangadap.
 AV-RQV-teach 1s.NOM GEN word GEN Dusun DAT Pangadap
I am asking Pangadap to teach me the Dusun language.
- b. Isai ot poki-tuduk-an nuh do boros do momogun?
 who NOM RQV-teach-DV 2s.GEN GEN word GEN Dusun
Who are you asking to teach you the Dusun language?
- c. Nunuh ot poki-tuduk-on nuh siddi Pangadap?
 what NOM RQV-teach-OV 2s.GEN DAT Pangadap
What are you asking Pangadap to teach you?

As the examples in (74) indicate, requestive verbs can occur in at least three voices. Actor voice is used to select the asker as subject, dative voice for the source or addressee (the person asked), and objective voice for the thing asked for.

With intransitive roots, the requestive form often carries the meaning ‘ask permission to X’. With some noun roots, the requestive prefix can be added to mean ‘search for X’ or ‘gather X’. Other noun roots which can take this prefix have less predictable meanings. Some commonly used examples of various types are listed in the following table, all in actor voice:

(75)

Root	Gloss	Requestive Form	Gloss
anu	<i>take</i>	mokianu	<i>ask for</i>
patay	<i>die</i>	mokipatay	<i>risk or seek death</i>
waya	<i>follow</i>	mokiwaya	<i>ask to accompany someone</i>
atod	<i>send, take</i>	mokiatod	<i>ask for a ride</i>
suwang	<i>enter</i>	mokisuwang	<i>seek to enter</i>
gangot	<i>firewood</i>	mokigangot	<i>gather firewood</i>
lo'o	<i>to fall</i>	mokilo'o	<i>search for windfalls (fruit)</i>
gambar	<i>picture</i>	mokigambar	<i>have ones picture taken</i>
gunting	<i>scissors</i>	mokigunting	<i>get a haircut</i>
(t)ubat	<i>medicine</i>	mokiubat	<i>seek medical treatment</i>
sawo	<i>spouse</i>	mokisawo	<i>ask to marry</i>
rayow	<i>praise</i>	mokirayow	<i>seek praise; show-off</i>
ambaya	<i>friend</i>	mokiambaya	<i>try to make friends with</i>

4.5.2. Reciprocals and reflexives

There are no reflexive or reciprocal pronouns in Kimaragang. Reflexive and reciprocal actions are indicated by derivational prefixes on the verb, *pising-* and *pi-* respectively. The reciprocal prefix *pi-* requires that the subject of the verb be plural (or a dual pronoun), since the subject NP names a group whose members stand in some relation to each other. Partial reduplication of the stem often accompanies this prefix, but is not obligatory. Reciprocal verbs most often occur in the actor voice. The sentence in (76), taken from a traditional flood narrative, contains three such examples.

(76) Leed.sule'ed om ko-pi-sa-sambat,
 after.long.time and AV.POT-RCP-RDP-meet

miboboros nopoh nga amu ko-pi-arati.
 m-pi-bo-boros nopoh nga amu ko-pi-arati.
 AV-RCP-RDP-speak only but NEG AV.POT-RCP-understand

A long time passed (after people were scattered in the world), and when they met each other, they would speak to each other but could not understand each other.

When the verb is marked for some other voice, there must be an Actor which is distinct from the subject. This construction generally has causative semantics, with the Actor functioning as causer. The Actor need not be plural, but the subject must be expressed by a plural NP, since it is the subject which names the group involved in a reciprocal action or relation. Note that the subject must be given a plural interpretation even when it is not explicitly marked as being plural, as seen in (77a).

(77) a. Nokuroh.tu pi-ansap-on nuh inoh dangol?
 why RCP-scrape-OV 2s.GEN MED.NOM bush.knife
Why are you scraping those bush knives against each other?

- b. P-in-i-toning-Ø kuh it sapi om karabau Ø-po-ogot.
 PST-RCP-near-OV 1S.GEN NOM cow and buffalo AV-TR-tie
I tied up the cow and the buffalo near each other.

The reflexive prefix *pising-* has a variety of uses, similar to the range of meanings associated with the middle voice in many languages; but in Kimaragang this affix must co-occur with one of the regular voice markers. The primary use of the reflexive prefix is with transitive verb roots. In this context, the effect of the prefix is to signal that the Actor and Undergoer of the action are the same individual. A few examples of this usage are given in (78). Notice that the final nasal in this prefix does not assimilate to a following obstruent.

(78)

Root	Gloss	Reflexive Form	Gloss
garas	<i>slaughter</i>	misinggaras	<i>slit one's own throat</i>
patay	<i>die, kill</i>	misingpatay	<i>kill oneself</i>
timbang	<i>shoot</i>	misingtimbang	<i>shoot oneself</i>
tobok	<i>stab</i>	misingtobok	<i>stab oneself</i>
wanit	<i>poison</i>	misingwanit	<i>poison oneself</i>
lapis	<i>slap</i>	misinglapis	<i>slap oneself</i>
(t)ubat	<i>medicine</i>	misingubat	<i>treat/medicate oneself</i>
(o)wiyaw	<i>full (of food)</i>	misingwiyaw	<i>to eat one's fill</i>
rayow	<i>praise</i>	misingrayow	<i>to praise oneself</i>
gambar	<i>picture</i>	misinggambar	<i>take one's own picture</i>

As these examples indicate, reflexive verbs almost always appear in the actor voice (*m-pising-* becoming *mising-*). However, this is not the only possible pattern. Note the use of dative voice in the following example, derived from the root *liyuw* 'to learn, study':

- (79) Ombot awasi, irih noh pising-liyuw-an.
 where good ANAPH.NOM FOC RFL-learn-DV
Whatever is good, that is what you should study.

With intransitive verbs and adjectival roots, the reflexive prefix can have several possible uses: 'make oneself X', 'pretend to be X', 'intentionally X', 'be excessively X', etc. Some representative examples are given below:

- (80) a. Amu mangakan yalo, mising-gagas.
 NEG AV:TR:eat 3s.NOM AV:RFL-skinny
She won't eat, she is trying to slim down.

- b. Mising-ba-basag yalo mana'an dilo gangot
 AV:RFL-RDP-strong 3s.NOM AV:TR:hold DIST firewood

dot amimi-i o-owit-Ø.
 REL NEG:RDP-EMPH POT-carry-OV

He is pretending to be strong by lifting that firewood when in fact he can't carry it.

- c. Mising-sa-sama yalo do manan-tapi....
 AV:RFL-RDP-Bajau 3s.NOM COMP AV:put.on-sarong
He is acting like a Bajau by wearing a sarong (spoken of a Kimaragang man)

Transitive and unaccusative verb roots can occasionally be used in an intransitive actor voice form with a middle or reflexive meaning, e.g. *sumiddang* 'to sunbathe', derived from the transitive root *siddang* 'to dry (something) in the sun'; and *gumaras* 'slit one's own throat', from the root *garas* 'slaughter'.

4.5.3. Other verbal affixes

Kimaragang has a considerable number of other derivational affixes, but only a few of them can be mentioned here. The prefix *ponoN-* changes noun roots into verbs which usually have the meaning 'to use, wear, put on X'. Some examples in actor voice are listed in (81); see also (80c).

(81)

Root	Gloss	Derived Form	Gloss
tapi	<i>sarong</i>	manantapi	<i>wear a sarong</i>
kasut	<i>shoe</i>	manangkasut	<i>wear shoes</i>
tiyan	<i>stomach</i>	monontiyang	<i>be pregnant</i>
sawo	<i>spouse</i>	manansawo	<i>(of man) to marry a woman</i>
ama	<i>father</i>	manangama	<i>address or regard as father</i>

The desiderative prefix *ti-* attaches to verb stems to form new verbs meaning 'want to X'. Some examples are given in (82). With most transitive roots, the *ti-* form includes one of the transitivity prefixes, but at least some ingestives appear to be exceptions to this pattern. A single example (*ti-odop-on* 'sleepy') has been found which includes a suffix.

(82)

Root	Gloss	Desiderative	Gloss
sobu	<i>urine</i>	tisobu	<i>feel need to urinate</i>
sayau	<i>dance style</i>	tisayau	<i>want to dance</i>
odop	<i>sleep</i>	tiodop	<i>want to sleep</i>
binit	<i>pinch</i>	tipominit	<i>feel the urge to pinch</i>
apuy	<i>fire</i>	tipagapuy	<i>want to light a fire</i>
akan	<i>eat</i>	tiakan	<i>want to eat</i>

The prefix *obing-* attaches to verb roots to produce adjectives meaning 'prone to X'. Some examples are given in (83). As with the reflexive prefix, the final nasal in this

prefix does not assimilate. With some roots the dative voice suffix can co-occur, as shown in (84).

(83)

Root	Gloss	Derived Form	Gloss
babak	<i>shatter</i>	obingbabak	<i>fragile, easily broken</i>
rasak	<i>dried up</i>	obingrasak	<i>prone to dry up (river)</i>
rasang	<i>angry</i>	obingrasang	<i>quick to anger, hot tempered</i>
tigog	<i>startled</i>	obingtigog	<i>easily startled</i>
labus	<i>escape</i>	obinglabus	<i>prone to escape</i>
tarabang	<i>help</i>	obingtarabang	<i>quick to help</i>

(84)

peet	<i>bitter</i>	obingpeet	<i>quickly becomes bitter (e.g. rice wine)</i>
		obingpeetan	<i>(person) very sensitive to bitter taste</i>
lonit	<i>swell up</i>	obinglonit	<i>prone to swell (e.g. feet)</i>
		obinglonitan	<i>prone to suffer swelling (e.g. allergic person)</i>

Another prefix, *otug-*, is used with similar meaning in a few forms, e.g. *otug-oling* ‘forgetful’; *otug-irak* ‘quick to laugh’.

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