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UNIVERSITY OF CALIFORNIA

Santa Barbara

A Grammar of Karo, Tupi (Brazil)

A Dissertation submitted in partial satisfaction of the requirements for the degree

of

Doctor of Philosophy

in

Linguistics

by

Nilson Gabas, Jr.

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September 1999

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For the Arara

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ABSTRACT

A GRAMMAR OF KARO, TUPÍ (BRAZIL)

by

Nilson Gabas, Jr.

The Karo language is spoken by approximately 150 Arara Indians in the state of Rondônia, in the southwest part of the Amazon region, in Brazil. It is genetically affiliated with the Ramarama branch of the Tupi family, one of the largest families of languages in South America. Karo is supposedly the sole language of its branch.

The Arara Indians used to call themselves *iʔərap* (from *iʔə* 1ST PERSON INCLUSIVE pronoun, plus *rap* ASSOCIATIVE) 'ourselves, us', and are known to have lived in their present location from time immemorial. They have been in contact with the surrounding white population since the 1940's, and although the majority of them are bilingual in Portuguese, they use the Karo language exclusively among themselves for communication.

Prior to my work, nothing was known about the Karo language except for a few wordlists published by ethnologists (Horta Barbosa 1945; Levi-Strauss 1950; Nimuendaju 1925, 1955; Rondon 1948; Schultz 1955; Vitor Hugo 1959).

Some of the main typological features of Karo include a) a complex interplay of segments and suprasegmentals at the phonetic and phonological levels; b) an extensive internal and external array of morphophonemic processes; c) a fairly simple morphology, with only a few derivational and inflectional processes, no case or gender marking on nouns; d) a relatively strict order of

elements (determiners, adjectives, nouns, verbs, postpositions, etc.) within constituents (noun, verb, adverbial and postpositional phrases); e) a relatively strict SOV word order; and f) a fairly rich inventory of particles with different grammatical functions such as noun classification and evidentiality.

This dissertation is arranged in a fairly intuitively progression of linguistic complexity, moving from the smaller linguistic units, the sounds, to the larger units of morphology and syntax. In the last three chapters I deal with three grammatical systems found in Karo, the classifier system, the ideophone system, and the evidential system.

Chapter 1 provides an overview of the language, the sociolinguistic situation, as well as a brief history and cultural analysis of the group, the number of fieldtrips undertaken and information about the data collected.

In Chapter 2 a description of Karo phonetics and phonology is provided. It includes a description of the consonantal and vocalic segments of Karo, its syllabic patterns, processes of nasal spreading, assimilation processes, patterns of stress placement, and tone.

The morphology of Karo is described in Chapter 3. It includes a description of the word classes of Karo, its affixes (both inflectional and derivational), clitics, and processes of nominalization and compounding.

Chapter 4 deals with the syntax of Karo. First, in section 4.1, I present and describe the types of simple sentences found in the language (basic declarative, focused declarative, interrogative, and imperative sentences). Then, in section 4.2, I describe the major predicate types which occur in the language. In section 4.3 I describe the Karo phrases (noun phrase, verb phrase, postpositional phrase and adverbial phrase) and their constituents. Following the description of phrases I account for the way tense is marked in the language (in section 4.4) and the

syntactic processes of negation (in section 4.5). In section 4.6 I describe the process of reported speech, and in the last section of the chapter, section 4.7, I describe the processes of clause combinations: clause chaining and three types of subordination, 1) time, 2) purpose and 3) cause.

In the last three chapters of the dissertation I describe three different grammatical systems found in Karo: the classifier system, in Chapter 5; the ideophone system, in Chapter 6; and the evidential system, in Chapter 7.

In Chapter 5 I account for the formal and semantic properties of the classifier system, examining them in the light of available typologies of noun classification.

In Chapter 6 I provide an analytical background of the linguistic literature on ideophones, followed by a description of ideophones of Karo from the phonetic, phonological, morphological, syntactic, semantic and discourse points of view. At the end I provide a (partial) list of 100 ideophones found in the language.

In Chapter 7 I first provide an overview of the literature on evidentials, and then describe the evidentials of Karo formally and semantically.

Finally, in the Epilogue I bring together the main characteristics of the language, relating them to current typologies of languages in general and of Amazonian languages in particular.

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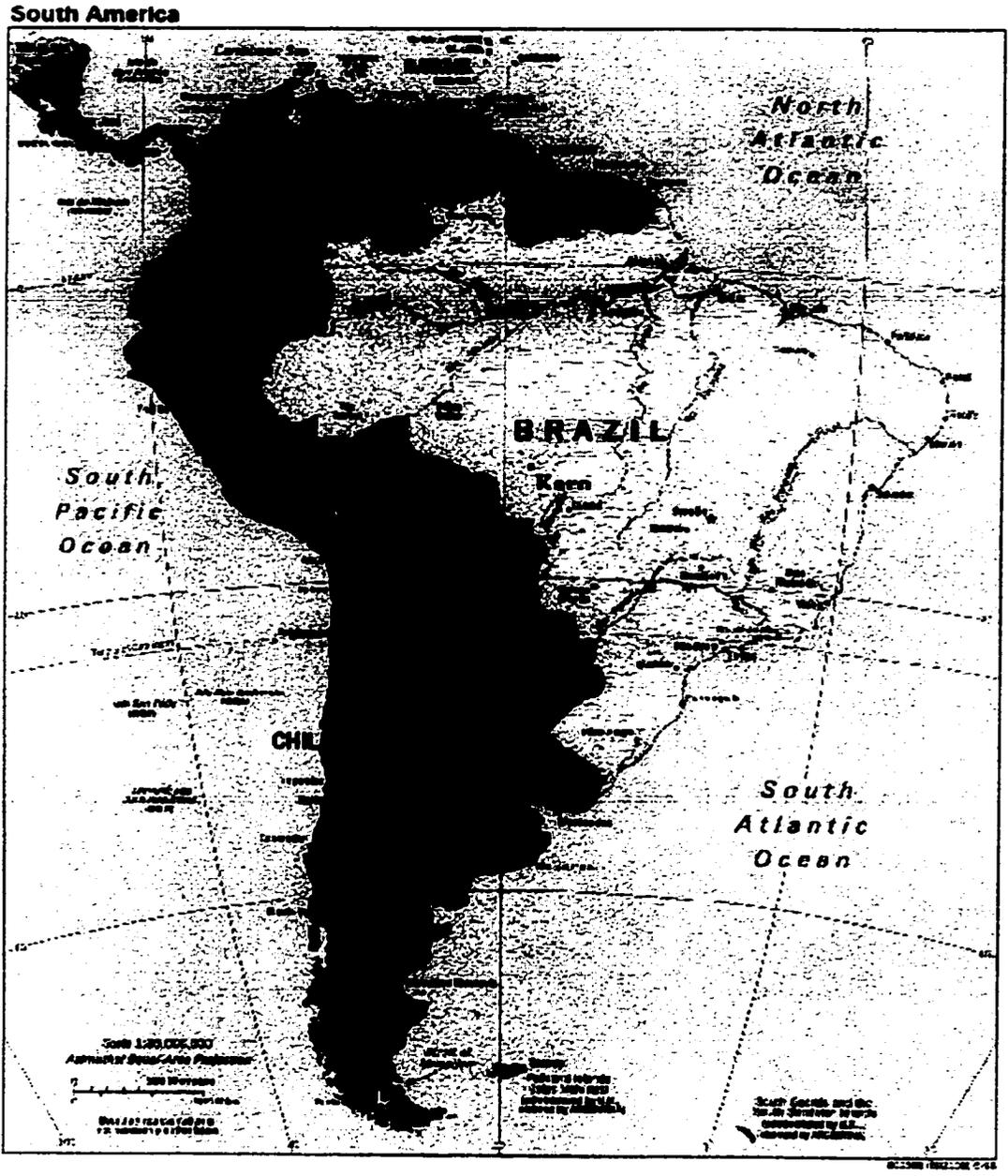
ABBREVIATIONS

1SG	FIRST PERSON SINGULAR
2SG	SECOND PERSON SINGULAR
3SG	THIRD PERSON SINGULAR
3SG.FEM	THIRD PERSON SINGULAR FEMININE
3IMP	THIRD IMPERSONAL
3R	THIRD COREFERENTIAL (WITH SUBJECT)
1PL.INCL	FIRST PERSON PLURAL INCLUSIVE
1PL.EXCL	FIRST PERSON PLURAL EXCLUSIVE
2PL	SECOND PERSON PLURAL
3PL	THIRD PERSON PLURAL
1SG.POSS	FIRST PERSON SINGULAR POSSESSIVE
2SG.POSS	SECOND PERSON SINGULAR POSSESSIVE
3SG.POSS	THIRD PERSON SINGULAR POSSESSIVE
3SG.FEM.POSS	THIRD PERSON SINGULAR FEMININE POSSESSIVE
3R.POSS	THIRD COREFERENTIAL (WITH SUBJECT) POSSESSIVE
1PL.INCL.POSS	FIRST PERSON PLURAL INCLUSIVE POSSESSIVE
1PL.EXCL.POSS	FIRST PERSON PLURAL EXCLUSIVE POSSESSIVE
2PL.POSS	SECOND PERSON PLURAL POSSESSIVE
3PL.POSS	THIRD PERSON PLURAL POSSESSIVE
ABESS	ABESSIVE
ABL	ABLATIVE
ADESS	ADESSIVE
ADVZ	ADVERBIALIZER
ALL	ALLATIVE

ASSOC	ASSOCIATIVE
AUX	AUXILIARY
AUX.FUT	FUTURE AUXILIARY
CAUS	CAUSATIVE
CL.BDS	CLASSIFIER, BUNCH:DIFFERENT SOURCE
CL.BSS	CLASSIFIER, BUNCH:SAME SOURCE
CL.CCV	CLASSIFIER, CONCAVE OR CONVEX
CL.CYLB	CLASSIFIER, CYLINDRICAL:BIG
CL.CYLM	CLASSIFIER, CYLINDRICAL:MEDIUM
CL.CYLS	CLASSIFIER, CYLINDRICAL:SMALL
CL.FEM	CLASSIFIER, FEMININE
CL.FLAT	CLASSIFIER, FLAT
CL.RD	CLASSIFIER, ROUND
CL.TFLAT	CLASSIFIER, THIN FLAT
COM	COMITATIVE
COMIT	COMITATIVE CAUSATIVE
COP	COPULA
DAT	DATIVE
DEM	DEMONSTRATIVE
DISP	DISPERSIVE
EMPH	EMPHATIC
EVID	EVIDENTIAL
FUT	FUTURE
GER	GERUND
IND1	INDICATIVE 1
IND2	INDICATIVE 2

INESS	INESSIVE
INSTR	INSTRUMENTAL
INTERR	INTERROGATIVE
IPASS	IMPERSONAL PASSIVE
LOC	LOCATIVE
NEG	NEGATIVE
NOMZ	NOMINALIZER
OPT	OPTATIVE
PAST	PAST
PL	PLURAL
POSS	POSSESSIVE
REC	RECIPROCAL
REFL	REFLEXIVE
RPAST	REMOTE PAST
SIMIL	SIMILITIVE

MAP OF BRAZIL IN SOUTH AMERICA (KARO VILLAGE SHOWN)



CHAPTER 1

INTRODUCTION

1.1 THE KARO LANGUAGE

Karo is an Amazonian language spoken by approximately 150 Arara Indians, in the state of Rondônia, Brazil.

Genetically, Karo has been classified as part of the Ramarama branch of the Tupi family, together with three other languages, Ramarama, Urukú and Urumí, given as extinct (Rodrigues 1964). Recently, however, a preliminary study has shown that Karo might be the sole member of its branch, and that the different languages considered its sisters might be, in fact, Karo itself, which was labeled differently by different researchers at different times (Gabas, to appear).

Apart from wordlists published by some ethnologists (the same ones who labeled *Karo* differently) in the beginning and middle of this century (Horta Barbosa 1945; Lévi-Strauss 1950; Nimuendaju 1925, 1955; Rondon 1948; Schultz 1955; Vitor Hugo 1959), no systematic linguistic research has been done previously on Karo.

1.2 THE TUPI LANGUAGES

The Tupi family is one of the largest language families in South America, with ten different branches: Arikem, Aweti, Juruna, Mawe, Munduruku, Monde, Purubora, Ramarama (where Karo belongs), Tupari and Tupi-Guarani. Of these, the Tupi-Guarani branch is the best known, probably because it contains the majority of languages of the family: approximately 55 out of the 80 Tupi languages are classified as Tupi-Guaranian.

A few studies dealing with languages outside of the Tupi-Guarani branch are also available, among them some descriptive grammars (cf. Moore 1984 for the Gavião language; Crofts 1973 for the Mundurukú language), dictionaries (cf. Landin 1983 for Karitiana; Fundação Nacional do Índio 1977 for Mundurukú; Bontkes 1985 for Suruí) collections of texts (cf. Burum 1977, 1978, 1979 for Mundurukú), and a number of published as well as unpublished works (cf. Crofts 1985, Comodo 1981, and Rodrigues 1980 for Mundurukú; Graham and Harrison 1978 for Mawé; van der Meer 1981, 1982, 1983 for Suruí; Rodrigues 1966 for Cinta-Larga; Rodrigues 1990, 1995 for Xipáya; Galúcio 1996, 1997, Hanke, Swadesh & Rodrigues 1958 for Mekéns; Landin 1983, 1984, 1988, Landin and Landin 1973, Landin 1987, 1989, and Storto 1993, 1994, 1997a, 1997b, for Karitiana; Gabas 1998, 1989, 1990, 1991, 1994 for Karo; Moore 1984, 1985, 1989 for Gavião; Fargetti 1992 for Jurúna; Braga 1992 for Makurap).

For comparative and historical analysis of grammatical aspects of these languages, however, the quantity of the studies available is still far from adequate (cf. Moore 1994, an overview of Tupi syntax). It may be hoped that such analysis will become a reality in the near future, when more descriptions of languages beyond the Tupi-Guarani branch become available.

1.3 HISTORY OF THE GROUP

Although the Arara presently share their reservation (the Área Indígena Igarapé de Lourdes) with the Gavião and some Zoró Indians, both scientific and non-scientific reports show that they have always lived around that area.

The Arara were contacted by Western society in the late 1940's during the rubber expansion into the northwestern part of Brazil. As a result of the contact, many died of diseases carried by the rubber explorers and settlers.

The estimated number of Arara at contact was 600 people. This number had dropped considerably, to approximately 50, just two decades later. After contact, the remaining Arara either left to live in the cities or were brought to work on 'seringais' (rubber fields).

It was only in the mid-1960's that an employee of the now extinct Serviço de Proteção ao Índio, SPI, (the Brazilian Bureau of Indian Affairs) started the process of 'retribalization' of the Arara, bringing them to live in the area that is now their reservation. The Gavião and Zoró Indians came to join them shortly afterward.

By 1987, when I began fieldwork, the 100 Arara Indians living in the village were highly 'deculturated' and dependent on goods from the city. Traditional rituals, dances and music are rarely performed anymore, and foreign cultural items, activities, cuisine and religion have been incorporated into their society.

As for their economic resources, the Arara depend in part on natural products gathered from the reservation (rubber, fruits, Brazil nut, manioc flour, etc.) and on crafts (bows, arrows, baskets, earrings, necklaces, etc.). Most of their income, however, comes from lumbering.

1.4 CULTURAL OVERVIEW

The type of contact established with the Arara (unplanned, with no health care), and the historical situation (their "extraction" from their villages in order to participate in the process of rubber expansion) seem to have contributed to the lack of scientific studies of this group, either anthropological, linguistic or of any other nature. As a consequence, many of the traditions of the Arara have been lost, such as several spiritual rituals and regulatory orations.

Nevertheless, the people still remember some myths, sporadically sing their songs and practice a special kind of oratory, where two leaders (usually the spiritual leader and the chief) talk simultaneously, with one paraphrasing the other.

For subsistence, the Arara still manage to plant their crops of manioc, sweet potato, corn, papaya, pineapple and several kinds of bananas. Recently, they have also started to plant rice and sometimes beans, though not very successfully.

Besides the crops they also gather several types of fruits from the forest, especially cocoa, açai, cupuaçu, muruci, jatobá, caju, patuá, and several other kinds not known to me.

Recently, the Arara have begun to raise cows as an alternative means of subsistence. Generally, apart from sporadic losses due to jaguars and snakes, their herds are growing, and they seem to be successful in this endeavor.

The Arara also hunt and fish. Almost all hunting is now done with firearms instead of the traditional bows and arrows, though some rodents are still hunted with bows and arrows. The hunt, however, is becoming increasingly rare due to the heavy machinery used to gather wood and to the increase of pasture for the cattle. People are growing increasingly dependent on the city for their food, not only for meat but also oil, sugar, salt, rice, beans, sweets, etc.

Fishing still seems to be a lively activity among the Arara. Traditional as well as non-traditional ways of fishing are used, depending on the season. In the dry season (June through November), when the water level of the streams is low, bows and arrows are used. The tradition of fishing by poisoning the water with a special type of vine (the “timbó”) is also maintained. Due to the extensive killing of all types of aquatic animals, as well as baby fish, this technique is used more

rarely. In the rainy season, especially at the beginning, when the added turbulence of the water dirties the streams, fish lines and fish sticks are used.

By 1987 the Karo people lived in a single village, strategically located next to the end of a road to the closest city, Ji-Paraná. Even though their houses were no longer being built in the traditional way, they still carried the rough elements of a traditional house: the type of wood used, the way the logs were put together, and the roof of palm fronds.

In addition to their houses in the main village, all family groups also had temporary houses (or, as they call them, *colocações*) in the heart of the reservation, where they gather rubber and Brazil nuts. Sudden visits to the main village are not uncommon, however, especially in case of disease.

After 1987 there was a split within the Arara community, with the removal of the leader, who left with his family group to found another village.

Recently, with the decision of the shaman (and his family group) to live away from the other two villages, a three-way split has occurred. Although the reason for his move is apparently unknown, it is possible that he decided not to take sides in the dispute over power and went to live in a neutral place.

Only the first village is recognized bureaucratically by Fundação Nacional do Índio, FUNAI (the Brazilian Bureau of Indian Affairs), as an Indian Post and is entitled to the three basic elements of a Post: a permanent position and residence for a FUNAI employee, a teacher and a nurse.

Missionaries from the New Tribes Mission are also present a few meters across the creek which serves as a natural boundary between the reservation and a farm. Although their main goal is evangelical, they also serve as care providers to the Indians by trading goods, offering health care, and serving as mediators in economic transactions.

From approximately 100 in 1987, the Arara population increased to about 150 in 1995. This was due chiefly to an improvement in the quality of the medical assistance provided to the Indians by FUNAI and (probably) the missionaries.

1.5 THE SOCIOLINGUISTIC SITUATION

The long years of contact with the surrounding white population did not keep the Arara people from speaking Karo in their communities. Children still use Karo as their primary language for communication, and Portuguese is used exclusively as a language of contact. Except for three Indians who were raised in the “seringais”, away from contact with other Arara Indians, all Arara speak Karo. Older Arara Indians understand Portuguese, though they do not speak it. Younger generations of the Arara are bilingual in Portuguese (probably as consequence of their frequent trips to the closest cities), and a few male Arara also understand the Gavião-Zoró language, due to inter marriage which is relatively infrequent. Among these Arara is my best consultant, Mário Jorge, who married a Gavião Indian and usually spends part of the year with the Gavião and the other part with the Arara. All of their five children are bilingual in Karo and Gavião and also have a good understanding of Portuguese.

Only a few loan words from Portuguese are employed by the Arara, generally words for items introduced via contact, like *enxada* ‘hoe’, *carro* ‘car’, *caminhão* ‘truck’, *bicicleta* ‘bicycle’, etc. Over the past years, however, a tendency towards using kin terms borrowed from Portuguese has been increasing among the children, especially the words for ‘mother’ *mamãe*, ‘father’ *papai*, ‘uncle’ *titio* and ‘aunt’ *titia*.

As for dialectal differences, at least two dialects seem to have been spoken in the past by different clans, the Arara ('Macaw') clan and the Urubu ('Vulture') clan, also known as Pé-Preto ('Blackfoot'). Presently, only one family is reported to belong to the Vulture clan, and the dialectal differences between the members of this family and the rest of the Arara community, if any, seem to have disappeared¹.

1.6 FIELDTRIPS

Since the beginning of my research with the Karo language, in 1987, seven fieldtrips have been undertaken. The period of each fieldtrip is given below:

1 st fieldtrip:	June - August of 1987
2 nd fieldtrip:	April of 1990
3 rd fieldtrip:	August - September of 1990
4 th fieldtrip:	July - August of 1992
5 th fieldtrip:	July - August of 1993
6 th fieldtrip:	July - September of 1994
7 th fieldtrip:	October - December of 1995

¹ Although no differences between the Vulture family and the rest of the Arara community were found, a few differences among the Arara themselves seem to exist, at least in specific words. For example, while some speakers say [wirup] for 'food', others say [wirap]. [pirudn] 'round' can also be heard as [pirõn], etc.

1.7 THE DATA

The material on which this grammar is based comes from two different styles: elicited data and naturally occurring data (conversations, narratives, myths, telling of dreams, etc.). Elicited data were used mostly in the beginning of the research, and as I moved on to a better understanding of the language more and more of the second type of data was collected and analyzed.

I have recorded about 150 hours of elicited data, taken notes in 13 notebooks, and recorded approximately 120 hours of natural data, of which 1/3 is just roughly transcribed (not analyzed) and 1/5 is transcribed and analyzed².

A profile of the consultants I have had a chance to work with is as follows:

Chiquito	male	born approximately in 1945
Manoel	male	born approximately in 1940
Carlão	male	born approximately in 1965
Mário Jorge	male	born approximately in 1965
Pereira	male	born approximately in 1970
Yarök	male	born approximately in 1975
Wāk-wāk	male	born approximately in 1970
Rute	female	born approximately in 1980
Rosa	female	born approximately in 1975
Marli	female	born approximately in 1970

Besides these consultants, several other members of the community have also participated in the recording of myths and conversations, especially the members of the family of Mário Jorge.

The equipment used to make the recording was all analog. Except for the first fieldtrip, in which I used a Uher recorder, in all subsequent fieldtrips I used either a Sony Walkman Professional or a Marantz tape recorder. Almost all recordings were stereophonic. In one occasion the stereo microphone broke, and in another the stereo plug of the recorder also broke, recording only in monophonic mode.

² The analysis of transcribed data I refer to comprises the process of understanding the exact meaning of all morphemes (including literal translations) and grammatical patterns. This is a long process which averages 10-15 hours of analysis for each hour transcribed.

CHAPTER 2

PHONETICS AND PHONOLOGY

As in other Tupian languages, the most salient characteristic of Karo at the levels of phonetics and phonology is a heavy interplay between segmental and suprasegmental factors. As I will shown below, suprasegmentals like tone and stress relate to the structure of the sounds and syllables in remarkable ways.

I will first present the inventory of the phonetic and phonological segments (consonants and vowels, respectively) followed by a description of their variants and the respective environments in which they occur. Examples showing crucial distinctions among consonantal and vocalic phonemes also will be provided. In section 2.2 I will characterize the syllable patterns. Rules of nasalization spread will be given in section 2.3, and the processes of external sandhi will be presented in section 2.4³.

Although tone and stress are phenomena necessarily mentioned in the discussion of consonants and vowels, in section 2.1, the processes of stress placement and tone, including tone spreading, will be described in detail in the last two sections, 2.5 and 2.6, respectively.

2.1 PHONETIC SEGMENTS

The consonantal and vocalic phonetic segments of Karo are presented below. The transcription of these segments follows Ladefoged and Maddieson (1996).

³ The processes of *internal sandhi*, because of their specificity with relation to the word class in which they occur, will be presented in Chapter 3 when I describe the word classes of Karo.

2.1.1 CONSONANTS

The following phonetic consonants were found in Karo:

	bilabial	alveolar	palatal	velar	glottal
stops	p p: p ^ˀ b	t t: t ^ˀ	c c:	k k: k ^ˀ g	ʔ
nasal	m m ^b m ^ˀ	n n ^d n ^ˀ		ŋ ŋ ^g ŋ ^ˀ	
flap		r r̃			
fricative	β		ç	ɣ	h
approximant	w w̃		y ỹ		

Table 1. Consonantal segments⁴

The following table represents the consonantal phonemes of Karo:

⁴ I also found a consonant cluster, [t̥p̥], which occurs, so far, in one word of Karo, [t̥p̥u], meaning 'to jump'. This sound can be described as a cluster of a voiceless alveolar stop plus a voiceless bilabial stop, released with a trill on both lips. I am not including this sound in the phonetic and phonemic chart of Karo consonants because the word in which it occurs is an ideophone. Ideophones, due to their specificity in terms of sound symbolism, are generally kept apart from the "normal" phonetic and phonological systems of the language in which they occur.

	bilabial	alveolar	palatal	velar	glottal
stop	p	t	c	k	ʔ
	b	r ⁵		g	
nasal	m	n		ŋ	
fricative					h ⁶
approximant	w		y		

Table 2. Consonantal phonemes

The phonetic alternations of the consonantal phonemes are explained below.

The pairs [b]:[β] and [g]:[ɣ] are in free variation in onsets of unstressed syllables after vowels.

[¹yaba] ~ [¹yaβa] ‘rodent (sp.)’

[aga¹ya] ~ [aɣa¹ya] ‘cocoa’

[c] and [ç] are in free variation.

⁵ The phoneme /r/ is represented in the chart in sequence with the voiced stops /b/ and /g/ because they form a natural phonological group, even though they are not a phonetically coherent group. For phonological and morphological reasons, /r/ is being considered as the voiced counterpart of the voiceless stop /t/, as /b/ and /g/ are the (natural) voiced counterparts of the voiceless stops /p/ and /k/, respectively. Furthermore, treating /b/, /r/ and /g/ as natural phonological counterparts of the voiceless /p/, /t/, /k/ has several precedents among other Tupian languages (Rodrigues, p.c.).

⁶ It is important to mention that /h/ is not a frequent phoneme as compared to the others.

[ˈcaːn] ~ [ˈçɑːn] ‘fire’
 [ˈcɔ̃n] ~ [ˈçɔ̃n] ‘cat’
 [eˈc:ɛtʰ] ~ [eˈçɛtʰ] ‘your name’

The phonetic segments of the voiceless stop series, [p]:[pʰ]:[p̚]; [t]:[tʰ]:[t̚]; [c]:[cʰ]:[c̚]; [k]:[kʰ]:[k̚], alternate as follows:

- long segments [p:], [t:], [c:], [k:] occur as the onsets of stressed syllables.

[iˈt:i] ‘deer’
 [moˈp:ikʰ] ‘guan (sp.)’
 [iˈc:i] ‘water’
 [koˈk:õ] ‘hawk’

- unreleased segments [p̚], [t̚], [k̚] occur as word-final codas.

[maˈk:ap̚] ‘peanut’
 [pɛˈwít̚] ‘honey, sweet’
 [maʔˈt:ɛk̚] ‘palm tree (sp.)’

- non-aspirated segments [p], [t], [c] and [k] occur elsewhere.

[paraˈmitʰ] ‘spider’

[maʔpɛ]	‘gourd’
[ˈtikʔ]	‘mosquito’
[naʔtɔ]	‘tapir’
[ˈcɔ̃n]	‘cat’
[naʔcəkʔ]	‘hole’
[ˈkaro]	‘macaw’
[caʔkĩn]	‘monkey (sp.)’

The phonetic segments of the nasal series, [m]:[m^b]:[m^b]; [n]:[n^d]:[n^d]; [ŋ]:[ŋ^ɛ]:[ŋ^ɛ], alternate as follows:

- post-denasalized segments [m^b], [n^d], [ŋ^ɛ] occur on stressed syllable onsets before oral vowels.

[naʔm ^b i]	‘wasp (sp.)’
[ana'n ^d a]	‘pineapple’
[ma'ŋ ^ɛ ɔtʔ]	‘again’

- pre-denasalized segments [m], [n], [ŋ] occur on word-final codas of stressed syllables after an oral vowel.

[aʔpɛ ^b m]	‘otherwise’
[ˈkɛ ^d n]	‘to sleep’
[ˈpɛ ^ɛ ŋ]	‘white man’

- plain nasal segments [m], [n], [ŋ] occur elsewhere.

[ame'k:ɔ]	‘jaguar’
[ana'n ^d a]	‘pineapple’
[ma'ʔip ^ʔ]	‘log’
[na'c:ɛy]	‘grazing ground’
[^h mãrõ]	‘capibar’
[^h nãm]	‘breast’
[i'yõm]	‘father’
[^h cãn]	‘cat’
[^h tẽŋ]	‘to fly’

The phonetic segments of the approximant series, [r]:[r̃]; [w]:[w̃]; [y]:[ỹ], alternate as follows:

- [w̃] and [ỹ] occur adjacent to nasal vowels.

[o'wã]	‘mother’
[^h tãw̃]	‘far’
[^h wĩn]	‘to kill’
[^h nãyã]	‘corn’
[i'yõm]	‘father’
[^h yãỹ]	‘tooth’

- [r̄] occurs between nasal vowels in unstressed syllables preceded by stressed syllables:

['kǎ̄r̄ēm]	‘hummingbird’
['mǎ̄r̄ō]	‘capibar’
['pǎ̄r̄ēm]	‘tree (sp.)’

- [w], [y] and [r] occur in all other environments.

[kiri'wɛpʔ]	‘butterfly’
[wə'wə]	‘fan’
['yaw]	‘ray’
[i'yɔ]	‘bat’
[naʔ'wəy]	‘monkey’
[ya'yɔ]	‘armadillo (sp.)’
['paratʔ]	‘fish (sp.)’
[a'ɔrɔ]	‘parrot’
[ere'rētʔ]	‘peacock’
[awa'rǎ]	‘bird (sp.)’
[ko'rē]	‘wood (sp.)’

Crucial distinctions regarding specific features (voicing, manner and point of articulation) can be seen in the following examples:

Voicing:

/p/ : /b/ =	/abipe/	[abi ^h pɛ]	‘his lip’	vs.
	/acibe/	[aci ^h bɛ]	‘root’	
/t/ : /ɾ/ =	/matet/	[ma ^h t:ɛt ^h]	‘yesterday’	vs.
	/korét/	[ko ^h rét ^h]	‘bird (sp.)’	
/k/ : /g/ =	/wakāya/	[wa ^h k:āȳa]	‘rodent (sp.)’	vs.
	/māygāra/	[māȳ ^h gāra]	‘snake’	

Manner of articulation:

/p/ : /m/ =	/pako/	[pa ^h k:ɔ]	‘fish (sp.)’	vs.	
	/makap/	[ma ^h k:ap ^h]	‘peanut’		
	/nāp/	[^h nāp ^h]	‘wasp (sp.)’		vs.
	/nām/	[^h nām]	‘breast’		
/t/ : /n/ =	/tāw/	[^h tāw ^h]	‘far’	vs.	
	/nāk/	[^h nāk ^h]	‘mouth’		
	/ṛīt/	[^h ṛīt ^h]	‘small’	vs.	
	/wīn/	[^h wīn]	‘to kill’		

/k/ : /ŋ/ =	/káʔ/	['káʔ]	CL.CCV	vs.
	/ŋa/	['ŋ ^g a]	3SF.FEM	
	/mēk/	['mēkʔ]	'to smear'	vs.
	/tēŋ/	['tēŋ]	'to fly'	
/p/ : /w/ =	/piy/	['piy]	'lazy'	vs.
	/wiy/	['wiy]	'to leave'	
	/capə/	[ca'p:ə]	'penis'	vs.
	/wəwə/	[wə'wə]	'fan'	
/h/ : /ʔ/ =	/nahek/	[na'həkʔ]	'fontanel'	vs.
	/maʔip/	[ma'ʔipʔ]	'log'	
	/ihyāy/	[ih'yāy]	'piranha'	vs.
	/piʔti/	[piʔ'ti]	'heavy'	
/c/ : /y/ =	/cú/	['cú]	'big'	vs.
	/yu/	['yu]	'blood'	
	/cã/	['cã]	'bitter'	vs.
	/iyã/	[i'yã]	'Brazil nut'	

Point of articulation:

/ʔ/ : /k/ = /pʔ/ [pʔ] 'CLASSIFIER' vs.
/tik/ [tik] 'pick'

/maʔip/ [maʔip] 'log' vs.
/makap/ [makap] 'peanut'

/c/ : /t/ = /can/ [ca^dn] 'to pluck' vs.
/tan/ [ta^dn] 'to beat'

/ici/ [i^c:i] 'water' vs.
/iti/ [i^t:i] 'deer'

/c/ : /k/ = /nacap/ [na^c:ap] 'hair' vs.
/makap/ [makap] 'peanut'

/naco/ [na^c:ɔ] 'plantation field'
/pako/ [pa^k:ɔ] 'fish (sp.)'

2.1.2 VOWELS

Karo has the following vocalic (oral and nasal) phonetic segments:

	front	central	back
high	i ī	ɨ	u
mid-high	e ē	ə ǝ	o ō
mid-low	ɛ		ɔ
low		a	

Table 3. Vocalic segments (oral and nasal)

The vocalic phonemes of Karo are as follows:

	front	central	back
high	i ī	ɨ	u
mid	e ē	ə	o ō
low		a ā	

Table 4. Vocalic phonemes (oral and nasal)

The rules that account for the occurrence of [e]:[ɛ] and [o]:[ɔ] as allophones of the phonemes /e/ and /o/, respectively, are:

- [e] occurs in high-tone syllables⁷:

[ko'réʔ]	/korét/	'guan (sp.)'
[pé ^h ŋ]	/péŋ/	'non-Indian'
[wétʔ]	/wét/	'to cry'

⁷ High tone is marked with the acute symbol; low tone is left unmarked.

- [ɛ] occurs in unstressed syllables and in low-tone stressed syllables:

[amɛ'k:ɔ]	/ameko/	'jaguar'
[pɛ'witʰ]	/pewit/	'honey'
[ko're ^b m]	/korem/	'also'
[maʔ'pɛ]	/maʔpe/	'gourd'

- [o] occurs in high-tone syllables and in unstressed syllables:

[o'wẽ]	/owẽ/	'baby'
[mo'c:ay]	/mocay/	'possum'
[t'óy]	/tóy/	'to disappear'
[m ^b óá]	/móa/	'tortoise'

- [ɔ] occurs in low-tone stressed syllables:

[pa'k:ɔ]	/pako/	'fish (sp.)'
[naʔ'tɔ]	/naʔto/	'tapir'
[m ^b ɔkʰ]	/mok/	'rope'

The distribution of the phonetic segments [e]:[ɛ] and [o]:[ɔ] shows that their occurrence is not conditioned by segmental factors but by suprasegmental ones. Roughly, while **high tone** seems to favor the occurrence of the higher vowels, [e] and [o], **stress** seems to favor the occurrence of the lower vowels [ɛ] and [ɔ].

It is worth mentioning that in the linguistics literature only consonantal segments have been reported to interact with tone (cf. Hyman & Schuh 1974, Hyman 1973, 1975). In Karo, **vocalic** segments do interact with tone, a fact which may be unusual.

The examples below show crucial phonological distinctions among pairs of vowels:

/i/ : /e/ =	/iti/	[i'ti]	'somebody came'	vs.
	/ite/	[i't:ɛ]	'uncle'	
	/wip/	['wipʔ]	'cooked'	vs.
	/wep/	['wɛpʔ]	'I do not know'	
/i/ : /ə/ =	/kiy/	['kiy]	'truth'	vs.
	/kəy/	['kəy]	DATIVE	
	/tin/	['ti ^d n]	'to burn'	vs.
	/tən/	['tə ^d n]	'to walk'	
/ə/ : /a/ =	/kəy/	['kəy]	DATIVE	vs.
	/kay/	['kay]	AUX.FUTURE	
	/apəy/	[a'p:əy]	'grandmother'	vs.
	/aʔ-pay/	[aʔ'pay]	'he died'	

/u/ : /o/ =	/up/	[ˈupˀ]	‘red’	vs.
	/op/	[ˈɔpˀ]	‘papaya’	
	/naʔtup/	[naʔˀtupˀ]	‘end’	vs.
	/naʔto/	[naʔˀtɔ]	‘tapir’	
/i/ : /ĩ/ =	/win/	[ˈwiˀn]	‘to feed’	vs.
	/wĩn/	[ˈwĩn]	‘to kill’	
	/tati/	[taˀtˀi]	‘to bring’	vs.
	/kotĩ/	[koˀtˀĩ]	‘one’	
/e/ : /ẽ/ =	/aʔ-pey-a/	[aʔˀpeya]	‘do it’	vs.
	/aʔ-pẽy-a/	[aʔˀpẽya]	‘step on it’	
	/korét/	[koˀrétˀ]	‘guan (sp.)’	vs.
	/carēk/	[caˀrēkˀ]	‘slow’	
/a/ : /ã/ =	/kap/	[ˈkapˀ]	‘fat’	vs.
	/kãp/	[ˈkãpˀ]	‘delicious, tasteful’	
	/paʔpan/	[paʔˀpaˀn]	‘to fall’	vs.
	/pãpã/	[pãˀpãˀ]	‘yam (sp.)’	

/o/ : /õ/ =	/yakoy/	[ya'k:ɔy]	'to sweat'	vs.
	/yakõy/	[ya'k:õỹ]	'to dive'	
	/mok/	[m ^b ɔkʷ]	'thin rope'	vs.
	/mõy/	[mõỹ]	'powder'	

2.2 SYLLABIC PATTERN

Four types of syllables occur in the words of Karo: open syllables CV and V, and closed syllables VC and CVC. There is a general tendency for closed syllables to occur word-finally, preceded by one or two open syllables. (It is rare for a word to contain more than three syllables.) Closed syllables can precede open syllables only if the coda consonant is a glottal stop /ʔ/.

Below I provide examples of each possible sequence of syllables, open-open, open-closed, closed-open, and closed-closed. Syllabic units are separated by dots.

Open-open:

/ya.mo.mõ/	'chameleon'
/ka.ʔa/	'house'
/a.o.ro/	'parrot'
/i.yo/	'bat'
/mó.a/	'tortoise'

/cõ.a.be/	‘bow’
/a.me.ko/	‘jaguar’
/ó.ra/	‘music’
/a.ʔi/	‘sloth’

Open-closed:

/pe.wit/	‘honey’
/i.gip/	‘aunt’
/cõ.at/	‘slippery’
/i.it/	‘to squeeze’
/ca.ro.gĩn/	‘smoke, cloud’
/a.tĩŋ/	‘worm’
/pe.ĩn/	‘to ripe off’
/ma.pøy/	‘rainbow’
/na.cey/	‘plantation field’

Closed-open⁸:

/maʔ.pe/	‘gourd’
/kaʔ.to/	‘2PL’
/iʔ.ke/	NEGATIVE PARTICLE
/aʔ.ti/	‘he came’

⁸ The open syllable of a sequence closed-open must always be CV. If it were otherwise an open syllable with no onset (only V), nothing would prevent the coda of the preceding closed syllable to become its onset, forming thus a sequence (C)V + CV.

/ku.ruʔ.cu/	‘saliva’
/yaʔ.ci/	‘bad odor’
/ko.roʔ.pe/	‘snake (sp.)’
/yaʔ.mo/	‘sweet potato’

Closed-closed:

/aʔ.pem/	‘otherwise’
/iʔ.net/	‘wait!’
/naʔ.pit/	‘path, road’
/caʔ.wət/	‘thorn’
/peʔ.tik/	‘potato’
/paʔ.pan/	‘to fall down’
/maʔ.wit/	‘man’
/a.yaʔ.nāp/	‘branch’
/naʔ.yop/	‘leaf’

Words with just one syllable are also possible:

Open:

/tī/	‘shame’
/cú/	‘big’
/ŋa/	3SG.FEM
/pe/	CL.FLAT
/i/	‘jenipapo’

Closed:

/pɛŋ/	‘white man’
/tik/	‘mosquito’
/tap/	3PL
/piy/	‘lazy’
/up/	‘red’
/ap/	‘house (of animals)’
/ip/	‘fish’
/ék/	‘inside’

While there are no restrictions on the occurrence of vowels at the V position, the consonants /c/, /b/, /r/ and /g/ occur exclusively as syllable onsets. /b/, /r/ and /g/ also occur exclusively word-medially.

2.3 NASAL SPREADING

Two types of nasalization spread occur in Karo, one obligatory and the other optional.

Obligatorily, nasalization spreads from an underlying nasal vowel of a stressed (penultimate) syllable through the last syllable of a word (L → R) if the onset of this last syllable is either /r/ or /g/⁹. The nasalization spreads not only to the vowel but also to the /r/ and /g/ consonants as well, which become [r̃] and [ŋ], respectively.

⁹ I did not find any example in the data where a syllable begins with /b/.

/cērat/	[¹ cēṙāt̃]	‘smooth’
/māro/	[¹ mārō]	‘capibar’
/mēgan/	[¹ mēṙān]	‘to smear’
/cīgan/	[¹ cīṙān]	‘to arrange’

Optionally, a vowel becomes nasalized between two non-final nasals.

/maṙot/	[mā ¹ ṙ ^Ḃ ot̃]	~	[ma ¹ ṙ ^Ḃ ot̃]	‘again’
/anana/	[anā ¹ n ^d a]	~	[ana ¹ n ^d a]	‘pineapple’
/yamomō/	[yamō ¹ mō]	~	[yamo ¹ mō]	‘chameleon’
/mani/	[mā ¹ ni]	~	[ma ¹ ni]	‘manioc’

If the penultimate syllable does not have a nasal consonant as its onset, then the nasalization spread does not occur:

/erenī/	[ere ¹ nī]	‘wood (sp.)’
/kanā/	[ka ¹ nā]	‘thing’

2.4 PHONOLOGICAL ASSIMILATION

Phonological assimilation of specific features is a widespread phenomenon in Karo. Some phonemes easily assimilate the features of other phonemes both word-internally and at word boundaries.

Internal assimilations occur with noun, verb and adjective roots, involving basically a change in either voice or manner of articulation of the voiceless stops /p/, /t/ or /k/. Depending on the surrounding environment, /p/, /t/ and /k/ become respectively, /b/, /r/, /g/ or /m/, /n/, /ŋ/. The complete description of these changes, due to the specificity with relation to the word classes in which they occur, will be provided in Chapter 3, section 3.1, where I describe the word classes of Karo.

External alternations occur extensively in Karo¹⁰. They involve changes of the voiceless stops /p/, /t/ and /k/ both word-initially and word-finally. With a few exceptions, these alternations are conditioned by an association of segmental factors (the position of specific vowels and consonants) plus a suprasegmental factor (the occurrence vs. non-occurrence of stress) in strings of words.

The phonological changes affect the voiceless stops /p/, /t/ and /k/ as a group in a similar fashion. Roughly speaking, three patterns of change were found: 1) /p/, /t/ and /k/ change to /b/, /r/ and /g/, respectively, before or after vowels or glides; 2) /p/, /t/ and /k/ change to /m/, /n/ and /ŋ/, respectively, either word-initially or word-finally. Word-initially, they change to /m/, /n/ and /ŋ/ after a word which ends with a nasal consonant. Word-finally, they change to /m/, /n/ and /ŋ/ if they are preceded by a nasal vowel nucleus and followed by a word with a nasal consonant at the word-initial position; and 3) /p/ and /k/ change to /b/ (or /h/) and /g/, respectively, if they occur in a word-final stressed syllable with an oral vowel nucleus followed by a word with a nasal consonant in the word-initial position. Each of these patterns of change is described below.

¹⁰ The description provided in this section is representative of only certain groups of speakers within the Karo community. No exhaustive survey was made with respect to possible phonological alternations presented here.

1a) /p/, /t/ and /k/ change to their voiced counterparts /b/, /r/ and /g/ in word-final position before vowels or glides.

/p/, /t/, /k/ → /b/, /r/, /g/ / __ # V or G(lide)

/p/:

[*war iyōm **ib** an*]

wat iyōm ip at-t

1SG father fish bring.IND1

'my father brought a fish'

[*cawab wiy*]

cawap wiy-t

sun go.out-IND1

'the sun rose'

[*naʔcab yatep*]

naʔcap yatep

head.hair fall(ADJ.)

'fallen head hair'

/t/¹¹:

[*ma λwír ameko roy*]
ma λwíř ameko top-t
man jaguar see-IND I
'the man saw the jaguar'

[*ma λwír yét toy*]
ma λwíř yét top-t
man this see-IND I
'the man saw this one'

[*õn ñorér wĩn*]
õn korét wĩ-n
1SG bird kill-IND I
'I killed a/the bird (sp.)'

¹¹ No change of /t/ to /t/ happens when /t/ is followed by the glide /y/ in an unstressed syllable. In such cases, an epenthetic /n/ occurs between /t/ and /y/. Examples are:

- | | | | | | |
|--------|-------|------------------------|--------|--------------------|-------------------------|
| (1) õn | mewít | nyegat | (2) õn | a?cegat | nyané |
| õn | pewít | yega-t | õn | a?-cega-t | yané |
| 1SG | honey | search.for-IND I | 1SG | 3SG-turn.off-IND I | first |
| | | 'I searched for honey' | | | 'I turned it off first' |

/k/:

[*ma ʔeg i ʔke*]

ma ʔek i ʔke

palm.tree NEG

'it's not (a) palm tree (sp.)'

[*ōn yaracewag ya ʔi nān*]

ōn yaracewak ya ʔi nā-n

1SG wild.dog like COP-IND I

'I like the wild dog'

[*yate na ʔcæg wew*]

yate na ʔcək wew

pig nose large

'pig's large nose'

1 b) /p/, /t/ and /k/ change to their voiced counterparts /b/, /r/ and /g/ in word-initial position after vowels or glides.

/p/, /t/, /k/ → /b/, /r/, /g/ / V or G # __

/p/:

[*óra becép*]

óra pecép

song ugly

‘ugly song’

[*oyakōy bāttem*]

o-yakōp-t pāt=tem

1SG=dive-INDI beautiful=ADVZ

‘I dove beautifully’

[*pew bæt*]

pew pæt

wound lots.of

‘lots of wounds’

/t/:

māygāra roba at towīya

māygāra top-a aʔ=ʔe-t to=wīy-a

snake see-GER 3SG=AUX-INDI 3R=leave-GER

‘He left to see the snake.’

[ar ināw rati]

at ināw tati-t

3SG bird bring-INDI

‘he brought a bird (sp.)’

[iʔnō gay rə]

iʔ-nō kəy tə

1PL.INCL=one.of DAT EVID

‘for one of us, they say’

/k/:

[oti gán]

o=ti-t kán

1SG=come-INDI RPAST

‘long ago I came’

[iyāy gōm]

i=yāy kōm

3IMP=tooth like

‘like a tooth’

[yaw gōam]

yaw kōam

ray also

‘ray too’

2a) /p/, /t/, /k/ change to their nasal counterparts /m/, /n/ and /ŋ/ word-initially
after a word ending with a nasal consonant.

/p/:

iyōm māt

iyōm pāt

father beautiful

‘beautiful father’

koran map

koran pap

fish CL.CYLB

‘fish (sp.)’

/t/:

kāram natia

kāram ta-ti-a

hummingbird COM-take-GER

‘Bring the hummingbird!’

haran narap

haran tarap

monkey spotted

‘spotted monkey (sp.)’

/k/:

iyōm ***ŋōm***

iyōm ***kōm***

father **SIMIL**

‘like father’

okun ***ŋɛ̃***

o=kun ***kɛ̃***

1SG=belly **white**

‘my white belly’

2b) /p/, /t/, /k/ change to their nasal counterparts /m/, /n/ and /ŋ/ word-finally in a syllable with a nasal vowel nucleus followed by a word beginning with a nasal consonant.

/p/, /t/, /k/ → /m/, /n/, /ŋ/ /ĩ __ # N

nāĩm *naká*

nāĩp *naká*

bee head

‘head of (the/a) bee (sp.)’

epāĩn ***māĩm*** *ahyə*

e=pāĩt ***māĩm*** *ahyə*

2SG=beautiful X **INTERR**

‘Are you good/alright?’

aʔwāŋ *naʔto wĩm*
aʔ=wāk *naʔto wĩ-n*
 3SG=sick tapir kill-INDI
 ‘He, being sick, killed the tapir.’

3) /p/ and /k/ change to /b/ and /g/, respectively, if they occur in a word-final stressed syllable with an oral vowel as its nucleus, followed by a word beginning with a nasal consonant.

/p/, /k/ → /b/, /g/ / V __ # N

cób *mawiya*
cóp *ma-wiy-a*
 fly CAUS-go.out-GER
 ‘make the fly leave’ (frighten it!)

wagag *naká*
wagak *naká*
 bird head
 ‘bird’s (sp.) head’

Furthermore, if the syllable with the nasal consonant is also stressed, /p/ does not change to /b/ but to /h/ instead. (This same rule also applies when the onset of the last syllable also begins with the glides /w/ and /y/.)

/p/ → /h/ / V __ # N_(+stress) ¹²:

ma λw ħtah *mōm* *wĭy*
ma λw ħtap *mōm* *wĭy-t*
man ASSOC only leave-IND1
'only men left'

na λyoh *nō*
na λyop *nō*
leaf one.of
'one of the leaves'

ocorah *wét*
o-corap *wé-t*
1SG=girlfriend cry-IND1
'my girlfriend cried'

wayo *bah* *yu*
wayo *bap* *yu*
alligator CL.CYLB blood
'blood of (an) alligator'

¹² I did not find any example where /p/ changes to /h/ before /ŋ/.

2.5 STRESS

Stress occurs basically on the last syllable of Karo words. Less frequently, it occurs on penultimate syllables. These occurrences are predictable in terms of segmental and suprasegmental factors.

2.5.1 SEGMENTAL CONDITIONING OF STRESS PLACEMENT

From the segmental point of view, stress can be predicted by the onset of the last syllable: if it is a voiced stop consonant, /b/, /r/ or /g/, then the stress shifts one syllable to the left.

/yaba/	[¹ yaba]	‘rodent (sp.)’
/cobi/	[¹ cobi]	‘hook’
/pibeʔ/	/ ¹ pibeʔ/	‘foot’
/pábeʔ/	/ ¹ pábeʔ/	‘hand’
/aoro/	[a ¹ oro]	‘parrot’
/kirik/	[¹ kirik ^ˀ]	‘green’
/waro/	[¹ ˀwaro]	‘snail’
/māro/	[¹ māro]	‘capibar’
/karo/	[¹ karo]	‘macaw’
/were/	[¹ were]	‘frog’
/yuri/	[¹ yuri]	‘tatoo’
/macirup/	[ma ¹ c:irup ^ˀ]	‘bird (sp.)’
/cirip/	[¹ cirip ^ˀ]	‘bird (sp.)’

/yogo/	[ˈyɔgɔ]	‘eel’
/cego/	[ˈcɛgɔ]	‘monkey (sp.)’
/táɣip/	[ˈtáɣipˀ]	‘bow’
/igip/	[ˈigipˀ]	‘aunt’
/cigi/	[ˈcigi]	‘spot’
/məga/	[ˈməga]	‘mouse’
/ecigun/	[ɛˈci:ɣu ^d n]	‘ant-eater (sp.)’
/iʔcogo/	[iʔˈcɔgɔ]	‘quati (sp.)’
/manogon/	[maˈn ^d ɔgo ^d n]	‘rabbit (sp.)’

If the onset of the last syllable is of any other kind rather than /b/, /r/ or /g/ then the stress falls on the last syllable.

/peon/	[peˈɔ ^d n/	‘skin’
/mopik/	[moˈp:ikˀ]	‘bird (sp.)’
/matek/	[maˈt:ɛkˀ]	‘palm tree (sp.)’
/kuruʔcu/	[kuruʔˈcu]	‘saliva’
/pako/	[paˈk:ɔ]	‘fish (sp.)’
/yaʔo/	[yaˈʔɔ]	‘lizard (sp.)’
/yaʔmo/	[yaʔˈm ^b ɔ]	‘yam (sp.)’
/anana/	[anaˈn ^d a]	‘pineapple’
/maŋot/	[maˈŋɔtˀ]	‘again’
/nahɛk/	[naˈhɛkˀ]	‘fontanel’

/kiriwep/	[kiri'wɛpʰ]	'butterfly'
/koyo/	[kɔ'yɔ]	'crab'

A few exceptions to this segmental rule occur. In these exceptions, the last syllable is stressed instead of the penultimate one, violating the rule which establishes stress on penultimate syllables beginning with /b/, /r/ or /g/.

/acibe/	[aci'bɛ]	*[a'c:ibɛ]	'root'
/kiribop/	[kiri'bɔpʰ]	*[ki'ribɔpʰ]	'frog (sp.)'
/pobo/	[pɔ'bɔ]	*[p'ɔbɔ]	'owl'
/korem/	[ko're ^b m]	*[kɔ're ^b m]	'also'
/miririy/	[miri'riy]	*[mi'ririy]	'toad (sp.)'
/koran/	[ko'ra ^d n]	*[kɔ'ra ^d n]	'fish (sp.)'
/pirun/	[pi'ru ^d n]	*[pi'ru ^d n]	'round'
/pagon/	[pa'gɔ ^d n]	*[p'agɔ ^d n]	'friend'
/cagəp/	[ca'gəpʰ]	*[c'agəpʰ]	'dish'
/yogoy/	[yo'gɔy]	*[yɔgɔy]	'breath'

2.5.2 SUPRASEGMENTAL CONDITIONING OF STRESS PLACEMENT

Stress is also affected by nasalization and tone. In the first case, the underlying nasal vowel of an ultimate or penultimate syllable is automatically stressed, regardless of the type of onset of the last syllable¹³.

Ultimate syllable stress:

/iyã/	[i'ỹã]	'Brazil nut'
/cokōy/	[co'k:ōỹ]	'parrot (sp.)'
/maʔō/	[ma'ʔō]	'ant (sp.)'
/ayaʔnāp/	[ayaʔ'nāp']	'branch'
/yaʔcī/	[yaʔ'cī]	'bad odor'
/cigã/	[ci'gã]	'bone'

Penultimate syllable stress:

/wakāya/	[wa'k:āyã]	'rodent (sp.)'
/īya/	[i'īyã]	'bird'
/yogōyom/	[yo'gōyōm]	'beard, moustache'
/māygāra/	[māy'gārã]	'snake'
/cimāran/	[ci'mārãn]	'snake (sp.)'
/kōnam/	[k'ōnãm]	'crazy'
/catōwa/	[ca't:ōwã]	'fish (sp.)'

¹³ There seems to be just one underlying nasal vowel per word in Karo. Furthermore, Karo does not have words with nasal vowels as the nucleus of the penultimate syllable and voiceless stop consonants as the onset of the last syllable, e.g. *[pãki], *[yōca], *[tēpan], etc. The presence of such words would have the effect of clashing the segmental and suprasegmental rules of stress placement.

Stress is also affected by tone: a syllable with high pitch is automatically stressed. Only one underlying high pitch occurs per word. This type of conditioning interacts with the two other types in the following ways:

- A. **conditioning by nasality:** high pitch never occurs in a syllable of a word which also contains another syllable with an underlying nasal vowel (e.g. *[^hpákā], *[^hwétā], etc.);
- B. **segmental constraints:** high pitch also never occurs in a penultimate syllable if the onset of the ultimate syllable has a voiceless stop /p/, /t/, /c/, /k/, /ʔ/ (e.g. *[^htápi^l], *[^hcékə], etc.)

Examples of words with high pitch are¹⁴:

/yogá/	[yo ^h gá]	‘egg’
/korét/	[ko ^h rét ^l]	‘guan (sp.)’/‘fowl’???
/napía/	[na ^h p:íá]	‘ant (sp.)’
/móa/	[^h móá]	‘turtle (sp.)’
/pewít/	[pe ^h wít ^l]	‘sweet’
/nayúa/	[na ^h yúá]	‘ant’s house’
/wíup/	[^h wíup ^l]	‘native, non-domesticated’

¹⁴ The phonetic convention I use to mark pitch is: high pitch : [^h]; mid pitch : [^l]; low pitch : unmarked.

2.6 PITCH

Three levels of pitch occur phonetically in Karo words: high, mid and low. Of these, only high and low are phonologically contrastive; mid pitch is the phonetic realization of low pitch in stressed syllables.

Since high, mid and low pitches do not rise or fall during their production, the pitch system of Karo can be categorized as a ‘register level pitch system’ (Pike 1948).

Furthermore, the fact that only high and mid pitches occur in stressed syllables, and that high and mid pitches are also used to distinguish the meanings of words make Karo a ‘pitch-accent’ language (Hyman 1975).

Some pairs of words distinguishable only by means of differences in pitch are:

/pén/	['pén]	‘to open’	vs.
/pēn/	['pēn]	‘to step’	
/cán/	['cá ^d n]	‘to wash’	vs.
/can/	['ca ^d n]	‘to pluck’	
/tóy/	['tóy]	‘to disappear’	vs.
/toy/	['tóy]	‘to see’	

The examples below show the occurrence of low pitch in unstressed syllables and mid and high pitches in stressed syllables:

/maʔpe/	[maʔ'pē]	'gourd'
/parato/	[para't:ō]	'armadillo (sp.)'
/ameko/	[ame'k:ō]	'jaguar'
/yogá/	[yo'gá]	'egg'
/pewít/	[pɛ'wít']	'honey'
/korét/	[ko'rét']	'fowl'

It thus can be observed that from the strict phonological point of view, only three sequences of pitch occur in Karo: 1) (low-)low-low, 2) (low-)low-high and 3) (low-)high-low:

low-low:

/naʔwəy/	[naʔ'wəy]	'monkey (generic)'
/wayo/	[wa'yō]	'alligator'
/paramit/	[para'mit']	'spider'

low-high:

/korét/	[ko'rét']	'guam (sp.)'
/cagá/	[ca'gá]	'eye'
/yogá/	[yo'gá]	'tongue'

high-low:

/káram/	['kǎ̃rǎ̃m]	'hummingbird'
/napía/	[na'p:íá]	'ant (sp.)'
/móa/	['m ^b óá]	'tortoise'

2.6.1 TONE SPREADING

The high or mid tone of a penultimate syllable of a word in Karo spreads rightwards to the last syllable (L → R) if the onset of this last syllable is a voiced segment V, /b/, /r/, /g/, /w/, /y/, /m/, /n/, /ŋ/.

/napía/	[na'p:íá]	'ant (sp.)'
/yaba/	['yāβā]	'rodent (sp.)'
/páram/	['pǎ̃rǎ̃m]	'wood (sp.)'
/karo/	['kárō]	'macaw'
/yogo/	['yōgō]	'eel'
/káwan/	['káwán]	'be fat'
/morīya/	[mo'rīyā]	'bead'
/a-ma-kóma/	[ama'k:ó má]	'make it warm/warm it!'
/a-ma-pána/	[ama'p:ǎ ná]	'make it beautiful!'
/páŋan/	['pǎ̃ŋǎ̃n]	'to give'

2.6.2 PHONETIC PROPERTIES OF TONE

In order to check the measures of each syllable type with relation to their tone, a sample of 140 words was taken from four different young male consultants and digitized using the software CECIL. Two different patterns were investigated:

1. the absolute measure of tone for each type of syllable (low, mid and high) and
2. the absolute measure of change in tone from one type of syllable to another (from low to mid; from low to high)¹⁵.

Given the fact that tone patterns varied substantially depending upon the phonetic environment (where differences in vowel quality and differences in stress interfere with the production of higher or lower tones¹⁶), the measures for each type of tone - low, mid and high - are presented in a range. These are:

LOW:	109 - 128 Hz
MID:	117 - 146 Hz
HIGH:	146 - 172 Hz

The average range of tone transition from one syllable type to another was:

LOW → MID:	15 Hz
LOW → HIGH:	33 Hz

¹⁵ Due to the stress patterns seen before (in section 2.5) and to the tone spreading processes (seen in section 2.6.1), there are no occurrences of sequences high-mid, mid-low or high-low within simple words in Karo. Two possible exceptions could be the words [tá:giḽ], 'bow' and [ĩ:giḽ], 'aunt, brother (female speaking)', respectively, in which the high tone of the first syllable does not spread to the following syllable, even though the /g/-type onset is among the ones which allow the spreading of the high tone. These exceptions might be explained when we recognize that these words might be lexicalized forms of a sequence of two morphemes, *ták* plus *?ip* and *ik* plus *?ip*.

¹⁶ High vowels carry intrinsically higher pitch when compared to lower vowels, and stressed syllables also tend to have higher pitch as compared to unstressed syllables.

CHAPTER 3

MORPHOLOGY

From a typological point of view, Karo can be characterized as mildly synthetic and fusional. It does not exhibit intricate arrays of morphemes: noun phrases are not marked for case, verbs do not have person marking, etc. Only a few inflectional and derivational affixes occur, and a handful of clitics. The morphological processes that occur are a few types of nominalization, two types of causation, a process of adverbialization, and compounding.

The content of this chapter is as follows. In section 3.1 I present the word classes, discussing their occurrence as bound or free forms. In sections 3.2 and 3.3 I describe the affixes and clitics of Karo, respectively, and the phonological alternations associated with them. In section 3.4 I discuss the processes of nominalization and finally, in section 3.5, I describe the way compounds are formed.

3.1 WORD CLASSES

Nine classes of words occur in Karo: 1) pronouns, 2) nouns, 3) verbs, 4) auxiliaries, 5) adjectives, 6) postpositions, 7) adverbs, 8) particles and 9) ideophones¹⁷. Verbs, adjectives, auxiliaries, postpositions and inalienable nouns have in common the fact that they must *always* be preceded by an argument, either a pronoun, a personal clitic or an alienable noun.

Below I describe each of these classes and provide the necessary evidence which helps categorize a given word as belonging to one class or another.

¹⁷ Even though ideophones are considered a separate class of words, I will describe their occurrences and particulars in a separate chapter, given their complexity.

3.1.1 PRONOUNS

Four classes of pronouns occur in Karo: personal pronouns, possessive pronouns, interrogative pronouns and demonstrative pronouns.

Personal pronouns are used to mark ergative arguments of transitive verbs (see Chapter 4, section 4.3.1.4 on Case marking and grammatical relations). The personal pronouns of Karo are presented in Table 5 below.

Person / Number	1	2	3	3 feminine
SG	ōn	ēn	at	ŋa
PL (INCL)	iʔtə			
PL (EXCL)	té	kaʔto		tap

Table 5 Karo free personal pronouns

A set of possessive pronouns is used with alienable nouns. (See Genitive Constructions in Chapter 4, section 4.3.1.2.) This set is probably derived historically from the juxtaposition of the set of personal clitics (see section 3.3.3 below) plus the possessive marker *at*, which could have been an inalienable noun with a general meaning of ‘thing’. (Examples of possessive pronouns are provided in Chapter 4, section 4.3.1.1, in the description of noun phrase constituents.)

Person / Number	1	2	3	3 feminine
SG	wat	et	at	ŋaat
PL (INCL)	iʔyat			
PL (EXCL)	teʔet	karowat		tabat
INDĪEF			yat=	

Table 6 Karo possessive pronouns

Two interrogative pronouns occur in Karo: *nān* ‘who, what’ and *kigomə* ‘which’. *nān* occurs at the beginning of the clause, and is used as noun (phrase) substitute of any function (core and oblique).

nān *iket*

nān *i=ket*

who 3IMP=sleep

‘Who slept?’

nān *māygāra* *wĩn*

nān *māygāra* *wĩ-n*

who snake kill-IND1

‘Who killed the snake?’

nān *ēn* *itop*

nān *ēn* *i=top*

who 2SG 3IMP=see

‘Who/what did you see?’

nān *bihmām* *ekerap*

nān *pihmām* *e=ket-ap*

who COMIT 2SG=sleep-IND2

‘With whom did you sleep?’

The interrogative pronoun *kigomα* is used jointly with a noun (phrase). It also occurs at the beginning of clauses. The function of *kigomα* is to request more (precise) information about the noun to which it refers. *kigomα* may also occur in core or oblique function¹⁸.

kigomα *ip* *pay*
kigomα *ip* *pap-t*
 which fish die-IND1
 ‘Which kind of fish died?’

kigomα *ṭya* *ēn* *iwī*
kigomα *ṭya* *ēn* *i=wī*
 which bird 2SG 3IMP=kill
 ‘Which kind of bird did you kill?’

kigomα *iyá* *naká* *mā* *at* *yate* *wīm*
kigomα *iyá* *naká* *mā* *at* *yate* *wī-m*
 which stone head INSTR 3SG pig kill-IND2
 ‘With which knife did he kill the pig?’

Both interrogative pronouns, *nān* and *kigomα*, can be used with the interrogative particle *ahyε* in general information questions.

¹⁸ I have not found occurrences of *kigomα* in ergative (agentive) function.

nān ahyə mēr ā

nān ahyə mēt ā

who INTERR here X

‘What is this here?’

nān ahyə

nān ahyə

who INTERR

‘What (happened)?; What/who is it?’

kīgomə (+ noun) ahyə (mēr ā)

kīgomə (+ noun) ahyə (mēt ā)

which (...) INTERR (here X)

‘Which kind of (...) (is this one here)?’

Three demonstrative pronouns occur in Karo: *yét* ‘this (close to speaker)’, *tə* ‘that (close to hearer)’, and *yeket* ‘that (far from speaker + hearer)’. All three may occur in either core or oblique function. The demonstrative pronouns are further discussed in Chapter 4, section 4.3.1.1, on noun phrase constituents.

3.1.2 NOUNS

Nouns in Karo are not inflected for number, gender or case. For this reason, few morphological criteria are available to distinguish them from the other word classes. The bulk of the criteria comes, then, from syntax and semantics.

Nouns are prototypically recognizable by being arguments of intransitive verbs, transitive verbs, auxiliaries and other nouns.

ma ʔwɨ *para ʔkə*
ma ʔwɨ *para ʔkək-t*
man come.back-INDI
 ‘The man came back.’

ma ʔpəy *ici* *téy*
ma ʔpəy *ici* *tép-t*
woman **water** boil-INDI
 ‘The woman boiled the water.’

apəy *ɲa* *ʔet* *topaba* *mɨy* *mām*
apəy *ɲa* *ʔe-t* *to=pap-a* *mɨy* *mām*
grandmother **CL.FEM** AUX-INDI 3R=die-GER long.ago X
 ‘Grandmother died a long time ago.’

Most nouns can appear in possessive constructions, which can be either inalienable or alienable. Inalienably possessed nouns include mostly body parts, whereas alienably possessed free nouns include kin terms, handmade items, etc. Nouns denoting unpossessible entities never appear in possessive constructions. Unpossessible nouns are generally elements of nature, such as *cawap* ‘sun’, *wen* ‘moon’, *amān*, ‘rain’, *mapəy* ‘rainbow’, etc.

Inalienable possession is shown by the simple juxtaposition of a noun (phrase) or a possessive pronominal proclitic representing the possessor. Alienable possession is shown by a noun phrase followed by the possessive marker *at* or an independent possessive pronoun representing the possessor. (Genitive constructions will be fully discussed and described in Chapter 4, section 4.3.1.2.)

INALIENABLE POSSESSED NOUNS:

with possessive clitics

opía

o=piá

1SG=liver

‘my liver’

enaká

e=naká

2SG=head

‘your head’

aʔkun

aʔ=kun

3SG=belly

‘his/its belly’

with full nouns

na ʔwəy bíá

na ʔwəy piá

monkey liver

‘monkey’s liver’

wayo naká

wayo naká

alligator head

‘alligator head’

owē gun

owē kun

baby belly

‘baby belly’

ALIENABLE POSSESSED NOUNS:

with possessive pronouns

wat kaʔa

wat kaʔa

1 SG.POSS house

‘my house’

et tágip

et tágip

2 SG.POSS bow

‘your bow’

with full nouns

agóaʔpə at kaʔa

agóaʔpə at kaʔa

shaman POSS house

‘shaman’s house’

Noep at tágip

Noep at tágip

Noep POSS bow

‘Noep’s bow’

Nouns and pronouns may be followed by the associative particle *tap*.

(Associative constructions are described in section 3.1.7 below).

Kokō rap

Kokō tap

Hawk ASSOC

‘the Hawk people’

maʔpəy rap

maʔpəy tap

woman ASSOC

‘women (a woman and other women)’

aʔcot *tap*
aʔcot *tap*
3SG=seed ASSOC
'its seeds'

tabat *tap*
tabat *tap*
3PL.POSS ASSOC
'theirs (things)'

iʔə *rap*
iʔə *tap*
1pl.incl ASSOC
'ours (things), us'

Nouns are also the only class of words which can be modified by an adjective. Adjectives are further described in section 3.1.5.

maʔwɨ *cú*
maʔwɨ *cú*
man big
'big man'

<i>ma ḡəy</i>	<i>becép</i>
<i>ma ḡəy</i>	<i>pecép</i>
woman	ugly
‘ugly woman’	

<i>kḡ iwep</i>	<i>pǎt</i>
<i>kḡ iwep</i>	<i>pǎt</i>
butterfly	beautiful
‘beautiful butterfly’	

3.1.3 VERBS

Verbs in Karo are also not morphologically rich, but the few affixes which occur, together with syntactic criteria, are enough to distinguish them from the other classes of words, including auxiliaries.

Verbs are typically sentence-final elements which take modal suffixes. The moods distinguished in Karo will be discussed in section 3.2.1 below. Verbs also take derivational voice prefixes, a fact which distinguishes them from auxiliaries. As we will see below, auxiliaries also take modal suffixes but cannot take voice prefixes.

Verbs are further subcategorized into transitive and intransitive. The distinction is morphological as well as semantic. Morphologically, whereas transitive verbs can appear with the impersonal passivizer *pe-*, intransitive verbs cannot. Intransitive verbs, on the other hand, can take the causatives *ma-* and *ta-*, whereas transitives cannot. Semantically, only one argument is necessary to fulfill the requirements of intransitive verbs, whereas transitive verbs require two arguments.

Even though it cannot be considered a criterion for distinguishing intransitive from transitive verbs, it is worth mentioning that a few intransitive verbs include specification of number as part of their meaning. If the argument is singular, one verb is used, whereas if it is plural, another verb is employed.

<i>ken</i>	<i>oken</i>	vs.	<i>takéran</i>
<i>ket-t</i>	<i>o=ket-t</i>		<i>tap=kérat-t</i>
sleep-IND1	1SG=sleep-IND1		3PL=sleep-IND1
'to sleep'	'I slept.'		'They slept.'
<i>paraʔkə</i>	<i>abaraʔkə</i>	vs.	<i>karociraʔkə</i>
<i>paraʔkə-t</i>	<i>aʔ=paraʔkə-t</i>		<i>karo=ciraʔkə-t</i>
come.back-IND1	3SG=come.back-IND1		2PL=come.back-IND1
'to come back'	'He came back.'		'You (PL) came back.'
<i>peʔcɪn:</i>	<i>ebeʔcɪn</i>	vs.	<i>tekori</i>
<i>peʔcɪn-t</i>	<i>e=peʔcɪn-t</i>		<i>te=kori-t</i>
run-IND1	2SG=run-IND1		1PL.EXCL=run-IND1
'to run'	'You ran.'		'We ran.'
<i>wét:</i>	<i>ɲawét</i>	vs.	<i>taperi</i>
<i>wé-t</i>	<i>ɲa=wé-t</i>		<i>tap=peri-t</i>
cry-IND1	3SG.FEM=cry-IND1		3PL=cry-IND1
'to cry'	'She cried.'		'They cried.'

One last point worth discussing is the word class status of the copula *nā*. Even though *nā* has a predicative meaning and takes the same set of modal suffixes as any other verb or auxiliary, it behaves differently from verbs by not accepting any derivational (voice) prefixes. It also differs from auxiliaries in sometimes taking one argument and other times two, whereas auxiliaries always take only one argument.

3.1.4 AUXILIARIES

The term ‘auxiliary’ has a specialized sense in Tupian linguistics: auxiliaries in Tupian languages do not necessarily co-occur with a lexical verb.

Auxiliaries in Karo are similar to intransitive verbs, in that both require a single argument and take the same set of modal suffixes. (One exception is the auxiliary *waʔye* which does not take any modal suffix.) They differ, nevertheless, in having no obvious lexical meaning, except in reported speech, where one of the auxiliaries, *ʔe*, retained its original meaning ‘to say/do’). Auxiliaries also differ from verbs in not taking derivational (voice) prefixes. If an auxiliary occurs in a clause-chaining construction with a lexical verb, it appears in the finite form, marked by the indicative suffix *-t* or *-p*; the lexical verb appears in the non-finite form, marked by the gerund suffix *-a*.

Three auxiliaries have been found in Karo: *ʔe*, *waʔye* and *kap*. Of these, only *ʔe* and *kap* are inflected for mood. *ʔe* and *waʔye* are used with affirmative meaning in indicative clauses. One of their functions is to introduce important referents into discourse. The examples below come from an account of the Pear Film.

<i>m̄y</i>	<i>mām</i>	<i>péŋ</i>	<i>ʔep</i>	<i>to ʔwa</i>
<i>m̄y</i>	<i>mām</i>	<i>péŋ</i>	<i>ʔe-p</i>	<i>to=ʔe-a</i>
long.ago	X	white.man	AUX-IND2	3R=AUX-GER

‘Long ago there was a white man.’

<i>məy</i>	<i>ma ʔpəy</i>	<i>ŋa</i>	<i>wa ʔye</i>
<i>məy</i>	<i>ma ʔpəy</i>	<i>ŋa</i>	<i>wa ʔye</i>
so	woman	CL.FEM	AUX

‘So, there was a woman.’

<i>kanāy</i>	<i>abagon</i>	<i>nap</i>	<i>wa ʔye</i>
<i>kanāy</i>	<i>aʔ=pagon</i>	<i>tap</i>	<i>wa ʔye</i>
then	3PL=friend	ASSOC	AUX

‘Then there were his friends.’

The future auxiliary *kap* is used in indicative clauses. If any other transitive or intransitive verb co-occurs with *kap* it appears in the gerund form. (The future auxiliary *kap* is fully discussed in chapter 4, section 4.4.2.1.)

<i>a ʔwero</i>	<i>toba</i>	<i>okay</i>
<i>a ʔ=wero</i>	<i>top-a</i>	<i>o=kap-t</i>
3SG=speech	see-GER	1SG=AUX.FUT-IND1

‘I will listen to him.’

<i>kōm</i>	<i>iʔkay</i>	<i>Kabirera</i>	<i>wīa</i>	<i>iʔkōna</i>
<i>kōm</i>	<i>iʔ=kap-t</i>	<i>Kabirera</i>	<i>wī-a</i>	<i>iʔ=kōna</i>
how	1PL.INCL=AUX.FUT-IND1	Kabirera	kill-GER	1PL.INCL=EMPH

‘How will we kill Kabirera?’

<i>tena ʔwara</i>	<i>re ʔkay</i>
<i>te ʔ=na ʔwat-a</i>	<i>te ʔ=kap-t</i>
1PL.EXCL=leave-GER	1PL.EXCL=AUX.FUT-IND1

‘We will leave.’

<i>nān</i>	<i>mihmām</i>	<i>ekab</i>	<i>eya ʔwara</i>
<i>nān</i>	<i>pihmām</i>	<i>e=kap-ap</i>	<i>e=ya ʔwat-a</i>
who	COMIT	2SG=AUX.FUT-IND2	2SG=leave-GER

‘With whom you will leave?’

<i>kanāy</i>	<i>iʔkap</i>	<i>a ʔwīa</i>
<i>kanāy</i>	<i>iʔ=kap-ap</i>	<i>a ʔ=wī-a</i>
then	1PL.INCL=AUX.FUT-IND2	3PL=kill-GER

‘Then we will kill it.’

3.1.5 ADJECTIVES

Adjectives in Karo constitute an open class whose prototypical occurrence is in a noun phrase after the head noun. (A complete description of NP constituents is provided in Chapter 4, section 4.3.1.)

Adjectives differ from verbs in not taking modal suffixes or derivational voice prefixes. A few intransitive verbs, nevertheless, have been derived from adjectives with the modal suffixes *-t*, *-p* and *-a*.

kap	‘fat’	kap + t	→	kay	‘to be fat’
up	‘red’	up + t	→	uy	‘to be red’
yakōp	‘hot’	yakōp + t	→	yakōy	‘to be hot’
picorop	‘hungry’	picotop + t	→	picori	‘to be hungry’
pát	‘beautiful’	pát + t	→	pán	‘to be beautiful’
picot	‘naked’	picot + t	→	picon	‘to be naked’
pewit	‘sweet’	pewit + t	→	pewin	‘to be sweet’
wák	‘sick’	wák + t	→	wát	‘to be sick’
pitēk	‘cold’	pitēk + t	→	pitēgat	‘to be cold’
caʔyōk	‘sour’	caʔyōk + t	→	caʔyōgat	‘to be sour’

Adjectives (but not nouns) can serve as the basis for adverbs derived with the adverbializer enclitic =tem. The enclitic =tem is discussed in section 3.3.2.)

ma ʔpəy a ʔoy ʔitem
ma ʔpəy a ʔ=top-t ʔit=tem
 woman 3SG=see-IND1 **little=ADVZ**
 ‘The woman saw him/it briefly.’

at a ʔpɨy gahmōmnem
at a ʔ=pɨy-t kahmōm=tem
 3SG 3SG=wait.for-IND1 **quiet=ADVZ**
 ‘He waited for him quietly.’

ōn wat tap ya ʔi nān cúrem
ōn wat tap ya ʔi nā-n cú=tem
 1SG 1SG.POSS ASSOC like COP-IND1 **big=ADVZ**
 ‘I like mine (family, personal things) very much.’

The adjectives of Karo also differ from nouns in not constituting nuclei of noun phrases, and in never being associated directly with determiners.

3.1.6 ADVERBS

Adverbs constitute a closed class of items which do not appear with any inflectional or derivational affixes, and do not serve as bases from which any other lexical items may be derived. They typically appear at the ends of clauses or in initial focus position. They generally indicate manner, place or time. Manner adverbials are the most abundant. They are derived from adjectives and, as such, form an open (sub)class of words.

cárem	‘bitterly’
cúrem	‘very much’
maṅaptem	‘delayedly, longly’
cahmərəp̄tem	‘wisely’
kāp̄tem	‘deliciously’
pát̄tem	‘beautifully’, ‘nicely’
ṽittem	‘shortly’
carēktem	‘slowly’
cehmāktem	‘weakly’
kahmōmnem	‘calmly’
winnem	‘crookedly’

Among the manner adverbs are numerals. (As we shall see in Chapter 4, section 4.3.4, numerals in Karo are constituents of Adverbial Phrases and not of Noun Phrases.)

kofirem	‘one’
cagáro komnem	‘two’
pagon nóptem	‘three’
pagon nopættem	‘four’
pagon bayrem	‘five’
paʔpiktem	‘many’

Place adverbials constitute a closed subclass, and include the following:

mēt	‘here’
tət	‘there (close to speaker)’
meŋik	‘there’
mēm nu	‘very far away’

Finally, time adverbials also form a closed subclass, with items such as:

matet	‘yesterday’
mīn	‘today’
cāk mām	‘tomorrow’
tēna	‘now’
kanāy	‘after’
mīy mām	‘long ago’

3.1.7 PARTICLES

Cross-linguistically, the class of particles is generally defined negatively, i.e., the class of words that are not part of any other word class. Karo does not seem to be an exception. Particles in Karo share important characteristics which also distinguish them from other words in a negative way. They do not, for instance, appear with any inflection or derivation. They are also not derived from any other word class. They do not take nouns as arguments, nor can they be modified by adjectives.

While it seems intuitively transparent that particles form a different category from nouns, verbs, adjectives, auxiliaries and adpositions, it is not obvious how particles differ from adverbs.

Particles form a separate class from adverbs in Karo for distributional as well as semantic reasons. Distributionally, adverbs form a coherent category and always occur either at the beginning or at the end of clauses (or sentences). Particles are not as coherent. They can be subcategorized into different subclasses (depending on their function, which is not always transparent), and have different distributions depending on their subclass. The subclass of classifiers, for example, occurs exclusively inside the noun phrase. The evidentials occur in most cases at the end of clauses (or sentences), but a few may occur also in the middle of the noun phrase.

Semantically, while it is always true that adverbs in Karo have transparent meanings (the usual meanings associated with manner, place and time which serve to modify a proposition), the exact meanings of particles are difficult to determine. Particles in Karo are used to perform a variety of functions. One set of particles is used in noun categorization, and forms the group of classifiers (see Chapter 5). Another set is used as evidentials (see Chapter 7). Particles are also

employed to mark negation (*iʔke*, *yahmām* and *taykit* described in Chapter 4, section 4.5), interrogation (*ahyə* described in Chapter 4, section 4.1.2), and association (*tap*).

The associative (ASSOC) particle *tap* occurs with common nouns, proper nouns and possessive pronouns. It has the function of categorizing a set of entities associated with a particular referent as belonging to a temporary group. It differs from the set of classifiers of Karo in that the semantic categorization of the associative does not depend on any intrinsic property of the entities. Nonetheless, *tap* shares a distributional feature with the classifiers: in the presence of an adjective, *tap* also occurs twice in the noun phrase, once after the noun to which it refers, and again after the adjective, in concord (cf. this and other features of classifiers in Chapter 5 below). This feature of the associative particle can be seen by comparing the examples below where, in the first example, the associative follows a noun which is not modified by an adjective, whereas in the second it follows a noun which is modified by an adjective¹⁹.

<i>maʔpəy</i>	<i>rah</i>	<i>mōm</i>	<i>ikérat</i>
<i>maʔpəy</i>	<i>tap</i>	<i>mōm</i>	<i>i=kérat</i>
woman	ASSOC	only	3IMP=sleep

‘Only the women slept.’

¹⁹ The phonological alternations that occur with the consonants /t/ and /p/ of the particle *tap* follow the same changes presented in Chapter 2, section 2.4, for /t/’s and /p/’s in the same positions.

3.1.8 POSTPOSITIONS

Postpositions in Karo differ from verbs by not taking inflectional (modal) suffixes, or derivational (voice) prefixes. They differ from adverbs and particles by taking an argument as their complement. They differ from nouns by not appearing with any of the noun modifiers (adjectives, classifiers, the plural clitic, the associative particle, etc.) and not serving as arguments of predicates. They differ from adjectives by not taking the adverbializer =*tem*, and by not occurring inside noun phrases: a postposition forms a phrase on its own, which canonically occurs after (or, when focused, before) the clause.

Twelve different postpositions were found in Karo. Eleven of them have identical distribution and are used to add an oblique (i.e. non-required) argument to a clause. (See Chapter 4, section 4.3.3 on Postpositional Phrases for more details and full exemplification of oblique case markers in Karo.)

	POSTPOSITION	MEANING	TRANSLATION
1.	kəy	DATIVE	'at'
2.	mā	INSTRUMENTAL	'with'
3.	ʔerem	DISPERSIVE	'through'
4.	peʔ	LOCATIVE	'in/on'
5.	kōm	SIMILATIVE	'like'
6.	pihmām	COMITATIVE	'with'
7.	ʔay	ABLATIVE	'from'
8.	pik	ALLATIVE	'to'
9.	pət	INESSIVE	'inside'
10.	pikop	ABESSIVE	'close to, outside'
11.	pem	ADESSIVE	'close to, at (a place)'

The twelfth postposition, *kōna*, is used for emphatic purposes. *kōna* has the same distributional properties as other postpositions: it cannot receive any verbal inflection or derivation; it takes one argument as their complement; it does not occur with any noun modifier; it does not serve as argument of predicates; and, finally, it does not take the adverbializer =*tem*). It differs from the other eleven, however, in taking only core arguments as complements, and in having the possibility to occur also *before* the verb phrase.

Any core argument can be emphasized: the single argument of an intransitive verb or predicate adjective, or either argument of a transitive verb. A full description of the occurrences of *kōna* is provided in Chapter 4, section 4.3.3 on Postpositional Phrases.

EMPHASIS ON THE ARGUMENTS OF A TRANSITIVE VERB: ERGATIVE ARGUMENTS

<i>owagon</i>	<i>oyakay</i>	<i>tokōna</i>
<i>o=pagon</i>	<i>o=yakap-t</i>	<i>to=kōna</i>
1SG=friend	1SG=push-IND1	3R=EMPH

‘My friend pushed me.’

<i>ōn</i>	<i>ip</i>	<i>?īy</i>	<i>okōna</i>
<i>ōn</i>	<i>ip</i>	<i>?īp-t</i>	<i>o=kōna</i>
1SG	fish	catch-IND1	1SG=EMPH

‘I caught the fish’

EMPHASIS ON THE ARGUMENTS OF A TRANSITIVE VERB: ABSOLUTIVE ARGUMENTS

<i>ma ʔpəy</i>	<i>bǎt</i>	<i>tokōna</i>	<i>at</i>	<i>ipɨy</i>
<i>ma ʔpəy</i>	<i>pǎt</i>	<i>to=kōna</i>	<i>at</i>	<i>i=pɨy-t</i>
woman	beautiful	3R=EMPH	3SG	3IMP=wait.for-IND1

‘It was a **beautiful woman** whom he waited for.’

<i>móa</i>	<i>rokōna</i>	<i>ēn</i>	<i>ibe ʔn</i>	<i>ahyə</i>
<i>móa</i>	<i>to=kōna</i>	<i>ēn</i>	<i>i=pe ʔn-t</i>	<i>ahyə</i>
tortoise	3R=EMPH	2SG	3IMP=roast-IND1	INTERR

‘Was it **a/the tortoise** that you fried?’

EMPHASIS ON THE (ABSOLUTIVE) ARGUMENT OF INTRANSITIVE VERBS

<i>ma ʔwɨ</i>	<i>pekey</i>	<i>tokōna</i>
<i>ma ʔwɨ</i>	<i>pekep-tto=kōna</i>	
man	be.handicap	3R=EMPH

‘**The man** is handicapped.’

<i>a ʔwét</i>	<i>tokōna</i>
<i>a ʔ=wé-t</i>	<i>to=kōna</i>
3SG=cry-IND1	3R=EMPH

‘**He** cried.’

EMPHASIS ON THE ARGUMENT OF A PREDICATE ADJECTIVE CONSTRUCTION

taraptem *ōn* *okōna*
tarap=tem *ōn* *o=kōna*
spotted=ADVZ 1SG 1SG=EMPH
'I am spotted.'

cúrem *at* *tokōna*
cú=tem *at* *to=kōna*
big=ADVZ 3SG 3R=EMPH
'He is big.'

caropaptem *gaŋto* *garo=kōna*
caropap=tem *kaŋto* *karo=kōna*
sad=ADVZ 2PL 2PL=EMPH
'You (PL.) are sad.'

3.2 AFFIXES

Only a few inflectional and derivational affixes occur in Karo. In the two following subsections I provide a complete description of these affixes, their functions, and a full characterization of the processes of internal sandhi triggered by their occurrence.

3.2.1 INFLECTIONAL AFFIXES

Inflectional affixation in Karo is limited to predicates (verbs, auxiliaries and copulas). Only three **suffixes** occur, *-t*, *-p* and *-a*. The first two suffixes represent the mood categories of indicative (indicative I and indicative II), and the last suffix represent the mood category of gerund.

3.2.1.1 INDICATIVE –T²⁰

The indicative (INDI) suffix *-t* is used in statements. It occurs exclusively in main clauses when the order of the elements is SOV (the typical word order in Karo), and is the most used modal suffix. It has two allomorphs, */-t/* and */n/*. The allomorph */-n/* occurs after verb roots ending in nasal vowels and */-t/* occurs in all other environments.

<i>ōn</i>	<i>māygāra</i>	<i>wĩn</i>	<i>təgana</i>	<i>pe?</i>	<i>cf.</i>
<i>ōn</i>	<i>māygāra</i>	<i>wĩ-n</i>	<i>təgana</i>	<i>pe?</i>	
1SG	snake	kill-INDI	there	LOC	

‘I killed the snake there.’

<i>at</i>	<i>towirup</i>	<i>ʔot</i>	<i>cúrem</i>	<i>cf.</i>
<i>at</i>	<i>to=wirup</i>	<i>ʔo-t</i>	<i>cú=tem</i>	
3SG	3R=food	eat-INDI	big=ADVZ	

‘He ate his own food a lot.’

²⁰ It should be emphasized that the term ‘indicative’ is employed here in the absence of a better label, and should not be interpreted in opposition to ‘imperative’ and/or ‘interrogative’, as is commonly found in other languages around the world.

<i>oya ʔwan</i>	<i>át</i>	<i>mām</i>	<i>cf.</i>
<i>o=ya ʔwat-t</i>	<i>át</i>	<i>mām</i>	
1SG=leave-INDI	day	X	

‘I left during the day.’

<i>ōn</i>	<i>ma ʔwɨ́</i>	<i>at</i>	<i>ka ʔa</i>	<i>toy</i>	<i>cf.</i>
<i>ōn</i>	<i>ma ʔwɨ́</i>	<i>at</i>	<i>ka ʔa</i>	<i>top-t</i>	
1SG	man	POSS	house	see-INDI	

‘I saw the man’s house.’

The allomorph /-t/ of the indicative suffix *-t* may also trigger internal phonological alternations in the roots with which it occurs when these root end in /p/, /t/, /k/, nasal stop (N) or /y/. The changes are the following:

1. /p/ + /-t/ → /y/, with two phonetic realizations, [y] in roots with final stress, and [i] in roots with penultimate stress

<i>top + t</i>	→ <i>toy</i>	‘to see’
<i>yakōp + t</i>	→ <i>yakōy</i>	‘be.hot’
<i>pap + t</i>	→ <i>pay</i>	‘to die’
<i>cérop + t</i>	→ <i>céri</i>	‘to be cured’
<i>picorop + t</i>	→ <i>picori</i>	‘to be hungry’
<i>cahmərəp + t</i>	→ <i>cahməri</i>	‘to be dizzy/drunken’

2. /t/ + /-t/ → /n/, with two phonetic realizations, [n] after a nasal vowel, and [ᵈn] after an oral vowel

yaʔwat + t → yaʔwan 'to come back'

ket + t → ken 'to sleep'

ot + t → on 'to be born'

pát + t → pán 'to be beautiful'

3. /k/ + /-t/ → /gat/

pitēk + t → pitēgat 'to be cold'

pepak + t → pepagat 'to wake up'

nok + t → nogat 'to eat (intr.)'

4. N + /-t/ → /n/

pēm + t → pēn 'to step'

peīn + t → peīn 'to be torn/ripped'

pāŋ + t → pān 'to give away'

5. /y/ + /-t/ → /y/

wiy + t → wiy 'to go out'

piy + t → piy 'to wait'

3.2.1.2 INDICATIVE –P

The indicative suffix –p (IND2) is also used in statements. It occurs in main clauses when the order of one of its elements, either a noun phrase, a postpositional phrase or an adverbial phrase appears in focus position, at the beginning of the clause. (Focus constructions are discussed in detail in Chapter 4, section 4.1.1.2.)

–p has three allomorphs, /-p/, /-ap/ and /-m/. The allomorph /-p/ occurs in verb or auxiliary roots ending in vowels; the allomorph /-ap/ occurs in verbs or auxiliaries which end in consonants; and the allomorph /m/ occurs in verb roots ending in nasal vowels (there are no auxiliaries in Karo which end in nasal vowels).

cúrem at towirup ?op
cú=tem at to=wirup ?o-p
big=ADVZ 3SG 3R=food eat-IND2
'A lot, he ate his own food.'

át mām oya?warap
át mām o=ya?wat-ap
day X 1SG=leave-IND2
'During the day I left.'

maʔwɨ́ at kaʔa ɔ̃n itop
maʔwɨ́ at kaʔa ɔ̃n i=top-ap
 man POSS house 1SG 3IMP=see-IND2
 ‘It was the white man’s house what I saw.’

təgana peʔ ɔ̃n māygāra wĩm
təgana peʔ ɔ̃n māygāra wĩ-m
 there LOC 1SG snake kill-IND2
 ‘It was there that I killed the snake.’

The allomorphs /-p/ and /-m/ are not involved in any type of phonological alternation. They simply occur after verb (or auxiliary) roots ending, respectively, with an oral or a nasal vowel.

kə + p	kəp	‘to walk’
ʔo + p	ʔop	‘to eat’
capé + p	capép	‘to beat’
pě + m	pěm	‘to step’
wĩ + m	wĩm	‘to kill’

The allomorph /-ap/ is involved in the following changes:

1. A final /t/ or /k/ of verb roots changes to /r/ or /g/, respectively, before /-ap/.
(This is a regular voicing alternation that occurs at the word boundary level, involving voiceless consonants.)

peʔcit + ap	peʔcirap	‘to run’
yaʔwat + ap	yaʔwarap	‘to leave’
picot + ap	picorap	‘to be naked’
nok + ap	nogap	‘to eat’
pepak + ap	pepagap	‘to wake up’
pitēk + ap	pitēgap	‘to be hot’

2. A final /p/ of verb or auxiliary roots causes the /a/ of /-ap/ to drop and is fused with the remaining /p/;

pap + ap	pap	‘to die’
yakop + ap	yakop	‘to sweat’
pep + ap	pep	‘to be tidy’

3.2.1.3 GERUNDS

The gerund (GER) suffix *-a* is often used in clause combining to mark a non-finite clause with the same subject as the finite clause (Chapter 4). The presence of *-a* causes the voiceless stops /p/, /t/ and /k/ of the verbs to be voiced, changing them to their corresponding counterparts, /b/, /r/ and /g/.

top + a	→ toba	‘see’
pap + a	→ paba	‘die’
yakop + a	→ yakoba	‘sweat’
ket + a	→ kera	‘sleep’
yaʔwat + a	→ yaʔwara	‘leave’
cát + a	→ cára	‘wash’
wák + a	→ wága	‘be sick’
pitēk + a	→ pitēga	‘be hot’
citók + a	→ citóga	‘urinate’

-a is also employed in imperatives and in nominalized forms of verbs:

e=ker-a

e=ket-a

2SG=sleep-GER

‘Sleep!’

aʔ=tob-a

aʔ=top-a

3SG=see-GER

‘Watch it!’

e=bepag-a

e=pepak-a

2SG=wake.up-GER

‘Wake up!’

o=ker-a

kanã

o=ket-a

kanã

1SG=sleep-GER

NOMZ

‘My place to sleep.’

3.2.2 DERIVATIONAL AFFIXES

Six derivational **prefixes** occur with verbs. Five of these prefixes have a clear valence changing function and can, for this reason, be regarded as the **voice system** of Karo. The prefixes are: *ma-* simple causative (CAUS); *ta-* comitative causative (COM); *pe-* impersonal passive (IPASS); *to-* reciprocal (REC); and *mãm-* reflexive (REFL). The sixth prefix, *peʔ-* has the meaning of optative (OPT) and it could be considered part of the voice system only in purely positional grounds.

These prefixes occur immediately preceding the verb root. They are described and exemplified in the following subsections.

3.2.2.1 THE SIMPLE CAUSATIVE

Simple causative constructions occur with almost any intransitive verb but rarely with transitive ones. In causative constructions, a semantic initiator causes a secondary agent to perform or experience some action or state.

ōn amaken

ōn aʔ=ma-ket-t

1SG 3SG=CAUS-sleep-IND1

‘I made it/him sleep.’

et owā emakα

et owā e=ma-kə-t

2SG mother 2SG=CAUS-walk-IND1

‘Your mother made you walk.’

ŋa omacopɪn

ŋa o=ma-copɪ-t

3SG.FEM 1SG=CAUS-be.fat-IND1

‘She made me be fat.’

The causative prefix *ma-* does not undergo any change itself, but may cause the same alternations conditioned by the pronominal clitics: *ma-* causes the /p/ or /k/²¹ of a following intransitive verb to change to its voiced counterpart /b/ or /g/, in an unstressed syllable.

²¹ I did not find examples of polysyllabic intransitive verbs beginning with /t/ in an unstressed syllable.

at amabaraʔkə

at aʔ=ma-paraʔkə-t

3SG 3SG=CAUS-come.back-IND1

‘He made it/him come back.’

ōn emaberopit ɲakəy

ōn e=ma-peropi-t ɲa=kəy

1SG 2SG=CAUS-pinch-IND1 3SG.FEM=DAT

‘I made you pinch her.’

agóaʔpə amagahmōm nān

agóaʔpə aʔ=ma-kahmōm nā-n

shaman 3SG=CAUS-be.quiet COP-IND1

‘The shaman made him/it calm down.’

Otherwise there is no change.

ōn amapəri

ōn aʔ=ma-pəpə-t

1SG 3SG=CAUS-empty-IND1

‘I emptied it.’

at amati

at aʔ=ma-ti-t

3SG 3SG=CAUS-come.IND1

‘He made him/it come.’

ōn amaken

ōn aʔ=ma-ket-t

1SG 3SG=CAUS-sleep-IND I

‘I put him/it to sleep.’

3.2.2.2 THE COMITATIVE CAUSATIVE

Comitative causative constructions are marked by means of the prefix *ta-*. They occur primarily with intransitive verbs but have been found on occasions with transitives. They differ from simple causative constructions in that the semantic initiator, in addition to causing the secondary agent to perform or experience an action or state, also **performs** or **experiences** the action or state he/she/it initiates.

wat owā orakə

wat owā o=ta-kə-t

1SG.POSS mother 1SG=COM-walk-IND I

‘My mother made me walk, walking with me.’

ōn wat awe rabiṭēy

ōn wat awe ta-bitēp-t

1SG 1SG.POSS brother COM-cross-IND I

‘I made my brother cross, crossing with him.’

ŋa toat owẽ tanogat
ŋa toat owẽ ta-noga-t
 3SG.FEM 3r.POSS baby COM-eat-INDI
 ‘She fed her baby, eating with it.’

ta- may both undergo and/or trigger phonological changes. The initial /t/ of the prefix *ta-* changes to /t/ after vowels (either oral or nasal) or glides. /t/ changes to /n/ after nasal consonants.

After vowels:

õn wat owẽ raken
õn wat owẽ ta-ket-t
 1SG 1SG.POSS baby COM-sleep-INDI
 ‘I put my baby to sleep, sleeping with it.’

õn aʔ=rati
õn aʔ=ta-ti-t
 1SG 3SG=COM-come.INDI
 ‘I brought him/it.’

After glides:

ẽn yaw rati
ẽn yaw ta-ti-INDI
 2SG ray COM-come-INDI
 ‘You brought the ray.’

ta- can also trigger changes on a following intransitive verb if the first syllable of the verb is unstressed. In these cases, the changes also involve the phonemes /p/ and /k/²², which become voiced.

<i>wat</i>	<i>awe</i>	<i>orabitēy</i>
<i>wat</i>	<i>awe</i>	<i>o=ta-pitēp-t</i>
1SG.POSS	brother	1SG=COM-cross-IND I

‘My brother crossed with me.’

<i>ŋa</i>	<i>toat</i>	<i>owē</i>	<i>ragahmōm</i>	<i>nān</i>
<i>ŋa</i>	<i>toat</i>	<i>owē</i>	<i>ta-kahmōm</i>	<i>nā-n</i>
3SG.FEM	3R.POSS	child	COM-be.quiet	COP-IND I

‘She calmed her child and calmed down herself.’

3.2.2.3 THE IMPERSONAL PASSIVE

The impersonal passive *pe-* occurs with transitive verbs, adding passive meaning. No agent is grammatically possible.

The initial voiceless phoneme /p/ of the prefix *pe-* changes to its voiced counterpart /b/ if the preceding element (a clitic or a noun) ends in a glide or an unrounded vowel.

²² I did not find examples of polysyllabic intransitive verbs beginning with /t/ in an unstressed syllable.

After glides and unround vowels:

oyāy *bemeŋān*
o=yāy *pe-meŋā-n*
1SG=tooth IPASS-be.dirty-IND1
'My tooth got dirty.'

taykit yaw be bewīa
taykit yaw pe? pe-wī-a
NEG ray CL.FLAT IPASS-kill-GER
'Isn't the ray going to get killed?'

taykit aŋi bekiga
taykit aŋi pe-kik-a
NEG sloth IPASS-catch-GER
'Did the sloth get caught?'

If the preceding element ends with a round vowel /p/ changes to /w/.

boi ŋet towa ŋpara towewī-a
boi ŋe-t to=pa ŋpat-a to=we-wī-a
OX AUX-IND1 3R=fall-GER 3R=IPASS-kill-GER
'The ox fell and got killed.'

Finally, if the preceding element ends with a nasal consonant, /p/ changes to /m/.

cĩm mema ʔwaba
cĩm pe-ma ʔwap-a
meat IPASS-fry-GER
'The meat got fried.'

The alternations triggered by *pe-* are the same as those triggered by both causatives *ma-* and *ta-*. If the following element begins with /p/ or /k/²³ in an unstressed syllable, then /p/ and /k/ change to their voiced counterparts, /b/ and /g/, respectively.

abebe ʔħa
aʔ=pe-pe ʔħ-a
3SG=IPASS-roast-GER
'It got roasted.'

abegahmõm nã
aʔ=pe-kahmõm nã-a
3SG=IPASS-be.quiet COP-GER
'It got quiet/calmed down.'

²³ I did not find examples of polysyllabic intransitive verbs beginning with /t/ in an unstressed syllable.

3.2.2.4 THE REFLEXIVE

Reflexivity in Karo is marked by the reflexive prefix *mām* and is used with transitive as well as with intransitive verbs. In reflexive constructions with transitive verbs, *mām* is preceded by a personal clitic which is also coreferential with the subject of the clause.

ōn omāmnoy

ōn o=mām-top-t

1SG 1SG=REFL-see-IND1

‘I saw myself.’

at tomāmwĩn

at to=mām-wĩn

3SG 3R=REFL-kill-IND1

‘He/it killed him/itself.’

In reflexive constructions with intransitive verbs, reflexivity occurs between its only argument, the subject of the clause, and another argument in the oblique (generally the dative case marking) form. The reflexive prefix is then attached to the dative marker, preceded by the personal clitic coreferential to the subject.

owakán omāmkəy

o=waká-n o=mām-kəy

1SG=be.angry-IND1 1SG=REFL-DAT

‘I am angry at myself.’

aʔwero wɨy tomāmkəy
aʔ=wero wɨy to=mām-kəy
 3SG=speech go.out-IND1 3R=REFL-DAT
 ‘He spoke to himself.’

3.2.2.5 THE RECIPROCAL

Reciprocity is marked by attaching the reciprocal prefix *ro-* to the root of transitive verbs. In reciprocal constructions, *ro-* is always preceded by a personal clitic coreferential with the person of the subject of the clause.

tap toroyapít
tap to=ro-yapí-t
 3PL 3R=REC-kill-IND1
 ‘They killed each other.’

kaʔto karorocapét ahyə
kaʔto karo=ro-capé-t ahyə
 2PL 2PL=REC-beat-IND1 INTERR
 ‘Did you beat each other?’

3.2.2.6 THE OPTATIVE

Optative constructions are marked by the prefix *peʔ-* which may be attached to intransitive and transitive verbs as well as to auxiliaries. The semantic function of an optative construction is that of signaling ‘a speech act by which the speaker grants permission to a 2nd or 3rd person, as in “let him come in” (...)’

(Bybee 1985:166). In this sense, optatives imply the involvement of a semantic agent, even though they do not change the formal argument structure of the verb.

peʔ both undergoes and triggers phonological changes. The initial /p/ of *peʔ* changes to /w/ after a round vowel, to /b/ after an unround vowel or glide, and to /m/ after a nasal consonant.

After vowels:

oweʔŋen

o=peʔ-ket-t

1SG=OPT-sleep-IND1

‘Let me sleep.’

abeʔŋa

aʔ=beʔ-kə-t

3SG=OPT-walk-IND1

‘Let him/it walk.’

After glides:

naʔwəy *beʔŋa*

naʔwəy *peʔ-ŋə-t*

monkey OPT-walk-IND1

‘Let the monkey walk (free)!’

ināw *be ʔnogat*
ināw *pe ʔnoga-t*
curassow **OPT-eat-IND I**
‘Let the curassow eat!’

After nasal consonants:

kāram *me ʔnēy*
kāram *pe ʔnēp-t*
hummingbird **OPT-fly-IND I**
‘Let the hummingbird fly!’

cān *me ʔŋen*
cān *pe ʔket-t*
cat **OPT-sleep-IND I**
‘Let the cat sleep!’

iīŋ *me ʔŋə*
iīŋ *pe ʔkə-t*
worm **OPT-walk-IND I**
‘Let the worm go (free)!’

The changes triggered by *peʔ* consist of the nasalization of the first consonant of the following transitive or intransitive verb in stressed syllables. The consonants involved are, again, /p/, /t/ and /k/, which change to their homorganic nasal consonants /m/, /n/ and /ŋ/, respectively.

/p/ → /m/

õn *abe ʔmẽn*

cf.

õn *aʔpẽn*

õn *aʔ=peʔ-pẽ-t*

õn *aʔ=pẽ-t*

1SG 3SG=OPT-step-IND I

1SG 3SG=step-IND I

‘Let me step on it/him.’

‘I stepped on it/him.’

/t/ → /n/

õn *abe ʔnoy*

cf.

õn *aʔnoy*

õn *aʔ=peʔ-top-t*

õn *aʔ=top-t*

1SG 3SG=OPT-see-IND I

1SG 3SG=see-IND I

‘Let me see it/him.’

‘I saw it/him.’

/k/ → /ŋ/

owe ʔŋə

cf.

okə

o=peʔ-kə-t

o=kə-t

1SG=OPT-walk-IND I

1SG=walk-IND I

‘Let me walk.’

‘I walked.’

If the element following the optative prefix *pe ʔ*- begins with a vowel (or a glottal stop + a vowel) , an epenthetic /n/ appears between *pe ʔ*- and the vowel.

<i>ōn</i>	<i>ip</i>	<i>pe ʔnɪy</i>	<i>cf.</i>	<i>ōn</i>	<i>ip</i>	<i>ʔɪy</i>
<i>ōn</i>	<i>ip</i>	<i>pe ʔ-nɪy-t</i>		<i>ōn</i>	<i>ip</i>	<i>ʔɪy-t</i>
1SG	fish	OPT-catch-INDI		1SG	fish	catch-INDI
'Let me catch a/the fish.'				'I caught a/the fish.'		

<i>abe ʔnan</i>	<i>cf.</i>	<i>a ʔan</i>
<i>a ʔ=pe ʔ-ʔat-t</i>		<i>a ʔ=ʔat-t</i>
3SG=OPT-fall-INDI		3SG=fall-INDI
'Let it/him fall.'		'It/he fell.'

3.3 CLITICS

Clitics in Karo are distinguished from affixes by their distribution. While affixes occur exclusively with a given class of word (like the causative prefix *ma-*, which occurs specifically with the class of intransitive verbs), clitics occur with larger constituents than words (like the personal clitics which occur in noun phrases, verb phrases, postpositional phrases, etc.).

Karo contains the following clitics: 1) a plural marker *=to ʔ*, 2) an adverbializer *=tem*, 3) a set of personal markers, and 4) a nominalizer *ko=*. In the remainder of this section I will describe and exemplify their occurrences, except for the nominalizer *ko=*, which will be discussed in section 3.4 on nominalization.

3.3.1 THE PLURAL =toʔ

Prototypically, the plural enclitic =toʔ occurs at the end of noun phrases, with scope over the whole construction [(pro)nominal argument plus its modifiers].

kaʔaroʔ

kaʔa=toʔ

house=PL

‘houses’

vs.

kaʔa ʔaʔtoʔ

kaʔa ʔaʔ=toʔ

house CLR.RD=PL

‘houses’

vs.

wat kaʔa ʔa pɪk=toʔ

wat kaʔa ʔaʔ pɪk=toʔ

1SG.POSS house CLR rest.of=PL

‘the rest of my houses’

The initial /t/ of =toʔ alternates with /r/ when the preceding element ends with a vowel or glide or to /n/ if it ends with a nasal consonant.

inakároʔ

i=naká=toʔ

3IMP=head=PL

‘heads’

inãwroʔ

inãw=toʔ

curassow=PL

‘curassows’

wat naʔwəyroʔ

wat naʔwəy=toʔ

1SG.POSS monkey=PL

‘my monkeys’

kãramnoʔ

kãram=toʔ

hummingbird=PL

‘hummingbirds’

cibekonno?

cibekon=to?

vulture=PL

‘vultures’

tugno?

tug=to?

mortar=PL

‘mortars’

=*to?* also occurs in a few lexicalized constructions, where the plurality of the referent(s) is somehow intrinsic²⁴. In the examples below, =*to?* is part of the lexicalized word, and does not occur at the end of the noun phrase, its prototypical place of occurrence.

<i>pi</i>	vs.	<i>piro</i>	vs.	<i>piro</i>	<i>cú</i>	(cf. <i>*ka?a=ro cú</i>)
<i>pi</i>		<i>pi=to?</i>		<i>pi=to?</i>	<i>cú</i>	
foot		foot=PL		foot=PL	big	
‘foot’		‘feet’		‘big feet’		

²⁴ Usually, the lexicalized items refer to body parts such as ‘nostrils’, ‘feet’, ‘arms’, ‘ears’, ‘legs’, ‘hands’, etc.

3.3.2 THE ADVERBIALIZER =tem

The enclitic =tem occurs in three different types of constructions. The most frequent occurrences of =tem are with adjectives. These are also the constructions where a clear function of adverbialization occurs. In these constructions, an adverb is derived from an adjective plus =tem. Adverbs derived from adjectives occur in indicative sentences, either initially or finally. Like other adverbs, they occur sentence-initially when an auxiliary is present, and sentence-finally in sentences with indicative verbs:

<i>oken</i>	<i>cúrem</i>	
<i>o=ket-t</i>	<i>cú=tem</i>	
1SG=sleep-IND1	big=ADVZ	
'I slept a lot.'		cf.

<i>cúrem</i>	<i>wep</i>	<i>okera</i>
<i>cú=tem</i>	<i>o=ʔe-p</i>	<i>o=ket-a</i>
beautiful=ADVZ	1SG=AUX-IND2	1SG=sleep-GER
'I slept a lot.'		

<i>ŋa</i>	<i>o ʔoy</i>	<i>maŋaptem</i>
<i>ŋa</i>	<i>o=ʔop-t</i>	<i>maŋap=tem</i>
3SG.FEM	1SG=see-IND1	long=ADVZ
'She watched me for a long time'		cf.

<i>maŋaptem</i>	<i>ŋaap</i>	<i>otoba</i>
<i>maŋap=tem</i>	<i>ŋa=ʔe-p</i>	<i>o=top-a</i>
delayed=ADVZ	3SG.FEM=AUX-IND2	1SG=see-GER

‘For a long time she watched me.’

The second type of construction where *=tem* occurs seems to be a variant of the derived construction described above, only with a different function. In this construction, an adjective plus *=tem* occurs clause-initially followed by a (pro)noun or noun phrase. These constructions function as predicate adjectives. No mood marker occurs, and no further adjunct, except for another derived adverb, is possible.

<i>cárarem</i>	<i>õn</i>
<i>cára=tem</i>	<i>õn</i>
long=ADVZ	1SG

‘I am tall.’

<i>káptem</i>	<i>at</i>	<i>ahyə</i>
<i>káp=tem</i>	<i>at</i>	<i>ahyə</i>
delicious=ADVZ	3SG	INTERR

‘Is it delicious?’

<i>páitem</i>	<i>ma ʔpəy</i>
<i>páit=tem</i>	<i>ma ʔpəy</i>
beautiful=ADVZ	woman

‘The woman is beautiful.’

<i>pá̃ttem</i>	<i>cúrem</i>	<i>wat</i>	<i>owé</i>	<i>tap</i>
<i>pát=tem</i>	<i>cú=tem</i>	<i>wat</i>	<i>owé</i>	<i>tap</i>
beautiful=ADVZ	big=ADVZ	1SG	child	ASSOC

‘My children are big and beautiful.’

In the last type of constructions involving *=tem*, *=tem* is attached to the end of a transitive or intransitive verb, after the indicative mood marker */-t/*. Although it is clear that the final construction with *=tem* has an adverbial distribution, its exact meaning is not yet fully understood. My consultants suggest that the use of *=tem* in these constructions adds a meaning of ‘seeminglyness’. In the examples from spontaneous speech, these constructions with *=tem* are always followed by the auxiliary *?e* in the finite form.

When *=tem* is attached to a transitive verb, the subject of this verb is omitted, and the object can be in any person/number.

<i>otoyrem</i>	<i>at</i>
<i>o=to-y=tem</i>	<i>a?e-t</i>
1SG=see-IND1=ADVZ	3SG.AUX-IND1

‘He/it is pretending to be watching me.’

When *=tem* is attached to an intransitive verb, the subject of this verb is always marked by a personal clitic coreferential with the subject of the auxiliary.

<i>okennem</i>	<i>wet</i>
<i>o=ke-n=tem</i>	<i>o=?e-t</i>
1SG=sleep-IND1=ADVZ	1SG=AUX-IND1

‘I am pretending to be sleeping.’

The initial /t/ of *=tem*, may change to its voiced or nasal counterparts, /r/ and /n/, depending on context.

/t/ changes to /r/ after vowels or glides:

/cú/ + /=tem/ big + ADVZ	/cúrem/	['cúre ^b m]	'big'
/cǎ/ + /=tem/ bitter + ADVZ	/cǎrem/	['cǎre ^b m]	'bitter'
/piy/ + /=tem/ lazy + ADVZ	/piyrem/	['piyre ^b m]	'lazy'
/tǎw/ + /=tem/ far + ADVZ	/tǎwrem/	['tǎwre ^b m]	'far'

/t/ changes to /n/ after nasal consonants.

/pemēm/ + /=tem/ straight + ADVZ	/pemēmnem/	[pe'mēm ^d ε ^b m]	'straight'
/cagáro kōm/ + /=tem/ two + ADVZ	/cagáro kōmnem/	[ca'gáro 'kōm ^d ε ^b m]	'two'

/kĩn/ + /=tem/ hard + ADVZ	/kĩnnem/	['kĩnn ^d ɛ ^b m]	‘hard’
/win/ + /=tem/ curved + ADVZ	/winnem/	['wi ^d nn ^d ɛ ^b m]	‘curved’
/cawəɾəŋ/ + /=tem/ deep + ADVZ	/cawəɾəŋnem/	[ca'wəɾəŋn ^d ɛ ^b m]	‘deep’
/puruŋ/ + /=tem/ deep + ADVZ	/puruŋnem/	['puruŋn ^d ɛ ^b m]	‘deep (eye)’

After voiceless stops it remains unaltered.

/kap/ + /=tem/ fat + ADVZ	/kaptem/	['kaptɛ ^b m]	‘fat’
/pát/ + /=tem/ beautiful + ADVZ	/páttem/	['pát:ɛ ^b m]	‘beautiful’
/wāk/ + /=tem/ sick + ADVZ	/wāktem/	['wākte ^b m]	‘sick’

3.3.3 PERSONAL CLITICS

A class of personal clitics occur with nouns, verbs, adjectives, auxiliaries, postpositions and a copula. The clitics which occur with verbs and auxiliaries represent the absolutive case, used to mark the single argument of intransitive verbs or auxiliaries, and the patients of transitive verbs. They are in opposition to the class of free pronouns, which represent the ergative case, and are used exclusively to mark agent arguments of transitive verbs. Two sets of personal clitics occur in Karo: those in the first set are used to make reference to an entity in the world, while those in the second set establish coreference with a grammatical subject.

A personal clitic is always the first element in the phrase (noun phrase, verb phrase or postpositional phrase). It is in complementary distribution with lexical nominals in the same function. The two sets of personal clitics of Karo are distinguished only in the third person. The set of referential pronominal clitics presents three types of distinction in third person: 1) a distinction between third person and third person feminine in the singular; 2) a distinction between third person singular and plural; and 3) the presence of a third person impersonal. In the set of coreferential pronominal clitics all these distinctions are lost, and only one form for the third person occurs.

Person / Number	1	2	3	3 feminine
SG	o=	e=	aʔ=	ŋa=
PL (INCL)	iʔ=	karo=	tap=	
(EXCL)	té=			
INDIEF	i=			

Table 7. Karo referential clitics

Person/ Number	1	2	3
SG	o=	e=	to=
PL (INCL)	iʔ=	karo=	
(EXCL)	té=		

Table 8. Karo coreferential clitics

The phonological changes caused by the personal clitics involve the phonemes /p/, /t/ and /k/ of the first syllable of the word to which they are attached. This first syllable must be unstressed, otherwise no changes occur.

1) /p/ changes to /w/ following round vowels and to /b/ following non-round vowels.

/o= + penaoy/	/owenaoy/	[owena'ɔy]	'I danced.'	
/e= + penaoy/	/ebenaoy/	[ɛbena'ɔy]	'You danced.'	cf.

/o= + pǎn/	/opǎn/	[o'p:ǎn]	'I am well.'
/e= + pǎn/	/epǎn/	[e'p:ǎn]	'You are well.'

2) /t/ and /k/ change to /ɾ/ and /g/, respectively, after any type of vowel.

/o= + tati/	/orati/	[ora't:i]	'brought me'
/e= + tati/	/erati/	[era't:i]	'brought you' cf.

/o= + toɣ/	/otoɣ/	[o't:ɔɣ]	'saw me'
/e= + toɣ/	/etoɣ/	[e't:ɔɣ]	'saw you'

/o= + kuru?cu/	/oguru?cu/	[oguru?'cu]	'my saliva'
/ŋa= + kuru?cu/	/ŋaguru?cu/	[ŋaguru?'cu]	'her saliva' cf.

/o=kun/	/okun/	[o'k:u ^d n]	'my belly'
/ŋa=kun/	/ŋakun/	[ŋa'k:u ^d n]	'her belly'

Examples of the occurrence of personal clitics in Karo with verbs, adjectives, auxiliaries, postpositions and copula can be seen below.

WITH TRANSITIVE VERBS:

ameko otoy

ameko o=top-t

jaguar 1SG=see-IND 1

'The jaguar saw **me**.'

at ecapét ahyə
at e=capé-t ahyə
 3SG 2SG=beat-IND1 INTERR
 ‘Did he beat you?’

ōn aʔoy
ōn aʔ=top-t
 1SG 3SG=see-IND1
 ‘I saw **it/him.**’

WITH INTRANSITIVE VERBS:

oyaʔkoy
o=yaʔkop-t
 1SG=sweat-IND1
 ‘I sweat.’

eyaʔ
e=yaʔ-t
 2SG=climb.down-IND1
 ‘You climbed down.’

aʔken
aʔ=ket-t
 3SG=sleep-IND1
 ‘He slept.’

WITH ADJECTIVES:

ōn aʔpap toy
ōn aʔ=pap top-t
1SG 3SG=dead see-IND1
'I saw **him/it dead/hurt.**'

maʔvɪ̃ aʔkɪ̃ɪ̃ ʔan
maʔvɪ̃ aʔ=kɪ̃ɪ̃ ʔat-t
man 3SG=green bring-IND1
'The man brought **the green one.**'

WITH AUXILIARIES:

točitóga aʔkay
to=citók-a aʔ=kap-t
3R=urinate-GER 3SG=AUX.FUT-IND1
'**He** will go urinate.'

kanãy wep²⁵ okera
kanãy o=ʔe=p o=ket-a
then 1SG=AUX-IND1 1SG=sleep-GER
'Then **I** slept.'

WITH POSTPOSITIONS:

owakán *aʔkəy*
o=pakát-t *aʔ=kəy*
1SG=be.angry-IND1 3SG=DAT
'I am angry at **him/it**.'

maʔwā *yaʔwan* *ʔapik*
maʔwā *yaʔwat-t* *ʔa=pik*
man leave-IND1 3SG.FEM=ALL
'The man left with **her**.'

wat *iyōm* *ip* *ʔiy* *owihmām*
wat *iyōm* *ip* *ʔiy-t* *o=pihmām*
1SG.POSS father fish catch-IND1 1SG=COM
'My father caught a/the fish with **me**.'

WITH COPULA:

māygāra *cú* *aʔnān*
māygāra *cú* *aʔ=nā-n*
snake big 3SG=COP-IND1
'It is a/the big snake.'

²⁵ The first person singular clitic *o=* has a non-sylabic occurrence, *w=*, before vowels.

<i>maʔpəy</i>	<i>pát</i>	<i>ʔanān</i>
<i>maʔpəy</i>	<i>pát</i>	<i>ʔa=nā-n</i>
woman	beautiful	3SG.FEM=COP-IND I

‘She is a/the beautiful woman.’

<i>péŋ</i>	<i>aʔnān</i>
<i>péŋ</i>	<i>aʔ=nā-n</i>
white.man	3SG=COP-IND I

‘He is a/the white man.’

3.4 NOMINALIZATION

Verbs, verb phrases and whole clauses can be nominalized in Karo²⁶. With the exception of the nominalization of verbs by means of the suffix *-ap* (see below), all nominalized verbs show a non-finite form with the gerund suffix *-a*.

The suffix *-ap* is applied to transitive and intransitive verbs to yield agentive nominals. *-ap* has three allomorphs, */-p/*, */-m/* and */-ap/*. They occur, respectively, after a vowel, a nasal vowel, and a consonant. When */ap/* occurs after */p/* the */a/* falls and the remaining */p/* is fused with the */p/* of the verb root; when it occurs after */t/* and */k/*, the */t/* and */k/* change to */ɾ/* and */g/*, respectively.

²⁶ There is no special nominalization construction for adjectives. When the concept conveyed by an adjective is to be nominalized, (as in English ‘the beauty’) the adjective is used in connection with the noun *kanā*, the final construction meaning ‘Adjective + thing’, as in the examples below:

<i>kanā</i>	<i>pát</i>	and	<i>kanā</i>	<i>cú</i>
<i>kanā</i>	<i>pát</i>		<i>kanā</i>	<i>cú</i>
thing	beautiful		thing	big
‘beautiful thing’			‘big thing’	

ʔo	‘to eat’	ʔo + p	→	ʔop	‘eater’
capé	‘to beat’	capé + p	→	capép	‘beater’
wé	‘to cry’	wé + p	→	wép	‘crier’
kə	‘to walk’	kəp + p	→	kəp	‘walker’
wī	‘to kill’	wī + p	→	wīm	‘killer’
pipē	‘to make’	pipē + p	→	pipēm	‘maker’
top	‘to see’	top + ap	→	top	‘seer, watcher’
yakap	‘to throw’	yakap + ap	→	yakap	‘thrower’
pip	‘to drill’	pip + ap	→	pip	‘driller’
penaop	‘to dance’	penaop + ap	→	penaop	‘dancer’
cát	‘to wash’	cát + ap	→	cárap	‘washer’
cat	‘to step’	cat + ap	→	carap	‘stepper’
peʔtit	‘to roast’	peʔtit + ap	→	peʔtirap	‘roaster’
peʔcit	‘to run’	peʔcit + ap	→	peʔcirap	‘runner’
kik	‘to hold’	kik + ap	→	kigap	‘holder’
yek	‘to search’	yek + ap	→	yegap	‘searcher’
nok	‘to eat’	nok + ap	→	nogap	‘eater’
pək	‘to burn’	pək + ap	→	pəgap	‘burner’

Transitive and intransitive verbs can also be nominalized by the particle *kanā*, ‘thing’, yielding place nouns.

<i>o=ker</i>		<i>kanā</i>
<i>o=ker-a</i>		<i>kanā</i>
1 SG=sleep-GER		NOMZ

‘My place to sleep.’

<i>wat</i>	<i>ip</i>	<i>?iya</i>	<i>kanā</i>
<i>wat</i>	<i>ip</i>	<i>?iy-a</i>	<i>kanā</i>
1 SG	fish	catch-GER	NOMZ

‘My place to catch fish.’

kanā is also used to nominalize verb phrases as absolutive arguments of the verb ‘to like’, yielding terms for actions²⁷.

²⁷ *kanā* is also found in a few lexicalized items containing an absolutive argument and a transitive or intransitive verb in the participle form. The function of *kanā* in these items, nevertheless, seems not to be of a nominalizer, but of a regular noun (*kanā* in Karo is a noun which means ‘thing’).

<i>yāy</i>	cob	it	<i>kanā</i>
<i>yāy</i>	cop	it	<i>kanā</i>
tooth	dirt	clean	thing

‘dental floss’

<i>i?nok</i>	<i>kanā</i>
<i>i?=nok</i>	<i>kanā</i>
1 PL.INCL=eat	thing

‘restaurant’

ōn aʔwīa kanā yaʔi nān
ōn aʔ=wī-a kanā yaʔi nā-n
 1SG 3SG=kill-GER NOMZ like COP-IND1
 ‘I like to kill it.’

ōn wat mok pe cára kanā yaʔi nān iʔke
ōn wat mok peʔ cát-a kanā yaʔi nā-n iʔke
 1SG 1SG.POSS cotton CL.FLAT wash-GER NOMZ like COP-IND1 NEG
 ‘I do not like to wash my clothes.’

ēn ekerā kanā yaʔi nān ahyə
ēn e=ket-a kanā yaʔi nā-n ahyə
 2SG 2SG=sleep-GER NOMZ like COP-IND1 INTERR
 ‘Do you like to sleep?’

kaʔto karowéya kanā yaʔi nān
kaʔto karo=wé-a kanā yaʔi nā-n
 2PL 2PL=cry-GER NOMZ like COP-IND1
 ‘You (PL.) like to cry.’

In the last type of nominalization, the clitic *ko=* nominalizes a whole clause as the absolutive argument of the verb ‘to perceive’²⁸. Although *ko=* is a proclitic and attaches to the verb ‘to see’ in the indicative form, its scope is over the preceding clause, whose verb is in the gerund form. This can be seen in the example below, where the clause [amān an] ‘the rain fell/falls’ takes the non-finite form [amān ?ara] and is nominalized by *ko=* to be the argument of ‘to see’. Notice that it is the verb ‘to see’ which takes the finite form (by taking the indicative mood marker).

<i>ōn</i>	<i>amān</i>	<i>ara</i>	<i>gotoy</i>
<i>ōn</i>	<i>amān</i>	<i>at-a</i>	<i>ko=top-t</i>
1SG	rain	fall-GER	NOMZ=see-IND1
‘I saw the rain falling.’			

²⁸ That *ko=* is a nominalizer and not a complementizer can be seen in the following examples, where the nominalized clause with *ko=* occurs as the argument of a postposition, and not as complement of a perception verb.

owirup	tēy	kokəy	okap	ocagəpto	cára	koām
o=wirup	tēp-t	ko=kəy	o=kap-ap	o=cagəp=to?	cát-a	koām
1SG=food	boil-IND1	NOMZ=DAT	1SG=AUX.FUT-IND2	1SG=dish=PL	wash-GER	also
‘While my food boils I will go wash my dishes too.’						

Furthermore, *ko=* seems to serve also as the nominalizer of adverbs. Although this function of *=ko* is not yet well understood, one example of such nominalization is:

matet	kokoām	ocagəpto?	?et	toyawiga
matet	ko=koām	o=cagəp=to?	?e-t	to=yawik-a
yesterday	NOMZ=also	1SG=dish=PL	AUX-IND1	3R=be.dirty-GER
‘My things are like they were yesterday, dirty.’				

In the example below the same process happens with the nominalized clause [ŋa paba] ‘she died’:

<i>Júnior ŋa</i>	<i>pa</i>	<i>gotoy</i>	<i>ahyə</i>
<i>Júnior ŋa</i>	<i>pap-a</i>	<i>ko=top-t</i>	<i>ahyə</i>
Júnior 3SG.FEM	die-ger	NOMZ=see-IND1	INTERR
‘Did Júnior see her die?’			

3.5 COMPOUNDING

Compounds in Karo involve combinations of a noun plus an adjective, a noun plus an intransitive verb, or a noun plus another noun. Compound constructions are not easily distinguishable from simple sequences of [N + Adj.] and [N + N] in noun phrases and of [N + V] in intransitive clauses. Intervening material seems to be the only evidence which serves to differentiate one type of construction from another. Adjectives and classifiers are the two classes of words which operate as intervening material.

The compounding of a noun plus adjective ([N + Adj.]) yields either a noun or an adjective. [N + Adj.] noun compounds are mostly employed to name animal or plant species. The only evidence which shows that this sequence is actually a noun comes from the fact that although an adjective may be used *after* the compound to qualify the final referent, it cannot be used *between* the components noun and adjective.

<i>ití op</i>	<i>cf.</i>	<i>ití op cú</i>	<i>but</i>	<i>* ití cú op</i>
<i>ití op</i>		<i>ití op cú</i>		
deer red		deer red big		
‘red deer’		‘big red deer’		

<i>korét capōt</i>	<i>cf.</i>	<i>korét capōt pāt</i>	<i>but</i>	<i>* korét pāt capōt</i>
<i>korét capōt</i>		<i>korét capōt pāt</i>		
bird purple		bird purple beautiful		
‘bird (sp.)’		‘beautiful bird (sp.)’		

<i>cego bīk</i>	<i>cf.</i>	<i>cego bīk kāp</i>	<i>but</i>	<i>* cego kāp bīk</i>
<i>cego pīk</i>		<i>cego pīk kāp</i>		
monkey black		monkey black delicious		
‘black monkey’		‘delicious black monkey’		

[N + Adj.] adjective compounds are few in number. Evidence that sequences like these are truly compounds comes from the fact that a classifier cannot occur after the noun.

<i>páro pīy</i>	<i>cf.</i>	<i>* páro pe?</i>	<i>pīy</i>
<i>páro pīy</i>		<i>páro pe?</i>	<i>pīy</i>
hands lazy		hands CL.FLAT	lazy
‘sloth’		‘sloth’	

<i>cagáro</i>	<i>məɾəp</i>	cf.	* <i>cagáro</i>	<i>ʔaʔ</i>	<i>məɾəp</i>
<i>cagáro</i>	<i>məɾəp</i>		<i>cagáro</i>	<i>ʔaʔ</i>	<i>məɾəp</i>
eyes	hazy		eyes	CL.RD	hazy
‘drunk’			‘drunk’		

Only a few compounds consisting of a noun plus an intransitive verb ([N + Intr.V]) seem to occur in Karo. All compounds found so far employ the same verb, *wɨy* ‘go out’. The resulting construction is still an intransitive verb which takes an absolutive argument, like any other intransitive verb (*óra* ‘music’ + *wɨy* ‘to sing’; *ora* ‘feces’ + *wɨy* ‘to defecate’; *wero* ‘speech’ + *wɨy* ‘to speak’). In these constructions, an adjective may occur after the argument of the verb but cannot occur inside the [N + Intr.V] sequence.

<i>ma ʔpəy</i>	<i>óra</i>	<i>wɨy</i>	
<i>ma ʔpəy</i>	<i>óra</i>	<i>wɨy-t</i>	
woman	music	go.out-IND1	
‘The woman sang.’			cf.

<i>ma ʔpəy</i>	<i>báɿ</i>	<i>óra</i>	<i>wɨy</i>
<i>ma ʔpəy</i>	<i>páɿ</i>	<i>óra</i>	<i>wɨy-t</i>
woman	beautiful	music	go.out.IND1
‘The beautiful woman sang.’			but

* *maʔpəy* *óra* *bǎ́t* *wɛ́y*
maʔpəy *óra* *pǎ́t* *wɛ́y-t*
 woman music beautiful go.out.IND1
 ‘The woman sang beautiful music.’

In compounds of the type [N + N] an alienable noun generally occurs first, followed by an inalienable noun. The final noun is a regular alienable noun. Combinations of two bound nouns are also possible, although not very common. The two types of intervening material help characterizing these compounds:

Classifiers: An indication that a sequence of [noun + noun] is a compound and not a genitive construction, is when a classifier occurs *between* the two nouns. As I will describe in Chapter 5, the normal position for a classifier in genitive constructions is after the sequence [noun + noun], not between the two nouns. The classifier in this ‘normal’ position has scope over the whole (final) construction, not over one noun or another alone. This is illustrated in the examples below.

<i>wayo</i>	<i>naká</i>	<i>bap</i>	<i>cf.</i>	* <i>wayo</i>	<i>bah</i>	<i>naká</i>
<i>wayo</i>	<i>naká</i>	<i>pap</i>		<i>wayo</i>	<i>pap</i>	<i>naká</i>
alligator	head	CL.CYLB		alligator	CL.CYLB	head
‘alligator head’				‘alligator head’		

classifier of *wayo* ‘alligator’: *pap*

classifier of *naká* ‘head’: *káʔ*

<i>kɪ́ iwep</i>	<i>tem</i>	<i>ciʔ</i>	<i>cf.</i>	<i>*kɪ́ iwep</i>	<i>ciʔ</i>	<i>tem</i>
<i>kɪ́ iwep</i>	<i>tem</i>	<i>ciʔ</i>		<i>kɪ́ iwep</i>	<i>ciʔ</i>	<i>tem</i>
butterfly	wing	CL.TFLAT		butterfly	CL.TFLAT	wing
‘butterfly wing’				‘butterfly wing’		

classifier of *kiriwep* ‘butterfly’: *peʔ*

classifier of *tem* ‘wing’: *ciʔ*

When the classifier occurs *between* the two nouns, it indicates that a compound is formed. The resulting construction is still a noun, and tends to be a lexicalized expression whose meaning is not the sum of its parts.

<i>mok</i>	<i>peʔ</i>	<i>caki</i>	<i>cf.</i>	<i>*mok</i>	<i>caki</i>	<i>peʔ</i>
<i>mok</i>	<i>peʔ</i>	<i>caki</i>		<i>mok</i>	<i>caki</i>	<i>peʔ</i>
cotton	CL.FLAT	piece		cotton	piece	CL.FLAT
‘cloth’				‘piece of cotton’		
<i>wayo</i>	<i>bap</i>	<i>ci</i>	<i>cf.</i>	<i>*wayo</i>	<i>ci</i>	<i>bap</i>
<i>wayo</i>	<i>pap</i>	<i>ci</i>		<i>wayo</i>	<i>ci</i>	<i>pap</i>
alligator	CL.CYLB	water		alligator	water	CL.CYLB
‘alligator soup’				‘alligator soup’		

Adjectives: The occurrence of adjectives helps to determine the status of compounds in a negative way. As I will demonstrate when describing the internal structure of noun phrases, in Chapter 4, section 4.3.1 below, adjectives may occur after any noun in a noun phrase.

opábe *cigá*
o=pábe *cigá*
 1SG=hand blister
 ‘my hand blister’ cf.

opábe *cú* *cigá*
o=pábe *cú* *cigá*
 1SG=hand **big** blister
 ‘my [big hand] blister’ cf.

opábe *cigá* *cú*
o=pábe *cigá* *cú*
 1SG=hand blister **big**
 ‘my big [hand blister]’

Therefore, when it is not possible for an adjective to occur inside a [N + N] sequence, there is evidence that this sequence is a compound.

<i>wirik kanā</i>	vs.	<i>wirik kanā cú</i>	but	* <i>wirik cú kanā</i>
<i>wirik kanā</i>		<i>wirik kanā cú</i>		
edible thing		edible thing big		
‘edible thing’		‘big edible thing’		

<i>ip cahyoy</i>	vs.	<i>ip cahyoy kñ</i>	but	* <i>ip kñ cahyoy</i>
<i>ip cahyoy</i>		<i>ip cahyoy kñ</i>		
fish dog		fish dog white		
‘dog fish’		‘white dog fish’		

CHAPTER 4

SYNTAX

In this chapter I describe the types of sentences, phrases, predicates, the three forms of clause modifications and combinations which occur in Karo. First, in section 4.1, the types of simple sentences are presented and described. Simple sentences in Karo include declarative (DECL), interrogative (INTERR) and imperative (IMP). Then, in section 4.2, the types of predicates are described. In section 4.3, the four types of phrases which occur in Karo, noun phrase, verb phrase, postpositional phrase and adverbial phrase are described. In sections 4.4 and 4.5, tense marking and negation are presented and described. In section 4.6 I describe the process of reported speech, and finally, in section 4.7 the types of clause combinations that occur in Karo, clause chaining and subordination, are described.

4.1 SIMPLE SENTENCES

Three basic types of sentences occur in Karo: 1) declarative (DECL), 2) interrogative (INTERR), 3) imperative (IMP) They are described and exemplified in the next subsections.

4.1.1 DECLARATIVE SENTENCES

Declarative sentences are the most common sentences in Karo. Depending on the position of the elements in the sentences, they are divided into two groups: the group with a strict SOV order, called basic declaratives, and the group with one of its elements focused, called focused declaratives.

4.1.1.1 BASIC DECLARATIVES

Declarative sentences in Karo have a strict SOV order. They may have one or two arguments (depending on the type of the predicate) and a verb or auxiliary as its required constituents. One postpositional phrase and one or more adverbial phrases may also occur as complements.

The main verb or auxiliary in a declarative sentence may take any of the mood suffixes discussed in chapter 3 section 3.2.1. Examples of declarative sentences with different mood markers are:

at toat kaʔaʔ ʔaʔ pēn
at toat kaʔaʔ ʔaʔ pē-t
3SG 3R.POSS house CL.RD make-IND I
'He made his own house.'

kanāy at toat kaʔa ʔaʔ pēya²⁹
kanāy at toat kaʔa ʔaʔ pē-a
then 3SG 3R.POSS house CL.RD make-GER
'Then he (went and) made his own house.'

at toat kaʔa ʔaʔ pē mām
at toat kaʔa ʔaʔ pē mām
3SG 3R.POSS house CL.RD make X
'He is making his own house.'

4.1.1.2 FOCUSED DECLARATIVES

From a strictly formal point of view, focusing in Karo is a process whereby any constituent of a basic declarative sentence appears at the front of the sentence instead of occurring in its unmarked position. Functionally, focusing is used for contrastive purposes. The elements which can be focused for contrast are either nominal arguments or clause complements.

4.1.1.2.1 NOMINAL ARGUMENT FOCUSING

In argument focusing, the arguments of a transitive or an intransitive verb are contrasted with another argument in the discourse. Different types of change occur depending on the grammatical function of the argument, whether absolutive or ergative. Below I describe each of these changes separately.

FOCUSING OF ABSOLUTIVES

When the argument to be contrasted is originally an absolutive argument, the impersonal clitic *i=* remains on the main transitive or intransitive verb. The mood suffix of the main predicate also undergoes specific changes, depending on the type of verb, whether transitive or intransitive.

In intransitive focus constructions, the verb appears in the unmarked form.

²⁹ An epenthetic /y/ occurs between a final vowel of a verb root and the gerund mood marker *-a*.

agóa ḡpα *iket* *cf.*
agóa ḡpα *i=ket*
shaman 3IMP=sleep
‘The shaman (was the one who) slept.’

agóa ḡpα *ken*
agóa ḡpα *ket-t*
shaman sleep-IND I
‘The shaman slept.’

at *iba ḡpat* *cf.*
at *i=pa ḡpat*
3SG 3IMP=fall.down
‘He (was the one who) fell down.’

aba ḡpan
aḡ=pa ḡpat-t
3SG=fall.down-IND I
‘He fell down.’

In transitive focus constructions, the verb appears in the indicative mood, but with the following allomorphs: /-p/ ~ /-ap/ ~ /-m/. /-p/ occurs in verb roots which end in oral vowel; /-ap/ occurs in verb roots which end in consonants, and /-m/ occurs in verb roots which end in nasal vowels.

wayo gǎp ar iʔop *cf.*

wayo kǎp at i=ʔo-p

alligator tasty 3SG 3IMP=eat-IND2

‘(It is) a tasty alligator (that) he ate.’

ar wayo gǎp ʔot

at wayo kǎp ʔo-t

3SG alligator tasty eat-IND1

‘He ate a tasty alligator.’

wat owā ŋa ðn ibiyap *cf.*

wat owā ŋa ðn i=piy-ap

1SG.POSS mother CL.FEM 1SG 3IMP=wait.for-IND2

‘(It is) my mother (who) I waited for.’

ðn wat owā ŋa piy

ðn wat owā ŋa piy-t

1SG 1SG.POSS mother CL.FEM wait.for-IND1

‘I waited for my mother.’

māygāra cú ěn iwĩm ahyə *cf.*

māygāra cú ěn iwĩ-m ahyə

snake big 2SG 3IMP=kill-IND2 INTERR

‘Was it the/a big snake that you killed?’

<i>ēn</i>	<i>māygāra</i>	<i>cú</i>	<i>wĩn</i>	<i>ahyə</i>
<i>ēn</i>	<i>māygāra</i>	<i>cú</i>	<i>wĩ-n</i>	<i>ahyə</i>
2SG	snake	big	kill-INDI	INTERR

‘Did you kill the/a big snake?’

FOCUSING OF ERGATIVES

When the argument to be contrasted is ergative, it occurs first in the sentence, followed by the impersonal clitic *i=* and the auxiliary *ʔe*³⁰ in the indicative mood. A second clause, containing the absolutive argument (either in the pronominal or in the lexical form) and the transitive verb in the gerund mood, follows the auxiliary. Since the ergative argument of this second clause is coreferential with the subject of the auxiliary, it is omitted.

<i>ma ʔwĩ</i>	<i>yet</i>		<i>[Ø māygāra roba]</i>
<i>ma ʔwĩ</i>	<i>i=ʔe-t</i>		<i>[Ø māygāra top-a]</i>
man	3IMP=AUX-INDI		<i>[Ø snake see-GER]</i>

‘(It was) the man (who) saw the snake.’

<i>ma ʔpəy</i>	<i>bāĩ</i>	<i>yet</i>		<i>[Ø opĩya]</i>
<i>ma ʔpəy</i>	<i>pāĩ</i>	<i>i=ʔe-t</i>		<i>[Ø o=pĩy-a]</i>
woman	beautiful	3IMP=AUX-INDI		<i>[Ø 1SG=wait.for-GER]</i>

‘(It was) the beautiful woman (who) waited for me.’

4.1.1.2.2 CLAUSE COMPLEMENT FOCUSING

When an adverb or postposition phrase is in focus, the /-p/ indicative occurs in the verb or auxiliary (cf. chapter 3, section 3.2.1.2).

<i>cāk</i>	<i>mām</i>	<i>okap</i>	<i>cīm</i>	<i>ʔóa</i>
<i>cāk</i>	<i>mām</i>	<i>o=kap-ap</i>	<i>cīm</i>	<i>ʔó-a</i>
tomorrow	X	1SG=FUT.AUX-IND2	meat	eat-GER

‘Tomorrow I will eat meat.’

<i>ʔītem</i>	<i>ōn</i>	<i>aʔop</i>
<i>ʔī=tem</i>	<i>ōn</i>	<i>aʔ=ɔp-ap</i>
small=ADVZ	1SG	3SG=see-IND2

‘Briefly I saw it/him.’

<i>wat</i>	<i>kaʔa</i>	<i>ʔa</i>	<i>peʔ</i>	<i>web</i>	<i>aʔpɪya</i>
<i>wat</i>	<i>kaʔa</i>	<i>ʔaʔ</i>	<i>peʔ</i>	<i>o=ʔe-p</i>	<i>aʔ=pɪy-a</i>
1SG.POSS	house	CL.RD	LOC	1SG=AUX-IND2	3SG=wait.for-GER

‘(It was) at my house (that) I waited for him/it.’

<i>et</i>	<i>kaʔa</i>	<i>ʔa</i>	<i>peʔ</i>	<i>at</i>	<i>epɪyap</i>
<i>et</i>	<i>kaʔa</i>	<i>ʔaʔ</i>	<i>peʔ</i>	<i>at</i>	<i>e=pɪy-ap</i>
2SG	house	CL.RD	LOC	3SG	2SG=wait.for-IND2

‘(It was) at your house (that) he waited for you.’

³⁰ The impersonal proclitic *i=* takes the non-syllabic form /y/ when it occurs before a verb or auxiliary which begins with a vowel.

By contrast, when the adverbial or postpositional phrase occurs in its basic order at the end of the clause, the /-t/ indicative occurs.

<i>cīm</i>	<i>ʔoa</i>	<i>okay</i>	<i>cāk</i>	<i>mām</i>
<i>cīm</i>	<i>ʔo-a</i>	<i>o=kap-t</i>	<i>cāk</i>	<i>mām</i>
meat	eat-GER	1SG=FUT.AUX-IND1	tomorrow	X

‘I will eat meat tomorrow.’

<i>ōn</i>	<i>aʔoy</i>	<i>ʔitem</i>
<i>ōn</i>	<i>aʔ=top-t</i>	<i>ʔit=tem</i>
1SG	3SG=see-IND1	small=ADVZ

‘I saw it/him briefly.’

<i>aʔiʔya</i>	<i>wet</i>	<i>wat</i>	<i>kaʔa</i>	<i>ʔa</i>	<i>peʔ</i>
<i>aʔiʔy-a</i>	<i>o=ʔe-t</i>	<i>wat</i>	<i>kaʔa</i>	<i>ʔaʔ</i>	<i>peʔ</i>
3SG=wait.for-GER	1SG=AUX-IND1		1SG.POSS	house	CL.RD LOC

‘I waited for him/it at my house.’

<i>at</i>	<i>epiʔ</i>	<i>et</i>	<i>kaʔa</i>	<i>ʔa</i>	<i>peʔ</i>
<i>at</i>	<i>epiʔ-t</i>	<i>et</i>	<i>kaʔa</i>	<i>ʔaʔ</i>	<i>peʔ</i>
3SG	2SG=wait.for-IND1	2SG	house	CL.RD	LOC

‘He waited for you at your house.’

4.1.2 INTERROGATIVE SENTENCES

Two types of interrogative constructions occur in Karo: yes-no questions and information questions. Each of these types is described in the subsections below.

4.1.2.1 YES-NO QUESTIONS

Yes-no questions are marked by the particle *ahyə*, with no change in the pitch contour of the clause. The form of the verb in yes-no questions is always finite, marked with the indicative mood suffix *-t* or *-p*. The position of the interrogative particle depends on the information requested. If the information is expressed by the whole clause, the interrogative particle occurs at the end of the clause.

<i>eken</i>	<i>ahyə</i>
<i>eket-t</i>	<i>ahyə</i>
2SG=sleep-INDI	INTERR
‘Did you sleep?’	

<i>eken</i>	<i>māitem</i>	<i>ahyə</i>
<i>eket-t</i>	<i>pāt=tem</i>	<i>ahyə</i>
2SG=sleep-INDI	beautiful=ADVZ	INTERR
‘Did you sleep well?’		

eken *wat* *manikap* *pe?* *bāitem* *ahyə*
eket-t *wat* *manikap* *pe?* *pāt=tem* *ahyə*
 2SG=sleep-INDI 1SG=POSS hammock LOC beautiful=ADVZ **INTERR**
 ‘Did you sleep well in my hammock?’

If one constituent of a clause is questioned, that element is put in focus position at the beginning of the clause and followed by the interrogative particle.

If information about the ergative argument is requested, the interrogative particle occurs immediately after it.

ēn *ahyə* *béŋ* *noy*
ēn *ahyə* *péŋ* *top-t*
 2SG **INTERR** white.man see-INDI
 ‘Was it you who saw the white man?’

m̄īīy *ahyə* *imaterān* *nānin*
m̄īīy *ahyə* *i? =ma-terā-t* *nānin*
 toad **INTERR** 1PL.INCL=CAUS-go astray-IND1 EVID
 ‘Was it the toad who really made us get lost?’

If information about the absolutive argument is requested, the argument itself plus the interrogation particle are focused, and the verb takes the (non-finite?) unmarked form with the third impersonal clitic attached to it.

péŋ *ahyə* *ēn* *itop*³¹
péŋ *ahyə* *ēn* *itop*
white.man **INTERR** 2SG 3IMP=see
‘Was it the white man that you saw?’

ēn *ahyə* *iker*³²
ēn *ahyə* *i=ket*
2SG **INTERR** 3IMP-sleep
‘Was it you who slept?’

Finally, adverbial elements can also be questioned. A postpositional phrase or an adverbial phrase is questioned by being focused at the beginning of the clause and followed by the interrogative particle. The verb in these cases takes the /-p/ indicative mood suffix.

pāttem *ahyə* *ekerap*
pāt=tem *ahyə* *e=ket-ap*
beautiful=ADVZ **INTERR** 2SG=sleep-IND2
‘Did you sleep well?’ (lit. ‘Is it well that you slept?’)

³¹ If information was requested upon the whole proposition, the form of the sentence would be:

ēn *péŋ* *toy* *ahyə*
ēn *péŋ* *top-t* *ahyə*
2SG white.man see.IND1 **INTERR**
‘Did you see the white man?’

³² The form of the question for requesting information upon the whole clause would be:

eken *ahyə*
e=ket-t *ahyə*
2SG=sleep-IND1 **INTERR**
‘Did you sleep?’

<i>wat</i>	<i>manikap</i>	<i>pe?</i>	<i>ahyə</i>	<i>ekerap</i>
<i>wat</i>	<i>manikap</i>	<i>pe?</i>	<i>ahyə</i>	<i>e=ket-ap</i>
1SG.POSS	hammock	LOC	INTERR	2SG=sleep-IND2
‘Did you sleep in my hammock?’ (lit. ‘Was it in my hammock that you slept?’)				

4.1.2.2 INFORMATION QUESTION

Information questions are marked by interrogative pronouns, listed below.

INTERROGATIVE PRONOUNS

<i>kiganape</i>	where?
<i>kiganapət</i>	from where?
<i>kigope</i>	when?
<i>kōm</i>	how?
<i>kōm igu</i>	how much?
<i>nānā</i>	why?

Interrogative pronouns occur at the beginning of the clause, which is always finite, marked with the indicative modal suffix. The interrogative particle *ahyə* may co-occur with the interrogative pronouns, immediately following them, but this occurrence is not obligatory. Examples of each of the interrogative pronouns are below. In all but *nānā* ‘why’ questions, the *-p* indicative suffix is used.

kiganape (ahyə) *ekerap*
kiganape (ahyə) *e=ket-ap*
which.place (INTERR) 2SG=sleep-IND2
 ‘Where did you sleep?’

kiganapɔ (ahyə) *at etop*
kiganapɔ (ahyə) *at e=top-ap*
from.where (INTERR) 3SG 2SG=see-IND2
 ‘From where did it see you?’

kigope (ahyə) *ekap eya ʔwara*
kigope (ahyə) *e=kap-ap e=ya ʔwat-a*
when (INTERR) 2SG=AUX.FUT-IND2 2SG=come.back-GER
 ‘When will you come back?’

kōm (ahyə) *māygāra etóp*
kōm (ahyə) *māygāra e=tó-p*
how (INTERR) **snake** 2SG=bite-IND2
 ‘How did the snake bite you?’

kōm (ahyə) *igu* *ēn* *ip* *yapít*³³
kōm (ahyə) *igu* *ēn* *ip* *yapí-t*
how (INTERR) many 2SG fish bowshot-INDI
‘How many fish did you shoot with a bow?’

nānā (ahyə) *agóaʔpɔ* *óra* *wɨy* *maŋaptem*
nānā (ahyə) *agóaʔpɔ* *óra* *wɨy-t* *maŋap=tem*
why (INTERR) shaman music go-INDI long=ADVZ
‘Why did the shaman sing for so long?’

4.1.3 IMPERATIVE CLAUSES

Only one type of imperative construction occurs in Karo. The verb in imperative constructions always takes the modal form of the gerund (suffix *-a*). The absolutive argument is the only argument morphologically marked.

Marking of the addressee depends on transitivity. In intransitive commands, the absolutive addressee is specified by a second person proclitic, singular or plural.

³³ In some occurrences of the interrogative pronoun *kōm igu*, *kōm* and *igu* are kept apart, *kōm* occurring at the beginning and *igu* occurring at the end of the clause. It is not yet well understood why this happens. Some examples are:

kōm (ahyə) *et* *péŋ* *yapía* *igu*
kōm (ahyə) *e=ʔe-t* *péŋ* *yapí-a* *igu*
how (INTERR) 2SG=AUX-INDI white.man bowshot-GER many
‘How many men did you shoot (with a bow)?’

kōm *at* *ip* *yapía* *igu*
kōm *aʔ=ʔe-t* *ip* *yapí-a* *igu*
how 3SG=AUX-INDI fish bowshot-GER many
‘How many fish did he shoot (with a bow)?’

<i>ewíya</i>	<i>karowíya</i>
<i>e=wíy-a</i>	<i>karo=wíy-a</i>
2SG=leave-GER	2PL=leave-GER
‘Leave!’	‘Leave (you PL.)!’

<i>ekera</i>	<i>karokérara</i> ³⁴
<i>e=ket-a</i>	<i>karo=kérar-a</i>
2SG=sleep-GER	2PL=sleep-GER
‘Sleep!’	‘Sleep (you PL.)!’

In transitive commands, the ergative addressee is generally unspecified (because it is recoverable from context), and the absolutive is indicated by either a pronominal clitic or a full noun phrase. If it is necessary to distinguish between the second person singular and plural, a free pronoun is employed at the end of the clause, in apposition.

<i>taptoba</i>	<i>(ēn / ka ŋto)</i>
<i>tap=top-a</i>	<i>(ēn / ka ŋto)</i>
3PL=see-GER	(2SG / 2PL)
‘Watch them!’	

³⁴ As discussed in Chapter 3, section 3.1.3, some intransitive verbs change their form when they occur with arguments in the plural, either pronominal or lexical noun phrases.

owirup tɪra (ɛ̃n / ka ʔo)

o=wirup tɪ-a (ɛ̃n / ka ʔo)

1 SG=food cook-GER (2SG / 2PL)

‘Cook my food!’

yét ma ʔpəy bā́t toba (ɛ̃n / ka ʔo)

yét ma ʔpəy pā́t top-a (ɛ̃n / ka ʔo)

this woman beautiful see-GER (2SG / 2PL)

‘Watch this beautiful woman!’

wat manikap peya (ɛ̃n / ka ʔo)

wat manikap pe-a (ɛ̃n / ka ʔo)

1 SG.POSS hammock make-GER (2SG / 2PL)

‘Make my hammock!’

4.2 MAJOR PREDICATE TYPES

Predicates in Karo can be either verb phrases or predicate adjective constructions. Verb phrases consist of an auxiliary, an intransitive verb, or a transitive verb plus absolutive. (Verb phrases are described in section 4.3.2 below.)

kanāy yét péŋ [ʔet]

kanāy yét péŋ [ʔe-t]

then this white.man [AUX-INDI]

‘Then this white.man said/did.’

ma λvñ [*ken*]
ma λvñ [*ket-t*]
 man [sleep-IND1]
 ‘The man slept.’

ōn [*a λwero* *toy*]
ōn [*aʔ=wero* *top-t*]
 1 SG [3SG=speech hear-IND1]
 ‘I heard him.’

Predicate adjective constructions consist of an adjective (with the adverbializer =*tem*) plus a noun phrase. No overt verb or copula is employed (as occurs, for example, in English ‘He *is* nice’, or Portuguese ‘Ele *é* legal’). The predicate in these constructions appears first in the clause, followed by the argument that is qualified.

cárarem *ōn*
cára=tem *ōn*
 tall=ADVZ 1 SG
 ‘I am tall.’

cúrem *wat* *kaʔa* *ʔa*
cú=tem *wat* *kaʔa* *ʔa*
 big=ADVZ 1 SG.POSS house CL.RD
 ‘My house is big.’

<i>pãttem</i>	<i>et</i>	<i>owẽ</i>	<i>rap</i>
<i>pãt=tem</i>	<i>et</i>	<i>owẽ</i>	<i>tap</i>
beautiful-ADVZ	2SG.POSS	child	ASSOC

‘Your children are beautiful.’

Other types of functional predicates such as predicate nominal, predicate locative, existentials and possessive predicates are not conveyed by special constructions in Karo.

Predicate nominals have almost the same structure of any transitive declarative clause. They differ in not occurring with a transitive verb but with the copula *nã* instead.

<i>kopɔ</i>	<i>to</i>	<i>wecéb</i>	<i>aʔnã</i>
<i>kopɔ</i>	<i>to</i>	<i>pecép</i>	<i>aʔ=nã-n</i>
animal PL(?)	ugly	3SG=COP-IND1	

‘He/it is an ugly animal.’

Predication of locatives in Karo are expressed by a regular intransitive verb of movement, *kə* ‘to walk’, *yakõy* ‘to dive’, etc., or position *ya* ‘to be stood’, etc., plus an oblique noun phrase with the locative case marker *peʔ*.

<i>Antônio</i>	<i>yã</i>	<i>kaʔa</i>	<i>ʔa</i>	<i>naʔot</i>	<i>peʔ</i>
<i>Antônio</i>	<i>yã-n</i>	<i>kaʔa</i>	<i>ʔaʔ</i>	<i>naʔot</i>	<i>peʔ</i>
Antônio	be.stood-IND1	house	CL.RD	top.of	LOC

‘Antônio is on the top of the house.’

Existential predication in Karo is also conveyed by a regular intransitive verb of movement or position plus a locational adjunct (noun phrase + locative case marker *peʔ*).

<i>tik</i>	<i>wán</i>	<i>ahyə</i>	<i>et</i>	<i>kaʔa</i>	<i>ʔa</i>	<i>peʔ</i>
<i>tik</i>	<i>wát-t</i>	<i>ahyə</i>	<i>et</i>	<i>kaʔa</i>	<i>ʔa</i>	<i>peʔ</i>
mosquito	fly-IND1	INTERR	2SG.POSS	house	CL.RD	LOC
‘Are there mosquitoes in your house?’			(lit. ‘Does mosquito fly in your house?’)			

Possessive predication is expressed by using the intransitive verb *kə* ‘to walk’.

<i>ōn</i>	<i>wat</i>	<i>kaʔa</i>	<i>ʔa</i>	<i>kə</i>	<i>cagáro</i>	<i>kōmnem</i>
<i>ōn</i>	<i>wat</i>	<i>kaʔa</i>	<i>ʔa</i>	<i>kə-t</i>	<i>cagáro</i>	<i>kōm=tem</i>
1SG	1SG.POSS	house	CL.RD	walk-IND1	two	X=ADVZ
‘I have two houses.’				(lit. ‘My two houses walk.’)		

<i>at</i>	<i>toat</i>	<i>makāri</i>	<i>rakə</i>
<i>at</i>	<i>toat</i>	<i>makāri</i>	<i>ta-kə-t</i>
3SG	3SG.POSS	necklace	COMIT-walk-IND1
‘He has a necklace.’			(lit. ‘He walks with his necklace.’)

4.3 PHRASES

Clauses (or sentences) in Karo are formed basically from noun phrases and verb phrases. Adverbial phrases and postpositional phrases may also occur optionally. In this section, each of these types of phrases is described in detail.

4.3.1 NOUN PHRASES

Noun phrases in Karo occur as arguments of auxiliaries, intransitive and transitive verbs, postpositions, and predicate adjective constructions. Below I give a list of each of the constituents of a noun phrase, and in sections 4.3.1.2 and 4.3.1.3 I provide a description of genitive constructions and noun phrase associations, respectively. In the last section of the chapter, section 4.3.1.4, I deal with case marking and grammatical relations.

4.3.1.1 NOUN PHRASE CONSTITUENTS

A noun phrase in Karo may have the following constituents, given in their normal relative order³⁵:

1. Demonstrative or Possessive pronoun
2. Noun (or proper noun)
3. Classifier
4. Adjective
5. Evidential
6. Plural marker

³⁵ Numerals do not occur inside the noun phrase but rather as adjuncts, in adverbial phrases.

In principle, none of the above constituents is obligatory, except for the category of Noun. Demonstratives, possessive pronouns and classifiers can function as nominals. It is rare to find more than two constituents besides the noun occurring in a noun phrase. Below I describe individually the occurrences of the constituents that may enter a noun phrase.

DEMONSTRATIVE OR POSSESSIVE PRONOUNS

The categories of demonstrative and possessive pronouns were already discussed in section 3.1.1 above. Some additional examples are below.

[*yét péŋ*] *pa ʔpan*
 [*yét péŋ*] *pa ʔpat-t*
 [DEM white.man] fall-IND1
 ‘This man fell.’

kanāy [yét] ʔet *tocaropaba*
kanāy [yét] ʔe-t *to=caropap-a*
 then [DEM] AUX-IND1 3R=be.sad-GER
 ‘Then this (white man) was sad.’

[*wat owē*] *wét*
 [*wat owē*] *wé-t*
 [1SG.POSS child] cry-IND1
 ‘My child cried.’

<i>[karoat]</i>	<i>yān</i>	<i>iʔke</i>	<i>tēna</i>
<i>[karoat]</i>	<i>yā-t</i>	<i>iʔke</i>	<i>tēna</i>
2PL.POSS	be.INDI	NEG	now

‘Yours (your animals) are not at home now.’

NOUNS

Nouns in Karo are either alienable or inalienable (cf. section 3.1.2 above). Alienable nouns occur usually once in a noun phrase. When two alienable nouns occur, they form either a possessive construction or a compound (cf. section 3.5 on compounds). In possessive constructions, the first noun is the possessor and the second noun the item possessed. A possessive marker, *at*, always occurs between them.

<i>maʔvɛ</i>	<i>at</i>	<i>táɡɛ</i>
<i>maʔvɛ</i>	<i>at</i>	<i>táɡɛ</i>
man	POSS	bow

‘man’s bow’

<i>agóaʔpɛ</i>	<i>at</i>	<i>kaʔa</i>	<i>ʔaʔ</i>
<i>agóaʔpɛ</i>	<i>at</i>	<i>kaʔa</i>	<i>ʔaʔ</i>
shaman	POSS	house	CL.RD

‘shaman’s house’

<i>maʔpəy</i>	<i>at</i>	<i>manikap</i>
<i>maʔpəy</i>	<i>at</i>	<i>manikap</i>
woman	POSS	hammock

‘woman’s hammock’

A noun phrase may also contain one or more inalienable noun. When two (or more) inalienable nouns occur they are in a relation of modification to each other, and the rightmost inalienable noun is the head noun. Since the resulting two nouns are still an inalienable noun, they must be preceded either by an alienable noun or by a possessive clitic pronoun.

Furthermore, even though it could be possible, in principle, for an inalienable noun to occur preceding an alienable noun, this does not occur for semantic reasons. Inalienable nouns in Karo are items which generally refer to body parts and, thus, cannot possess alienable items such as ‘house’, ‘hammock’, ‘bow’, ‘arrow’, etc.

<i>aʔpábe</i>	<i>cigá</i>
<i>aʔ=pábe</i>	<i>cigá</i>
3SG=hand	blister

‘the blister on his hand (his hand blister)’

<i>tanaká</i>	<i>peon</i>
<i>tap=naká</i>	<i>peon</i>
3PL=head	skin

‘the skin of their heads’

onakira *cop*

o=nakira *cop*

1SG=ear dirt

‘the dirt of my ear’

Finally, a mixture of alienable and inalienable nouns may occur in a noun phrase. In these cases, the relation established is one of possession. Free nouns precede bound nouns and indicate the possessor.

māygāra *capóp pí?*

māygāra *capóp pí?*

snake tail CL.CYLS

‘tail of a snake’

agóa ipa *naká*

agóa ipa *naká*

shaman head

‘shaman’s head’

owē *nakira* *cop*

owē *nakira* *cop*

child ear dirt

‘the dirt of the ear of the child’

cf.

war *owē* *nakira* *cop*

wat *owē* *nakira* *cop*

1SG.POSS child ear dirt

‘the dirt of the ear of my child’

cf.

ite *at* *owē* *nakira* *cop*

ite *at* *owē* *nakira* *cop*

uncle POSS child ear dirt

‘the dirt of the ear of my uncle’s child’

CLASSIFIERS

A complete description of the occurrences of classifiers, with examples, is given in chapter 5.

məy maʔpəy ŋa *ʔet* *at* *chapéu káʔ* *tiga* *igana* *peʔ*

məy maʔpəy ŋa *ʔe-t* *at* *chapéu káʔ* *tik-a* *igana* *peʔ*

then woman CL.FEM AUX-IND1 3SG.POSS hat CL.CCV throw-GER ground LOC

‘Then the woman threw his hat on the floor.’

ADJECTIVES

Adjectives in Karo are a class formed exclusively by bound forms which are always preceded either by a noun or by a clitic pronoun. It is rare for more than two adjectives to occur, and there are no special constructions with either comparative or superlative meaning.

ma ʔpəy *pā́t*
ma ʔpəy *pā́t*
 woman **beautiful**
 ‘beautiful woman’

ma ʔip cakot
ma ʔip cakot
 wood **chopped**
 ‘chopped wood’

A personal clitic may also occur in place of the head noun. When this happens, the adjective modifies the personal clitic, and together they may represent arguments of intransitive verbs, transitive verbs, auxiliaries, postpositions, and predicate adjective constructions:

owicorop *ken*
o=picorop *ket-t*
 1SG=**hungry** sleep-IND I
 ‘I slept hungry (or, better: ‘I-hungry slept’).’

<i>a ʔwā́k</i>	<i>toba</i>	<i>agóa ʔpə</i>	<i>ʔet</i>
<i>a ʔ=wā́k</i>	<i>top-a</i>	<i>agóa ʔpə</i>	<i>ʔe-t</i>
3SG=sick	see-GER	shaman	AUX-IND I

‘The shaman went to see him-sick.’

kanāy aʔpap ʔet towecḥa
kanāy aʔ=pap ʔe-t to=wecḥ-a
 then 3SG=hurt AUX-IND1 3R=run-GER
 ‘Then it-hurt ran.’

abakán aʔpap kəy
aʔ=pakát-t aʔ=pap kəy
 3SG=be.angry-IND1 3SG=hurt DAT
 ‘He was angry at the hurt one.’

pecéptem aʔtarap
pecép=tem aʔ=tarap
 ugly=ADVZ 3SG=spotted
 ‘He/it-spotted (with spots) is ugly.’

EVIDENTIALS

Evidentials in Karo constitute a category which basically occurs at the level of the sentence, i.e., they are constituents of sentences. A few evidentials, nevertheless, also occur at the level of the noun phrase, following the head noun (or pronoun). The class of evidentials in Karo is fully discussed in chapter 6.

at topə aʔwĩn
at topə aʔ-wĩ-n
 3SG EVID 3SG=kill-IND1
 ‘He was seen to have killed it.’

paɡon nóptem nakōm nap tə
paɡon tóp=tem nakōm tap tə
 three X=ADVZ kid ASSOC EVID
 ‘three kids, they say’

In the example below the noun phrase is repeated at the end of the sentence, for the sake of explicitness on the part of the speaker.

məy péŋ ʔet kohmāy ʔerem tokəga,
məy péŋ ʔe-t kohmāy ʔerem to=kək-a
 then **white.man** AUX-INDI top DISP 3R=walk-GER
 ‘Then (I saw that) the white man was walking through the top (of the tree),

tomanē māŋa tə,
to=manē māŋ-a tə
 3R=whole show-GER EVID
 ‘him entirely, they say’

péŋ tə
péŋ tə
white.man EVID
 the white man, they say.’

PLURAL

Occurrences of the plural marker =*toʔ* were discussed in chapter 3, section 3.3.1 above.

<i>kanāy</i>	<i>péŋ</i>	<i>ʔep</i>	<i>toat</i>	<i>mok</i>	<i>peroʔ</i>	<i>cára</i>	<i>ici</i>	<i>peʔ</i>
<i>kanāy</i>	<i>péŋ</i>	<i>ʔe-p</i>	<i>toat</i>	<i>mok</i>	<i>peʔ=toʔ</i>	<i>cát-a</i>	<i>ici</i>	<i>peʔ</i>
then	white.man	AUX-IND2	3R.POSS	clothe	CL.FLAT=PL	wash-GER	river	LOC

‘Then the white man was washing his clothes in the river.’

4.3.1.2 GENITIVE CONSTRUCTIONS

Two types of genitive constructions occur in Karo, inalienable and alienable. In inalienable possessive construction the inalienable noun can be possessed directly by either a possessive pronominal clitic or an alienable noun.

<i>ocāp</i>	<i>ití</i>	<i>cāp</i>
<i>ocāp</i>	<i>ití</i>	<i>cāp</i>
1SG=leg	deer	leg
‘my leg’	‘deer’	‘s leg’
<i>ekap</i>	<i>yate</i>	<i>gap</i>
<i>ekap</i>	<i>yate</i>	<i>kap</i>
2SG=fat	pig	fat
‘your fat’	‘pig’	‘s fat’

acagá
acagá
 3SG=eye
 'his/its eye'

aoro cagá
aoro cagá
 parrot eye
 'parrot's eye'

In alienable possessive construction the alienable noun can be possessed by either a possessive pronoun or by another alienable noun, in which case the possessor *at* occurs between the two alienable nouns.

wat kaʔa
wat kaʔa
 1SG.POSS house
 'my house'

maʔwɨ at kaʔa
maʔwɨ at kaʔa
 man POSS house
 'man's house'

er ici
et ici
 2SG.POSS water
 'your water'

maʔpəy at ici
maʔpəy at ici
 woman POSS water
 'woman's water'

at tágɨp
at tágɨp
 3SG.POSS bow
 'his bow'

agóaʔpə at tágɨp
agóaʔpə at tágɨp
 shaman POSS bow
 'shaman's bow'

4.3.1.3 ASSOCIATION OF NOUN PHRASES

Strictly speaking, no conjoining of noun phrases in Karo is grammatically possible. Association of noun phrases are done, nevertheless, by other means. Depending on the function of the nouns to be associated, different types of constructions are used. If the associated nouns are the subject of a transitive or intransitive verb (i.e., the ergative arguments of a transitive verb, or the absolutive argument of an intransitive verb), only one of the nouns occurs as core argument. The other noun occurs as an oblique argument of the same verb, and is marked with the postpositional comitative case marker *pihmām*.

<i>at</i>	<i>ip</i>	<i>?iy</i>	<i>Na?kɨ</i>	<i>pihmām</i>
<i>at</i>	<i>ip</i>	<i>?iy-t</i>	<i>Na?kɨ</i>	<i>pihmām</i>
3SG	fish	catch-IND1	Na?kit	COMIT

‘He and Na?kit caught the fish.’ (lit.: ‘He caught the fish with Na?kit’)

<i>owakán</i>	<i>matet</i>	<i>wat</i>	<i>iyōm</i>	<i>pihmām</i>	<i>(towakára)</i>
<i>o=pakát-t</i>	<i>matet</i>	<i>wat</i>	<i>iyōm</i>	<i>pihmām</i>	<i>(to=pakát-a)</i>
1SG=be.angry-IND1	yesterday	1SG.POSS	father	COMIT	(3R=be.angry-GER)

‘My father and I were angry yesterday.’

If the nouns represent the object (absolutive) argument of a transitive verb, they occur in separate clauses with the same verb repeated. One of the forms of the verb is finite and the other is non-finite. The particle *kōam*, ‘also’, occurs at the end of the second, non-finite clause.

<i>at</i>	<i>ĩya</i>	<i>wĩm</i>	<i>kokō</i>	<i>wĩa</i>	<i>kōam</i>
<i>at</i>	<i>ĩya</i>	<i>wĩ-t</i>	<i>kokō</i>	<i>wĩ-a</i>	<i>kōam</i>
3SG	bird	kill-IND1	hawk	kill-GER	also

‘He killed a/the bird and the hawk.’

If the associated nouns are in a Predicate Nominal construction, the second noun occurs in the oblique form, with the SIMILATIVE case marker *kōm*.

<i>agóa ĩpə</i>	<i>cú</i>	<i>a ĩnān</i>	<i>Cabirera</i>	<i>kōm</i>
<i>agóa ĩpə</i>	<i>cú</i>	<i>a ĩ=nā-n</i>	<i>Cabirera</i>	<i>kōm</i>
shaman	big	3SG=COP-IND1	Cabirera	SIMIL

‘He and Cabirera are big shamans.’ (lit.: ‘He is a big shaman, like Cabirera.’)

If the associated nouns are oblique arguments, they are both marked with the same case marking postposition, followed by the particle *koām*, ‘also’.

<i>ka ĩtay at</i>	<i>na ĩwəy</i>	<i>kəy</i>	<i>a ĩ</i>	<i>kəy</i>	<i>kōam</i>
<i>ka ĩtay a ĩ=ĩe-t</i>	<i>na ĩwəy</i>	<i>kəy</i>	<i>a ĩ</i>	<i>kəy</i>	<i>kōam</i>
shoot	3SG=AUX-IND1	monkey	DAT	sloth	DAT

‘He shot (arrows) at the monkey and at the sloth also.’

Finally, if the associated nouns are in a possessive construction, the second noun, regardless of whether the possession is alienable or inalienable, is marked by the particle *koām*, ‘also’.

ma ʔwɪr *at* *pewit, ɲaːt* *pewit koãm*
ma ʔwɪ *at* *pewit, ɲaːt* *pewit koãm*
 man POSS honey, 3SG.FEM.POSS honey also
 ‘the man’s honey, and her honey also’

opábe? *epábe?* *koãm*
o=pábe? *e=pábe?* *koãm*
 1SG=hand 2SG=hand also
 ‘my hand, and your hand also’

4.3.1.4 CASE MARKING AND GRAMMATICAL RELATIONS

There is a clear distinction among core and oblique arguments in Karo with respect to the different grammatical roles they perform in relation to their predicates (i.e., transitive and intransitive verbs and auxiliaries). Core arguments (either lexical noun phrases or pronominals) are required, and occur before their predicates. Oblique arguments, on the other hand, are not required. They occur canonically after their predicates, and they are always marked with a postposition. (See section 4.3.3 below on postpositional phrases.)

Among the core arguments there is no overt case marking on full noun phrases, and their order in the clause is relatively fixed (cf. section 4.3.1.4). The only argument of one-argument predicate clauses (those with an intransitive verb or an auxiliary) occur at the beginning of the clause:

ma ʔpəy *ken*
ma ʔpəy *ket-t*
 woman sleep-IND1
 ‘The woman slept.’

t̄ya t̄y
t̄ya t̄p-t
 bird fly-IND1
 ‘The bird flew.’

ma ḷvḡ ḷet matet
ma ḷvḡ ḷe-t matet
 man AUX-IND1 yesterday
 ‘The man (did something) yesterday.’

When two full noun phrases co-occur in transitive clauses, they both precede the transitive verb. Their role is indicated only by word order: the first noun is the semantic agent (the grammatical ergative argument) and the second is the semantic patient (the grammatical absolutive argument) of the clause. If the position of the nouns is changed, the meaning of the whole clause is also changed.

iyōm wat awe capét
iyōm wat awe capé-t
 father 1SG.POSS brotherbeat-IND1
 ‘Father beat my brother.’

wat awe iyōm capét
wat awe iyōm capé-t
 1SG.POSS brotherfather beat-IND1
 ‘My brother beat father.’

Case distinctions are indicated, nevertheless, by the different ways in which non-lexical arguments are represented: ergatives are marked by a set of free pronouns, while absolutes are marked by a set of pronominal clitics. The free pronouns and the pronominal clitics are in complementary distribution with lexical noun phrases.

<i>oken</i>		<i>cf.</i>	<i>owaraʔkə</i>
<i>o=ket-t</i>			<i>o=paraʔkə-t</i>
1SG=sleep-INDI			1SG=go.back-INDI
‘I slept.’			‘I went back.’
<i>maʔwɨ</i>	<i>ken</i>	<i>cf.</i>	<i>aʔ=ken</i>
<i>maʔwɨ</i>	<i>ket-t</i>		<i>aʔ=ket-t</i>
man	sleep-INDI		3SG=sleep-INDI
‘The man slept.’			‘He/it slept.’
<i>agóaʔpə</i>	<i>paraʔkə</i>	<i>cf.</i>	<i>abaraʔkə</i>
<i>agóaʔpə</i>	<i>paraʔkə-t</i>		<i>aʔ=paraʔkə-t</i>
shaman	go.back-INDI		3SG=go.back-INDI
‘The shaman went back.’			‘He/it went back.’
<i>ōn</i>	<i>ameko toy</i>	<i>cf.</i>	<i>ameko otoy</i>
<i>ōn</i>	<i>ameko top-t</i>		<i>ameko o=top-t</i>
1SG	jaguar see-INDI		jaguar 1SG=see-INDI
‘I saw the jaguar.’			‘The jaguar saw me.’

<i>ōn</i>	<i>a ŋtoy</i>	<i>cf.</i>	<i>at</i>	<i>otoy</i>
<i>ōn</i>	<i>a ŋ=top-t</i>		<i>at</i>	<i>o=top-t</i>
1SG	3SG=see-IND1		3SG	1SG=see-IND1
'I saw it/him.'			'It/he saw me.'	

On relatively rare occasions, the reference of a pronoun or a clitic may be elaborated with an appositive noun phrase. In the following example, the subject of the sentence 'he' is restated as 'this man', probably to avoid ambiguity, since several other third person singular participants were under discussion at the time.

məy.

məy

then

'Then,

a ŋva ŋye.

a ŋ=wa ŋye

3SG=AUX

he,

yét ma ŋwɪ.

yét ma ŋwɪ

this man

this man,

toat.

toat

3R.POSS

to his own,

toat páy gəy ro ʔwa.

toat páy kəy to=ʔe-a

3R.POSS other DAT 3R=AUX-GER

his own other.

towagon gəy.

to=pagon kəy

3R=friend DAT

His own friend.'

Finally, from the strict point of view of case marking, it is not possible to say that Karo has a subject category for lexical noun phrases in simple clauses. There is no special marking on full noun phrases, and the pronominal marking system does not follow a nominative-accusative pattern. Since all arguments occur preverbally, it is not possible to determine whether the single argument of an intransitive clause should be paired with the agent or the patient of a transitive clause. Thus, word order does not provide a strong argument for the presence of a grammatical subject.

Subjects occur, nevertheless, as an actual category in Karo at the cross-clause level, both in clause chaining and in subordination. (A detailed description of how subjects emerge in each of these types of clause combination is provided in sections 4.7.1 and 4.7.2, respectively, below.)

4.3.2 VERB PHRASES

Verb phrases in Karo are predicates based on an auxiliary, an intransitive verb, or a transitive verb. (These are the only three classes of words in Karo which are inflected for mood.) Adverbial phrases and postpositional phrases which occur at the ends of clauses, are not structurally part of verb phrases.

<i>õn</i>	<i>[er</i>	<i>iyõm</i>	<i>noy]</i> _{VP}	<i>[matet]</i> _{Adv.P}
<i>õn</i>	<i>[et</i>	<i>iyõm</i>	<i>top-t]</i>	<i>[matet]</i>
1SG	[2SG.POSS	father	see-IND1]	[yesterday]

‘I saw your father yesterday.’

The fact that adverbial phrases and postpositional phrases do not occur inside verb phrases can be seen in the examples below. Both can be negated independently in a focus construction before the nuclear clause.

<i>[tæ</i>	<i>iʔke]</i> _{Adv.P}	<i>õn</i>	<i>[aʔtop]</i> _{VP}
<i>[tæ</i>	<i>iʔke]</i>	<i>õn</i>	<i>[aʔ=top-ap]</i>
[there	NEG]	1SG	[3SG=see-IND2]

‘It was not there that I saw it/him.’

*[m̄m m̄m iʔke]*_{Adv.P} *péŋ* *[yowarap]*
[m̄m m̄m iʔke] *péŋ* *[yowat-ap]*
 [now X NEG] white.man [leave-IND2]
 ‘It was not now that the white man left.’

The few constituents which may occur in a verb phrase are listed and discussed below, in order of occurrence.

1. Noun phrase
2. Verb (transitive or intransitive) or Auxiliary
3. Tense marker
4. Negative particle

Noun phrases occur as constituents of verb phrases only when the verb is transitive. The fact that transitive verbs plus their absolutes form a constituent can be seen in the fact that they may appear together at the beginning of sentences in negative focus constructions.

agóaʔpə *[m̄yḡāra* *roy* *iʔke]*
agóaʔpə *[m̄yḡāra* *top-t* *iʔke]*
 shaman [snake see-IND1 NEG]

‘The shaman did not see the snake.’

cf.

[m̄yḡāra *toba* *iʔke]* *agóaʔpə* *ʔet*
[m̄yḡāra *top-a* *iʔke]* *agóaʔpə* *ʔe-t*
 [snake see-GER NEG] shaman AUX-IND1

‘Not seeing the snake was what the shaman did.’

In negative focus constructions with intransitive verbs, by contrast, the absolutive noun phrase does not appear at the beginning of the sentence. Instead of the noun phrase, a pronominal clitic is used. This pronominal clitic is always coreferential with the person of the absolutive argument of the auxiliary.

<i>ma ʔwɨ</i>	<i>ken</i>	<i>i ʔke</i>	<i>cf.</i>
<i>ma ʔwɨ</i>	<i>ket-t</i>	<i>i ʔke</i>	
man	sleep-IND1	NEG	

‘The man did not sleep.’

<i>[to=kera</i>	<i>i ʔke]</i>	<i>ma ʔwɨ</i>	<i>ʔet</i>
<i>[to=ket-a</i>	<i>i ʔke]</i>	<i>ma ʔwɨ</i>	<i>ʔe-t</i>
[3R=sleep-GER	NEG]	man	AUX-IND1

‘It was not sleeping that the man did.’

The verb or auxiliary is the only obligatory constituent of a verb phrase. Their morphology is restricted to the occurrence of an inflectional modal suffix and a few derivational prefixes (cf. Chapter 3, section 3.2.2). Examples of verb phrases containing intransitive verbs, transitive verbs and auxiliaries are below.

a ʔken

a ʔket-t

3SG=sleep-IND1

‘He slept.’

agóa ʔpɛ *wɪy*
agóa ʔpɛ *wɪy-t*
 shaman **leave-IND1**

‘The shaman left.’

ōn *māygāra* *toy*
ōn *māygāra* *top-t*
 1SG snake see-IND1

‘I saw a/the snake.’

kanāy pɛŋ *ʔet* (...)

kanāy pɛŋ *ʔe-t*

then **white.man** **AUX-IND1**

‘Then, the white man (...).’

Verb phrases can also contain tense markers. Two past tense markers, *co* ‘simple past’ and *kán* ‘remote past’, and two types of future particles, *yat* and *iga*, both meaning ‘simple future’, occur as tense markers in Karo. (Tense markers are discussed in detail in section 4.4.)

ōn *epɪy* *co*
ōn *epɪy-t* *co*
 1SG 2SG=wait.for-IND1 **PAST**

‘I waited for you’

owaʔpan *aʔpēya* *gán*
owaʔpat-t *aʔpēy-a* *kán*
 1SG=fall.down-IND1 3SG=step-GER **RPAST**
 ‘I fell stepping on it long ago.’

ōn *omēn* *meropir* *yar* *iʔke*
ōn *o=mēn* *peropi-t* *yat* *iʔke*
 1SG 1SG=husband pinch-IND1 **FUT** **NEG**
 ‘I will not pinch my husband.’

péŋ *yaʔ* *toat* *mok* *peʔ* *cán* *iga*
péŋ *yaʔ-t* *toat* *mok* *peʔ* *cát-t* *iga*
 white.man go.down-IND1 3R.POSS clothe CL.FLAT wash **FUT**
 ‘The white man will go down (to the river) to wash his clothes.’

Verb phrases are negated by two different particles, *iʔke* and *yahmām*.

Both particles appear at the end of the verb phrase. Negation is fully discussed in section 4.5 below. Some additional examples of verb phrases containing negation are:

ōn *péŋ* *yati* *nān* *iʔke*
ōn *péŋ* *yati* *nā-n* *iʔke*
 1SG white.man like COP-IND1 **NEG**
 ‘I do not like the white man.’

tap táy nān iʔke

tap táy nā-n iʔke

3PL few COP-IND1 NEG

‘They are not few.’

te ʔyoy iʔke tǎwrem

te ʔ=yop-t iʔke tǎw=tem

1PL.INCL=live-IND1 NEG far=ADVZ

‘We do not live far.’

ewét yahmām

e=wé-t yahmām

2SG=cry-IND1 NEG

‘Do not cry!’

ip ʔiya aʔkay yahmām

ip ʔiy-a aʔ=kap-t yahmām

fish catch-GER 3SG=AUX.FUT-IND1 NEG

‘He will not catch a fish’

Evidentials occur at the end of the verb phrase, following other constituents, if any is present. (Evidentials are fully described in Chapter 7.)

at māygāra wĩn menə

at māygāra wĩ-t menə

3SG snake kill-IND1 EVID

‘It is wondered whether he killed the snake.’

<i>at</i>	<i>māygāra</i>	<i>wīn</i>	<i>nānin</i>
<i>at</i>	<i>māygāra</i>	<i>wī-t</i>	<i>nānin</i>
3SG	snake	kill-IND1	EVID

‘He really killed the snake.’

<i>at</i>	<i>māygāra</i>	<i>wīn</i>	<i>tə</i>
<i>at</i>	<i>māygāra</i>	<i>wī-t</i>	<i>tə</i>
3SG	snake	kill-IND1	EVID

‘He killed the snake, they say.’

<i>at</i>	<i>māygāra</i>	<i>wīn</i>	<i>igū</i>
<i>at</i>	<i>māygāra</i>	<i>wī-t</i>	<i>igū</i>
3SG	snake	kill-IND1	EVID

‘He must have killed the snake.’

<i>at</i>	<i>māygāra</i>	<i>wīn</i>	<i>coke</i>
<i>at</i>	<i>māygāra</i>	<i>wī-t</i>	<i>coke</i>
3SG	snake	kill-IND1	EVID

‘He clearly killed the snake (but nobody saw the dead snake).’

<i>wat</i>	<i>owē</i>	<i>ŋa</i>	<i>kə</i>	<i>yat</i>	<i>iʔke</i>	<i>menə</i>
<i>wat</i>	<i>owē</i>	<i>ŋa</i>	<i>kə-t</i>	<i>yat</i>	<i>iʔke</i>	<i>menə</i>
1SG.POSS	baby	CL.FEM	walk-IND1	FUT	NEG	EVID

‘I wonder whether my baby girl will not walk.’

4.3.3 POSTPOSITIONAL PHRASES

Two types of postpositional phrases occur in Karo. One type is used to add an oblique (non-required) argument to the clause; the other type is used for emphatic purposes, exclusively with core arguments. Postpositional phrases of both types occur either clause-finally (in basic SOV clauses) or clause-initially (in focus constructions). They differ, nevertheless, in the fact that postpositional phrases with *kōna* can also occur clause-medially, sentence-initially and/or sentence-finally, when emphasis is on the subject of the clause or sentence.

The postpositional phrases which mark oblique cases consist of two elements: a noun phrase and one of the eleven postpositions. (The complete list of postpositions was given in chapter 3, section 3.1.8.)

abakán *ekəy*
aʔ=pakát-t *e=kəy*
 3SG=be.angry-IND1 2SG=DAT
 ‘He is angry at you.’

péŋ *aʔwĩn* *tágih* *mā*
péŋ *aʔ=wĩ-t* *tágip* *mā*
 white.man 3SG=kill-IND1 bow INSTR
 ‘the white man killed it with a/the bow.’

aʔwiy *naco* *?erem*
aʔwiy-t *naco* *?erem*
 3SG=go-IND1 forest DISP
 ‘He went through the forest.’

oken *péŋ* *at* *kaʔa* *ʔaʔ* *peʔ*
oket-t *péŋ* *at* *kaʔa* *ʔaʔ* *peʔ*
 1SG=sleep-IND1 white.man POSS house CL.RD LOC
 ‘I slept at the white man’s house.’

pecéptem *ēn* *et* *iyōm* *ŋōm*
pecép=tem *ēn* *et* *iyōm* *kōm*
 ugly=ADVZ 2SG 2SG **father** **SIMIL**
 ‘You are ugly like your father.’

ŋabenaoy *abihmām*
ŋa=penaop-t *aʔ=pihmām*
 3SG.FEM=dance-IND1 3SG=COMIT
 ‘She danced with him.’

naʔwəy *yaʔi* *maʔip* *ʔay*
naʔwəy *yaʔi-t* *maʔip* *ʔay*
 monkey go.down-IND1 tree **ABL**
 ‘The monkey went down from the tree.’

əg *inaʔwara* *aʔpik*
ək *iʔ=naʔwat-a* *aʔ=pik*
 let’s 1PL.INCL=leave-GER 3SG=ALL
 ‘Let’s leave (go out) to him/it.’

ip cú gǽ ici bǽ
ip cú kǽ-t ici pǽ
 fish big walk-IND1 water INESS
 ‘The big fish swam in the water.’

paramu ʔa owikop
paramu e=ʔe-a o=pikop
 sit.down 2SG=AUX-GER 1SG=ABESS
 ‘Sit down next to me!’

ci baʔpe bem wep owara ʔkǽga
ci paʔpe pem o=ʔe-p o=para ʔkǽk-a
 water edge ADESS 1SG=AUX-IND2 1SG=go.back-GER
 ‘I went back to the edge of the river.’

The postpositional phrases which mark emphatic arguments employ the postposition *kōna*. The noun (or noun phrase) to be emphasized is marked coreferentially in the postpositional phrase by a pronominal argument which is attached to *kōna*. Depending on the grammatical function of the argument to be emphasized, the postpositional phrase may occur in different places in the clause. If the emphasized noun is the subject (ergative argument of a transitive clause or

absolutive argument of an intransitive clause), the postpositional phrase occurs at the end of the clause, or immediately after the subject³⁶.

ōn ip ʔɿy okōna
ōn ip ʔɿp-t o=kōna
 1SG fish catch-IND1 1SG=EMPH
 ‘I caught the fish.’

ōn okōna ip ʔɿy
ōn o=kōna ip ʔɿp-t
 1SG 1SG=EMPH fish catch-IND1
 ‘I caught the fish.’

ɣa tokōna ici an yat aʔkəy
ɣa tokōna ici at-t yat aʔ=kəy
 3SG.FEM 3R=EMPH water bring-IND1 FUT 3SG=DAT
 ‘She will bring water to him/it.’

oken okōna
o=ket-t o=kōna
 1SG=sleep-IND1 1SG=EMPH
 ‘I slept.’

³⁶ In the examples I have, transitive and intransitive verbs seem to behave differently according to the type of the modal marker they take. Transitive verbs seem to take the indicative marker, whereas intransitive verbs seem to take the gerund marker.

ōn okōna okera
ōn o=kōna o=ket-a
 1SG 1SG=EMPH 1SG=sleep-GER
 ‘I slept.’

Emphatic postpositional phrases can also occur at the ends of sentences when the emphasized argument is the subject.

wəŋnem [mɪrɪɪy ʔet] [iʔpéya]
wəŋ=tem [mɪrɪɪy ʔe-t] [iʔ=pé=a]
 far=ADVZ [toad AUX-IND1] [1PL.INCL=confuse=GER]
 ‘From afar, **the toad** confuses us,

[iʔca macahmæɾəba] rokōna
[iʔ=ca ma-cahmæɾəp-a] to=kōna
 [1PL.INCL=eye CAUS-haze-GER] 3R=EMPH
 making our sight hazy.’

On the other hand, if the noun to be emphasized is the transitive absolutive (i.e. the patient of a transitive clause), the postpositional phrase occurs at the beginning of the clause. In these cases, the impersonal pronominal marker *i=* occurs attached to the transitive verb root.

ip tokōna ōn yŋy
ip to=kōna ōn i=ʔŋy-t
 fish 3R=EMPH 1SG 3IMP=catch-IND1
 ‘Fish I caught.’

4.3.4 ADVERBIAL PHRASES

Adverbial phrases in Karo can be classified into four types: 1) time (e.g. yesterday, long ago, etc.), 2) manner (e.g. beautifully, poorly, etc.), 3) place (e.g. here, over there, etc.) and 4) quantification (one, once, two, twice, many times, etc.). More than one adverbial phrase may occur in a clause. The fact that they are independent adverbial phrases, and not components of a single larger adverbial phrase, can be seen in the examples below, where one (and only one) adverbial phrase can be focused. Other adverbial phrases must remain in their canonical position, at the end of the clause.

<i>oyān</i>	<i>mēganape</i>	<i>mīn</i>
<i>oyā-n</i>	<i>mēganape</i>	<i>mīn</i>
1SG=be-IND1	here	now

‘I live here now.’

<i>at</i>	<i>péŋ</i>	<i>wīn</i>	<i>paʔpiktem</i>	<i>mīy</i>	<i>mām</i>
<i>at</i>	<i>péŋ</i>	<i>wī-n</i>	<i>paʔpik=tem</i>	<i>mīy</i>	<i>mām</i>
3SG	white.man	kill-IND1	many=ADVZ	long.ago	X

‘He killed many men long ago.’

<i>mēganape</i>	<i>ōn</i>	<i>ameko top</i>	<i>matet</i>
<i>mēganape</i>	<i>ōn</i>	<i>ameko top-ap</i>	<i>matet</i>
here	1SG	jaguar see-IND2	yesterday

‘Here I saw the/a jaguar yesterday.’

pecéptem *ʔep* *mĩn*
pecép=tem *ʔe-p* *mĩn*
ugly=ADVZ (2SG)AUX-IND2 now
 ‘In an ugly way you did (it) now.’

An adverbial phrase may contain the following constituents:

1. Adverb (or Adverb + *mām*)
2. Negative particle
3. Emphatic particle

In the majority of cases, the adverb (or the adverb plus the particle *mām*³⁷), is the only constituent of an adverbial phrase:

wat *apəy* *ŋa* *pepat* *cək* *mām*
wat *apəy* *ŋa* *pepak-t* *cək* *mām*
 1SG.POSS grandmother CL.FEM wake.up-IND1 **early** **X**
 ‘My grandmother woke up early.’

õn *aŋoy* *pāttem*
õn *aŋop-t* *pāt=tem*
 1SG 3SG=see-IND1 **beautiful=ADVZ**
 ‘I saw it nicely.’

³⁷ The meaning of the particle *mām* is not yet completely understood.

<i>agóa ḡpα</i>	<i>péŋ</i>	<i>wĩn</i>	<i>pa ḡpiktem</i>
<i>agóa ḡpα</i>	<i>péŋ</i>	<i>wĩ-n</i>	<i>pa ḡpik=tem</i>
shaman	white.man	kill-IND1	many=ADVZ

‘The shaman killed many white men.’

The negative and/or the emphatic particles occur only in cases where the adverb is in focus. In these cases, the whole adverbial phrase occurs focused at the beginning of the clause.

<i>tēna</i>	<i>iḡke</i>	<i>ma ḡpəy</i>	<i>ici</i>	<i>arap</i>
<i>tēna</i>	<i>iḡke</i>	<i>ma ḡpəy</i>	<i>ici</i>	<i>at-ap</i>
now	NEG	woman	water	bring-IND2

‘It was not now that the woman brought water.’

<i>pāttem</i>	<i>iḡke</i>	<i>ap</i>	<i>towerowiya</i>
<i>pāttem</i>	<i>iḡke</i>	<i>aḡ=ḡe-p</i>	<i>to=werowiy-a</i>
beautiful	NEG	3SG=AUX-IND2	3R=speak-GER

‘It was not beautifully that he spoke.’

<i>matet</i>	<i>iḡke</i>	<i>rokōna</i>	<i>Petip</i>	<i>ḡep</i>	<i>towetōa</i>
<i>matet</i>	<i>iḡke</i>	<i>to=kōna</i>	<i>Petip</i>	<i>ḡe-p</i>	<i>to=petō-a</i>
yesterday	NEG	3R=EMPH	Petip	AUX-IND2	3R=tell-GER

‘It was not yesterday that Petip told it (the story).’

In non-emphatic occurrences of adverbial phrases, the negative particle occurs inside the verb phrase, and the adverb occurs alone. The clause, then, has a different meaning:

maʔpəy ɪcɪ an iʔke rēna

maʔpəy ɪcɪ at-t iʔke tēna

woman water bring-IND1 NEG **now**

‘The woman did not bring water now.’

aʔwero wɪy iʔke bāttem

aʔ=wero wɪy-t iʔke pāt=tem

3SG=speech go-IND1 NEG **beautiful=ADVZ**

‘He did not speak beautifully.’

Petip petōn iʔke matet

Petip petō-n iʔke matet

Petip tell-IND1 NEG **yesterday**

‘Petip did not told (the story) yesterday’

Sequences of adverbial phrases may occur in various orders, and may include different subtypes of adverbials (place, manner, time).

maʔwɪ ip ʔɪy matet cagárokōmnem

maʔwɪ ip ʔɪy-t matet cagárokōm=tem

man fish catch-IND1 **yesterday** **two=ADVZ**

‘The man caught two fish yesterday.’

<i>ma ḷwḥ</i>	<i>ip</i>	<i>ḷḥy</i>	<i>cagárokōmnem</i>	<i>matet</i>
<i>ma ḷwḥ</i>	<i>ip</i>	<i>ḷḥy-t</i>	<i>cagárokōmnem</i>	<i>matet</i>
man	fish	catch-IND1	two=ADVZ	yesterday

‘The man caught two fish yesterday.’

<i>ar</i>	<i>atati</i>	<i>ba ḷpiktem</i>	<i>meḥk to</i>
<i>at</i>	<i>a ḷ=ta-ti-t</i>	<i>pa ḷpik=tem</i>	<i>meḥk to</i>
3SG	3SG=COM-go-IND1	lots.of=ADVZ	there X

‘He brought lots of it over there.’

Postpositional phrases usually occur immediately after the verb phrase. As a group, adverbial phrases thus tend to occur at the ends of clauses.

<i>war</i>	<i>owā ḡa</i>	<i>bakán</i>	<i>okəy</i>
<i>wat</i>	<i>owā ḡa</i>	<i>pakát-t</i>	<i>o=kəy</i>
1SG=POSS	motherCL.FEM	angry-IND1	1SG=DAT

‘My mother was angry at me.’

<i>war</i>	<i>owā ḡa</i>	<i>bakán</i>	<i>okəy</i>	<i>matet</i>
<i>wat</i>	<i>owā ḡa</i>	<i>pakát-t</i>	<i>o=kəy</i>	<i>matet</i>
1SG=POSS	motherCL.FEM	angry-IND1	1SG=DAT	yesterday

‘My mother was angry at me yesterday.’

<i>war</i>	<i>owã</i>	<i>ŋa</i>	<i>bakán</i>	<i>okəy...</i>
<i>wat</i>	<i>owã</i>	<i>ŋa</i>	<i>pakát-t</i>	<i>o=kəy</i>
1SG=POSS	mother	CL.FEM	angry-IND1	1SG=DAT

‘My mother was angry at me...

<i>...matet</i>	<i>péŋ</i>	<i>at</i>	<i>kaʔa</i>	<i>ʔa</i>	<i>peʔ</i>
<i>matet</i>	<i>péŋ</i>	<i>at</i>	<i>kaʔa</i>	<i>ʔaʔ</i>	<i>peʔ</i>
yesterday	white.man	POSS	house	CL.RD	LOC

... yesterday at the white man’s house.’

4.4 TENSE

Tense in Karo is marked only analytically. Past tense is marked by two particles and future is marked by two particles and one auxiliary. None of these markers is obligatory in the sentences of Karo. Their presence serves to reinforce the past or future occurrence of an event or state. In the sections below I describe each of these tenses in detail.

4.4.1 PAST

Two particles are employed in Karo to signal that an action or state occurred in the past, with the present moment as the point of reference: *co*, used for actions in the recent or simple past, and *kán*, used for actions in the remote or mythological past. The cut-off point for the use of one or another particle seems to be vague. Examples of *kán* were found to describe situations occurring 10-15 years before, a century earlier, and in mythic times.

púŋ wet **co**
púŋ o=ʔe-t **co**
 shoot 1SG=AUX-IND1 **PAST**
 ‘I shot.’

eken *ahyə* **co** *báitem*
e=ket-t *ahyə* **co** *pát=tem*
 2SG=sleep-IND1 **INTERR** **PAST** beautiful=ADVZ
 ‘Did you sleep well?’

ōn ʔriŋ macéri **gán**
ōn ʔriŋ ma-céri-t **kán**
 1SG girl CAUS-heal-IND1 **RPAST**
 ‘I healed the girl (long ago).’

co and *kán* may co-occur with semantically compatible time adverbials.

iyōm ŋen **co** **matet**
iyōm ket-t **co** **matet**
 father sleep-IND1 **PAST** **yesterday**
 ‘father slept yesterday’

iʔyat yaʔmo ci káʔ ʔor *iʔke werem ŋán*
iʔyat yaʔmo ci káʔ ʔo-t *iʔke werem kán*
 1PL.INCL sweet.potato water CL.CCV eat-IND1 **NEG** **firstly** **RPAST**
 ‘In the beginning we did not eat sweet potato soup.’

<i>toto</i>	<i>ibetō</i>	<i>mīy</i>	<i>mām</i>	<i>ḡán</i>
<i>toto</i>	<i>i=betō</i>	<i>mīy</i>	<i>mām</i>	<i>kán</i>
grandfather	3IMP-tell	long.ago	X	RPAST

‘It was grandfather who told (the story) long ago.’

Only the past marker *co* was found to co-occur with future markers, meaning a future with reference to the past. Two types of futures occur with *co*, the auxiliary future *-kap* and the particle *yat*.

<i>war</i>	<i>icī</i>	<i>ḡara</i>	<i>okay</i>	<i>co</i>
<i>wat</i>	<i>icī</i>	<i>ḡat-a</i>	<i>o=kap-t</i>	<i>co</i>
1SG.POSS	water	bring-GER	1SG=AUX.FUT-IND1	PAST

‘I was going to bring my water.’

<i>iyōm</i>	<i>ikap</i>	<i>towenaoba</i>	<i>co</i>
<i>iyōm</i>	<i>i=kap-ap</i>	<i>to=penaop-a</i>	<i>co</i>
father	3IMP=AUX.FUT-IND2	3R=dance-GERPAST	

‘Dad was going to dance.’

<i>ōn</i>	<i>cīm</i>	<i>yegat</i>	<i>yat</i>	<i>co</i>
<i>ōn</i>	<i>cīm</i>	<i>yega-t</i>	<i>yat</i>	<i>co</i>
1SG	meat	hunt-IND1	FUT	PAST

‘I was going to hunt.’

<i>ōn</i>	<i>owirap</i>	<i>tḥn</i>	<i>yat</i>	<i>co</i>
<i>ōn</i>	<i>o=wirap</i>	<i>tḥ-t</i>	<i>yat</i>	<i>co</i>
1SG	1SG=food	cook-IND1	FUT	PAST

‘I was going to cook my food.’

It is common in Karo to find occurrences of both past markers in the same clause³⁸. In all of the cases found so far, the simple past marker *co* occurs before the remote past marker *kán*.

<i>wat</i>	<i>kanā</i>	<i>rakəga</i>	<i>wet</i>	<i>co</i>	<i>kán</i>
<i>wat</i>	<i>kanā</i>	<i>takək-a</i>	<i>o=ʔe-t</i>	<i>co</i>	<i>kán</i>
1SG.POSS	thing	COMIT-walk-GER	1SG=AUX-IND1	PAST	RPAST

‘I had my things long ago.’

<i>ōn</i>	<i>opit</i>	<i>məy</i>	<i>mām</i>	<i>co</i>	<i>kán</i>
<i>ōn</i>	<i>o=pi-t</i>	<i>məy</i>	<i>mām</i>	<i>co</i>	<i>kán</i>
1SG	1SG=perforate-IND1	long	X	PAST	RPAST

‘I took the vaccine long ago’

4.4.2 FUTURE

There are three different ways in which future time is indicated in Karo: 1) by means of a future auxiliary *kap*, 2) by means of a particle *yat*, and 3) by means of another particle *iga*.

³⁸ I am not certain of the specific meaning of this type of occurrence besides the clear past meaning.

4.4.2.1 THE FUTURE AUXILIARY *KAP*

The future auxiliary *kap* is employed to indicate that an event is about to occur ('immediate or proximate future'). *kap* occurs with the /-p/ and /-t/ indicative moods, under the usual circumstances: /-p/ is used when an element of the clause is put into focus, and /-t/ is employed in all other environments.

In constructions with the auxiliary *kap*, the verb which specifies the main action or event (either a transitive or intransitive verb) always occurs in a separate clause and takes the non-finite form of the gerund. (*kap* forms a verb phrase on its own.)

Like other constructions involving dependent clauses, future constructions with *kap* show behavioral evidence of a subject category. The subject of the future auxiliary is always coreferential with the subject of the associated full verb. The marking of the subject of the non-finite verb is expressed with a special coreferential proclitic if the verb is intransitive, and omitted if the verb is transitive.

In the first type of construction, the intransitive verb in the gerund form occurs first, followed by a Noun Phrase + AUXILIARY FUTURE, which receives the indicative mood marking.

<i>tokera</i>	<i>[ma ʔwɛ́]</i>	<i>cú]</i>	<i>kay</i>
<i>to=ket-a</i>	<i>[ma ʔwɛ́]</i>	<i>cú]</i>	<i>kap-t</i>
3R=sleep-GER	[man	big]	AUX.FUT-IND I

'The big man is going to sleep.'

<i>owīya</i>	<i>okay</i>
<i>o=wīy-a</i>	<i>o=kap-t</i>
1SG=leave-GER	1SG=AUX.FUT-IND1

‘I am going to leave.’

In cases where the verb is transitive, a personal proclitic is also attached to it, but it marks the absolutive argument of the sentence. The ergative argument, which is always coreferential with the person of the subject of the future auxiliary, is omitted.

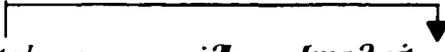
(Ø)	<i>māygāra</i>	<i>wīa</i>	[<i>wat</i>	<i>owē</i>] <i>kay</i>
(Ø)	<i>māygāra</i>	<i>wī-a</i>	[<i>wat</i>	<i>owē</i>] <i>kap-t</i>
(Ø)	snake	kill-GER	[1SG.POSS	child] AUX.FUT-IND1

‘My son is going to kill a/the snake.’

(Ø)	<i>aʔoba</i>	<i>cúrem</i> <i>aʔkay</i>
(Ø)	<i>aʔ=toba</i>	<i>cúrem</i> <i>aʔ=kap-t</i>
(Ø)	3SG=see-IND1	big=ADVZ 3SG=AUX.FUT-IND1

‘He is going to see it well.’

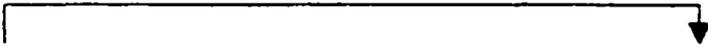
Future constructions with *kap* may also be negated with the negative particle *iʔke*. In these cases, the negative particle occurs in the clause which contains the non-finite verb (either intransitive or transitive).



tokera *iʔke* **[maʔwɪ́** **cú]** *gay*
to=ket-a *iʔke* **[maʔwɪ́** **cú]** *kap-t*
3R=sleep-GER **NEG** **[man** **big]** **AUX.FUT-IND1**
 ‘The big man is not going to sleep.’



owɪ́ya *iʔke* *okay*
o=wɪ́y-a *iʔke* *o=kap-t*
1SG=leave-GER **NEG** **1SG=AUX.FUT-IND1**
 ‘I am not going to leave.’



(Ø) *māygāra* *wīa* *iʔke* **[war** **owē]** *gay*
(Ø) *māygāra* *wī-a* *iʔke* **[wat** **owē]** *kap-t*
(Ø) *snake* *kill-GER* **NEG** **[1SG.POSS** **child]** **AUX.FUT-IND1**
 ‘My son is not going to kill a/the snake.’

(Ø) *aʔoba iʔke cúrem aʔkay*
 (Ø) *aʔ=top-a iʔke cú=tem aʔ=kap-t*
 (Ø) 3SG=see-IND1 NEG big=ADVZ 3SG=AUX.FUT-IND1
 ‘He is not going to see it well.’

4.4.2.2 THE FUTURE PARTICLE *yat*

The second type of future is marked by the particle *yat*, which is employed to mark simple future. In constructions with *yat*, the main verb or auxiliary takes the indicative mood form. *yat* then occurs at the end of the clause.

ameko cú yaʔwan yat
ameko cú yaʔwat-t yat
 jaguar big leave.IND1 FUT
 ‘The big jaguar will leave.’

õn aʔtoy yat
õn aʔtop-t yat
 1SG 3SG=see-IND1 FUT
 ‘I will see him/it.’

yat also occurs referring to nouns in noun phrases, meaning [future N].

<i>wat</i>	<i>kaʔa</i>	<i>ʔa</i>	<i>yat</i>
<i>wat</i>	<i>kaʔa</i>	<i>ʔaʔ</i>	<i>yat</i>
1 SG.POSS	house	CL.RD	FUT

‘My future house.’

<i>aʔcey</i>	<i>ʔa</i>	<i>yat</i>
<i>aʔ=cey</i>	<i>ʔa</i>	<i>yat</i>
3SG=wife	CL.FEM	FUT

‘his future wife’

The future particle *yat* may also occur with the negative particle *iʔke*. In these cases, the latter particle follows the former.

<i>ameko cú</i>	<i>yaʔwan</i>	<i>nyat</i>	<i>iʔke</i>
<i>ameko cú</i>	<i>yaʔwat-t</i>	<i>yat</i>	<i>iʔke</i>
jaguar big	leave.IND1	FUT	NEG

‘The big jaguar will not leave.’

<i>õn</i>	<i>aʔtoy</i>	<i>yar</i>	<i>iʔke</i>
<i>õn</i>	<i>aʔ=top-t</i>	<i>yat</i>	<i>iʔke</i>
1 SG	3SG=see-IND1	FUT	NEG

‘I will not see him/it.’

4.4.2.3 THE FUTURE PARTICLE *IGA*

The last type of future employs the particle *iga*, and is used to mark simple future exclusively in negative-interrogative clauses³⁹. In these clauses, the negative particle *taykit* occurs first, followed by the transitive or intransitive verb in a finite form with indicative marking.

taykir at aʔoy iga
taykit at aʔ=top-t iga
 NEG 3SG 3SG=see-INDI FUT
 ‘Isn’t he going to see it/him?’

³⁹ I have found a few examples where *iga* is also employed in complex sentences with purposive meaning (cf. the examples below), but at present I do not have knowledge of this use in other types of complex clauses (temporal and/or cause). Some of the few examples I found are:

oyaʔvara okay oken iga or
o=yaʔwar-a o=kap-t o=ket-t iga
 1SG=leave-GER 1SG=FUT 1SG=sleep-INDI FUT
 ‘I am going to leave to sleep’

oyaʔwan nyat oken iga
o=yaʔwat-t yat o=ket-t iga
 1SG-leave-INDI FUT 1SG=sleep-INDI FUT
 ‘I will leave to sleep’

oyaʔvara okay aʔoy iga or
o=yaʔwar-a o=kap-t aʔ=top-t iga
 1SG=leave-GER 1SG=FUT-INDI 1SG=sleep-INDI FUT
 ‘I am going to leave to see him/it’

oyaʔwan nyar aʔoy iga
o=yaʔwat-t yat aʔ=top-t iga
 1SG-leave-INDI FUT 3SG=see-INDI FUT
 ‘I will leave to see him/it’

<i>taykir</i>	<i>aʔken</i>	<i>iga</i>
<i>taykit</i>	<i>aʔ=ket-t</i>	<i>iga</i>
NEG	3SG=sleep-IND1	FUT

‘Isn’t he going to sleep?’

4.5 NEGATION

Negation in Karo is marked by means of three different particles, *iʔke*, *yahmām*, and *taykit*. Each particle occurs with a different type of clause and is described in detail in the subsections below.

4.5.1 THE NEGATIVE PARTICLE *iʔke*

The negative particle *iʔke* is the most frequent. It appears in declarative and future clauses. In declarative clauses, *iʔke* occurs in different places of the clause, depending on the scope of the negation. When its scope is over ergative or absolutive noun phrases, adverbial phrases, or postpositional phrases, these phrases occur in focus position at the beginning of the clause followed by the negative particle *iʔke*. The different occurrences of *iʔke* with different types of constituents in a clause are described in the items below.

1) When the scope of negation is over the whole clause (or proposition), the negative particle occurs after the verb phrase:

<i>oken</i>	<i>iʔke</i>
<i>oket-t</i>	<i>iʔke</i>
1SG=sleep-IND1	NEG

‘I did not sleep.’

ar otoy iʔke

at o=top-t iʔke

3SG 1SG=see-IND1 NEG

‘He/it did not see me.’

2) When the scope of negation is over the ergative argument, the negative particle occurs immediately after it, at the beginning of the clause:

[ōn iʔke] māygāra roy

[ōn iʔke] māygāra top-t

[1SG NEG] snake see-IND1

‘It wasn’t me who saw the snake.’

[ar owē rab iʔke] ewirup ʔot

[at owē tap iʔke] e=wirup ʔo-t

[3SG.POSS child] ASSOC NEG 2SG=food eat-IND1

‘It wasn’t his children who ate your food.’

3) When the scope of negation is over the absolutive argument, the absolutive argument appears in focus position at the beginning of the clause followed by the negative particle *iʔke*. The verb (transitive or intransitive) takes the impersonal proclitic *i=* and the unmarked form:

[māygāra iʔke] ōn itop

[māygāra iʔke] ōn itop

[snake NEG] 1SG 3IMP=see

‘It wasn’t the/a snake that I saw.’

[naʔto cú iʔke] at iwĩ
[naʔto cú iʔke] at iwĩ
[tapir big NEG] 3SG 3IMP=kill
'It wasn't a big tapir that he killed.'

[ẽn iʔke] ɲa icát
[ẽn iʔke] ɲa i=cát
[2SG NEG] 3SG.FEM 3IMP=wash
'It wasn't you that she washed.'

[õn iʔke] at icapé
[õn iʔke] at icapé
[1SG NEG] 3SG 3IMP=beat
'It was not me that he beat.'

[maʔpəy pǎt iʔke] iyaʔwat
[maʔpəy pǎt iʔke] i=yaʔwat
[woman beautiful NEG] 3IMP=leave
'It wasn't the beautiful woman who left.'

[õn iʔke] iket
[õn iʔke] iket
[1SG NEG] 3IMP=sleep
'It wasn't me who slept.'

4) When the scope of negation is over the postpositional phrase, this phrase appears in focus position at the beginning of the clause followed by the negative particle. The auxiliary *?e* with the *-p* indicative mood occurs after the [postpositional phrase + NEG], followed by a transitive or intransitive verb in the gerund form. The subject of the auxiliary is coreferential with the subject of the transitive or intransitive verb:

owakán *i?ke* *ekəy*
o=pakát-t *i?ke* *e=kəy*
 1SG=be.angry.IND1 NEG 2SG=DAT
 ‘I am not angry with you.’ *cf.*

[ekəy *i?ke]* *wep* *owakára*
[e=kəy *i?ke]* *o=?e-p* *o=pakát-a*
 [2SG=DAT NEG] 1SG=AUX-IND2 1SG=be.angry-GER
 ‘It is not with you that I am angry’

ōn *a?oy* *i?ke* *at* *ka?a* *?a* *pe?*
ōn *a?=top-t* *i?ke* *at* *ka?a* *?a?* *pe?*
 1SG 3SG=see-IND1 NEG 3SG.POSS house CL.RD LOC
 ‘I did not see him/it at his house.’ *cf.*

[at *ka?a* *?a* *pe?* *i?ke]* *wep* *a?oba*
[at *ka?a* *?a?* *pe?* *i?ke]* *o=?e-p* *a?=top-a*
 [3SG.POSS house CL.RD LOC NEG] 1SG=AUX-IND2 3SG=see-GER
 ‘It was not at his house that I saw him/it.’

5) When the scope of negation is over the adverbial phrase, the adverbial phrase is also focused, and the same changes described above for the postpositional phrase occur:

<i>pā́ttem</i>	<i>iʔke</i>	<i>web</i>	<i>okera</i> ⁴⁰
<i>pā́t=tem</i>	<i>iʔke</i>	<i>o=ʔe-p</i>	<i>o=ket-a</i>
beautiful=ADVZ	NEG	1SG=AUX-IND2	1SG=sleep-GER

‘It was not nicely that I slept.’

<i>mekōm</i>	<i>iʔke</i>	<i>iʔyat</i>	<i>kotigap</i>	<i>mīy</i>	<i>mām</i>
<i>mekōm</i>	<i>iʔke</i>	<i>iʔyat</i>	<i>kotiga-p</i>	<i>mīy</i>	<i>mām</i>
like.this	NEG	1PL.INCL	say-IND2	long.ago	X

‘It is/was not like this that ours (relatives) use to tell in old times.’

6) In predicate adjective constructions, when the scope of negation falls on the whole predication, the negative particle occurs immediately after the Adjective + Adverbializer:

<i>pā́ttem</i>	<i>iʔke</i>	<i>ōn</i>
<i>pā́t=tem</i>	<i>iʔke</i>	<i>ōn</i>
beautiful=ADVZ	NEG	1SG

‘I am not beautiful.’

⁴⁰ A construction with similar meaning where no auxiliary occurs is:

<i>oken</i>	<i>iʔke</i>	<i>pā́ttem</i>
<i>oket-t</i>	<i>iʔke</i>	<i>pā́t=tem</i>
1SG=sleep-IND1	NEG	beautiful=ADVZ

‘I did not sleep nicely/well.’

péŋ *mecéb iʔke aʔmān*
péŋ *pecép iʔke aʔmā-n*
 white.man ugly NEG 3SG=COP-IND1
 ‘He is not an ugly white man.’

In future clauses, *iʔke* also occurs in different places, depending on the type of future marker. (A complete description of future markers was provided in section 4.4.2 above.)

When *iʔke* is in a future clause with the auxiliary future *kap*, it occurs at the end of the non-finite verb phrase.

okera *iʔke okay*
o=kət-a *iʔke o=kap-t*
 1SG=sleep-GER NEG 1SG=AUX.FUT-IND1
 ‘I am not going to sleep.’

cīm cára *iʔke aʔkay*
cīm cát-a *iʔke aʔ=kap-t*
 meat wash-GER NEG 3SG=AUX.FUT-IND1
 ‘He is not going to wash his prey.’

When *iʔke* is in a future clause with the future particle *yat*, it occurs immediately after *yat*.

aʔwíy *yat* *iʔke*
aʔ=wíy-t *yat* *iʔke*
 3SG=go.out-IND1 FUT NEG
 ‘He will not go out.’

ōn *aʔtoy* *yat* *iʔke* *páitem*
ōn *aʔ=top-t* *yat* *iʔke* *páit=tem*
 1SG 3SG=see-IND1 FUT NEG beautiful=ADVZ
 ‘I will not see it/him nicely.’

4.5.2 THE NEGATIVE PARTICLE *YAHMĀM*

The negative particle *yahmām* is employed in imperatives and information questions.

In imperative clauses, the main verb takes the indicative mood form and the negative particle follows it. (In unmarked imperative clauses the verb appears in the gerund form.)

ewét *yahmām*
e=wé-t *yahmām*
 2SG=cry-IND1 NEG
 ‘Don’t cry!’

karokéran *yahmām*
karo=kérat-t *yahmām*
 2PL=sleep-IND1 NEG
 ‘Don’t sleep (you PL.)!’

ayowan *yahmām*
aʔ=yowat-t *yahmām*
 3SG=leave-IND1 NEG
 ‘Don’t leave it.’

cīm *yegat* *yahmām* *tēna*
cīm *yek-at* *yahmām* *tēna*
 meat look.for-IND1 NEG now
 ‘Don’t hunt now!’

In information questions, the negative particle occurs after the main verb or auxiliary, which appears in the indicative mood⁴¹:

kōm *ar* *otoy* *yahmām*
kōm *at* *o=top-t* *yahmām*
 how 3SG 1SG=see-IND1 NEG
 ‘How (come) he did not see me?’

kōm *péŋ* *ʔet* *nyahmām* *apik*
kōm *péŋ* *ʔe-t* *yahmām* *aʔ=pik*
 how white.man AUX-IND1 NEG 3SG=ALL
 ‘How (come) the white man did not go with him/it?’

⁴¹ Some speakers seem to employ the gerund form *-a* on the verb of the second clause as in:

kanape *wep* *omatia* *yahmām*
kanape *o=ʔe-p* *o=ma-ti-a* *yahmām*
 here(?) 1SG=AUX-IND2 1SG=CAUS-go-GER NEG
 ‘I did not come here.’

When an auxiliary plus a transitive or intransitive verb co-occur in question information clauses, they are both marked with the indicative mood marker, but the auxiliary has the allomorph /-p/.

<i>kiganape</i>	<i>ap</i>	<i>naʔo roy</i>	<i>yahmām</i>
<i>kiganape</i>	<i>aʔ=ʔe-p</i>	<i>naʔo top-t</i>	<i>yahmām</i>
where	3SG=AUX-IND2	tapir see-IND1	NEG

‘Where did he not see the tapir?’

<i>kiganape</i>	<i>ep</i>	<i>eken</i>	<i>yahmām</i>
<i>kiganape</i>	<i>e=ʔe-p</i>	<i>e=ket-t</i>	<i>yahmām</i>
where	2SG=AUX-IND2	2SG=sleep-IND1	NEG

‘Where did you not sleep?’

4.5.3 THE NEGATIVE PARTICLE *TAYKIT*

The last type of negative marker is the particle *taykit*, which is used in yes/no questions. In these constructions, *taykit* occurs at the beginning of the clause, and the main verb appears in the gerund form.

<i>taykir</i>	<i>iʔwirup</i>	<i>toba</i>
<i>taykit</i>	<i>iʔ=wirup</i>	<i>top-a</i>
NEG	1PL.INCL=food	see-GER

‘Aren’t/weren’t (you) watching our food?’

4.6 REPORTED SPEECH

Only direct speech occurs in Karo. Direct speech is marked by a noun phrase, which specifies the speaker, followed by *?e* ‘to say/do’ in the indicative mood form. The sequence NP + *?e* occurs at the end of the quotation, generally in a separate intonation break. A postpositional phrase or an adverbial phrase may also occur following the sequence [NP + *?e*].

<i>məy</i>	<i>yét</i>	<i>ma ?pəy</i>	<i>ŋa</i>	<i>wa ?ye</i>	<i>cán</i>	<i>nā</i>	<i>makɪra,</i>
<i>məy</i>	<i>yét</i>	<i>ma ?pəy</i>	<i>ŋa</i>	<i>wa ?ye</i>	<i>cán</i>	<i>nā</i>	<i>ma-kɪ-a</i>
then	this	woman	CL.FEM	AUX	fire	CL	CAUS-fire-GER

“Then this woman started a fire”,

<i>war</i>	<i>iyōm</i>	<i>?et</i>	<i>(okəy</i>	<i>matet)</i>
<i>wat</i>	<i>iyōm</i>	<i>?et</i>	<i>(o=kəy</i>	<i>matet)</i>
1SG.POSS	father	AUX-IND1	(1SG=DAT	yesterday)

my father said (to me yesterday).'

4.7 CLAUSE COMBINING

Clauses in Karo can be combined in two ways to form a sentence: 1) by juxtaposition of two or more clauses (clause chaining) and 2) by a complex construction of two clauses where one is more dependent on the other (subordination).

Clause chaining differs from subordination in two ways: 1) clause chaining does not employ clause connectors, whereas clause subordination does; 2) chained clauses always share the same subject, whereas subordination may involve different subjects.

Clause chaining itself differs from serial verb constructions in two ways: 1) the different clauses being combined correspond to different events and not to a single event, a feature of clause chaining and not of verb serialization, and 2) there is a clear boundary among the clauses being combined (indicated by modal suffixes attached to the verbs or predicates), whereby a clause can be easily recognized as finite in opposition to other non-finite clauses. (Finite clauses take the indicative modal suffix *-t* while non-finite clauses take the gerund modal suffix *-a*.)

4.7.1 CLAUSE CHAINING

Two or more clauses in Karo may be conjoined to form a sentence. The number of clauses in a sentence can be measured by the number of predicates with modal suffixes. Thus, an argument (either nominal or pronominal) plus an auxiliary alone may form a clause, since the auxiliary has a modal suffix attached to it⁴².

Only one of the conjoined clauses has finite verbal morphology, which is indicated by the presence of the indicative suffixes *-t* or *-p* on the verb or auxiliary. Other clauses, if more than one is present, are non-finite, and their verbal morphology carries the gerund suffix *-a*. Generally, finite clauses appear last in the chain.

⁴² Further evidence that only these two constituents form a clause comes from the fact that they can stand alone and show the same syntactic behavior as other simple clauses.

Clause chaining, furthermore, exhibits a clear grammatical nominative-accusative pattern. In order for conjoined clauses to occur in Karo they **must** share the same subject: non-finite clauses always have the same subject as finite clauses, whether intransitive or transitive. (When there is a change in subject, another, new, clause is started, and its predicate is in the finite form.)

There are two ways in which the same subject of a non-finite clause in Karo clause chaining is marked. If the non-finite clause is *intransitive*, its (absolutive) subject is marked by the special set of coreferential pronominal clitics, whereas if the non-finite clause is *transitive*, the (ergative) subject is omitted. The sentence below exemplifies both ways of marking same subjects in clause chaining.

Ø ci baʔpe mawiga,

Ø ci paʔpe ma-wik-a

Ø water edge CAUS-be.dirty-GER

‘(He) dirtied the edge of the water,’

Ø ci mininĩ ʔa mōm mawiya,

Ø ci mininĩ ʔa mōm ma-wiy-a

Ø water bubble CL.RD only CAUS-go.out-GER

‘(he) made the water bubbles to come up,’

Ø ɲaramāya,

Ø ɲa=ta-māy-a

Ø 3SG.FEM=COMIT-bring-GER

‘(he) took her (in),’

Ø ηα?óa,
 Ø ηα=?ó-a
 Ø 3SG.FEM=eat-GER
 ‘(he) ate her,’

toyāy ?a binō ya,
 to=yāy ?a? pinō ya-a
 3R=tooth CL.RD noise leave-GER
 ‘(he) cracked his own teeth’

at.
 a?=?e-t
 3SG=AUX-IND1
 ‘He (the alligator) did.’

A mixture of clause chaining and subordination (see section below on subordination) may also occur in Karo sentences.

i?tə	ma?pəy	ηa	cet	ma?ā	i?ke	nānin,
i?tə	ma?pəy	ηa	cet	ma?ā-a	i?ke	nānin
1PL.INCL	woman	CL.FEM	name	call-GER	NEG	EVID

‘We really cannot call the woman’s name,

naco	?erem ye		kanāp	i?kəga
naco	?erem i=?e		kanāp	i?=kək-a
forest	DISP	1PL.INCL=AUX	TIME	1PL.INCL=walk-GER

‘when we walk through the forest.’

4.7.2 SUBORDINATION

Two clauses may also combine in such a way that one clause is dependent (or subordinated) on another. In Karo, subordination is a process whereby a connection between two clauses is established, where one (dependent) clause bears some sort of circumstantial relation with another (main) clause. There is always a connector (conjunction) to mark the relation of dependency, and the verb in the subordinate clause is always non-finite.

Three types of circumstantial relations can be differentiated among Karo clauses⁴³, marked by three types of connectors 1) time, marked with *kanāp* ‘after, while, when’; 2) purpose, marked with *nāt* ‘in order to/for’; and 3) cause, marked with *yəye* ‘because’.

⁴³ I have found a few examples of a possible fourth type of subordination, marked with *wetik*, *yatik* or simply *tik*. Its precise meaning remains undetermined. (It may be a conditional subordinator.) In these examples, I observed little formal distinction between main (finite) and subordinate (non-finite) clauses, since the predicates in both are marked with the same indicative modal suffix *-t*:

<i>abakán</i>	<i>ekəy</i>	<i>[ɾatoy</i>	<i>tik</i>	<i>to ʔwa]</i>
<i>aʔ=pakát-t</i>	<i>e=kəy</i>	<i>[ɾa=top-t</i>	<i>tik</i>	<i>to=ʔe-a]</i>
3SG=be.angry-IND I	2SG=DAT	[3SG.FEM=see.IND I	X	3R=AUX-GER]
‘He would be angry at you because/if? you did not (come to) see her’				

<i>owakán</i>	<i>ekəy</i>	<i>tēna</i>	<i>[otoy</i>	<i>tik</i>	<i>wa]</i>
<i>o=pakát-t</i>	<i>e=kəy</i>	<i>tēna</i>	<i>[o=top-t</i>	<i>tik</i>	<i>o=ʔe-a]</i>
1SG=be.angry-IND I	2SG=DAT	now	[1SG=see.IND I	X	1SG=AUX-GER]
‘I would be angry at you if? you did not (come to) see me’					

4.7.2.1 TIME

Constructions which express a temporal relation between events in a sentence are marked by the subordinator *kanāp*. This relation can be either simultaneous (e.g. ‘while/when doing this s/he did that’) or sequential (e.g. ‘after doing this s/he did that’). The verb in the subordinate clause always takes the gerund form, while that in the main clause can take either the indicative or the unmarked form.

<i>oya ḥvan</i>	<i>a ḥkera</i>	<i>kanāp</i>
<i>o=ya ḥvat-t</i>	<i>a ḥ=ket-a</i>	<i>kanāp</i>
1SG=leave-INDI	3SG=sleep-GER	TIME

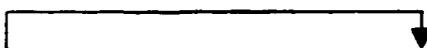
‘I left when he slept.’

<i>ōn</i>	<i>a ḥtop</i>	<i>mām</i>	<i>at</i>	<i>towirap</i>	<i>ḥo</i>	<i>kanāp</i>
<i>ōn</i>	<i>a ḥ=top</i>	<i>mām</i>	<i>at</i>	<i>to=wirap</i>	<i>ḥo</i>	<i>kanāp</i>
1SG	3SG=see	X	3SG	3R=food	eat.GER	TIME

‘I stayed watching it/him while he ate his food.’

As in clause chaining, when the clauses in complex sentences share the same subject, the subject of the dependent clause is expressed in a special way. Absolutive subjects of intransitive clauses are represented by special coreferential clitics⁴⁴.

⁴⁴ Although at first sight this type of marking could be thought as a switch-reference system, in fact it is not. When different subjects occur they do not occur in clause a chain, but in different sentences.

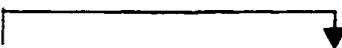


péŋ *ya ʔwan* [*to wéya* *kanāp*]

péŋ *ya ʔwat-t* [*to= wé-a* *kanāp*]

white.man **leave-IND1** [**3R=cry-GER** **TIME**]

 ‘The white man left when he cried.’



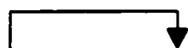
ōn *a ʔwĩn* [*owepak-a* *kanāp*]

ōn *a ʔ= wĩ-n* [*o=pepak-a* *kanāp*]

1SG **3SG=kill** [**1SG=wake.up-GER** **TIME**]

 ‘I killed it/him when I woke up.’

Ergative subjects of transitive clauses are not overtly specified in the subordinate clause at all.

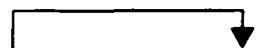


wĩt *wĩaw* *a ʔwa ʔye* [*∅* *at* *chapéu ká?* *to* *kanāp*]

wĩt *wĩaw* *a ʔ=wa ʔye* [*∅* *at* *chapéu ká?* *top* *kanāp*]

whistlewhistle **3SG=AUX** [**(3SG)** **3SG.POSS** **hat** **CL.CCV** **see** **TIME**]

 ‘He whistled when he saw his hat.’



ōn *a ʔwĩn* [*∅* *a ʔ=to* *kanāp*]

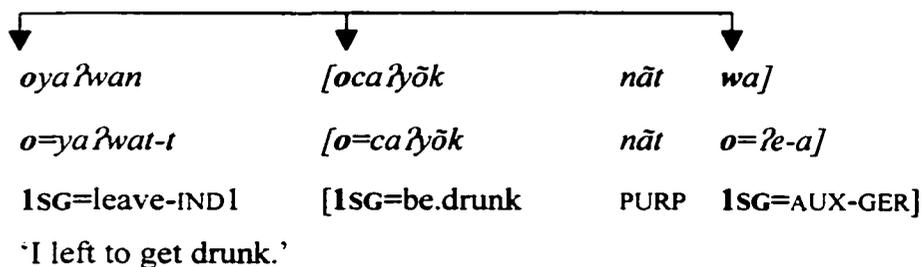
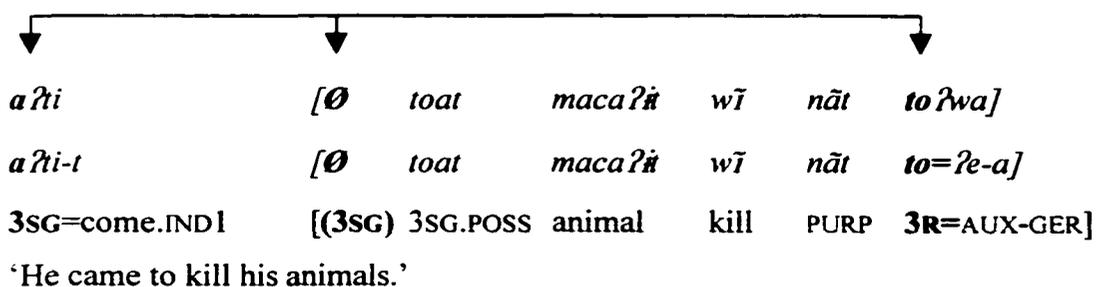
ōn *a ʔ= wĩ-t* [*∅* *a ʔ=top* *kanāp*]

1SG **3SG=kill-IND1** [**(3SG)** **3SG=see** **TIME**]

 ‘I killed it/him when I saw it/him.’

4.7.2.2 PURPOSE

In purposive constructions, the event represented in the subordinate clause serves as the purpose for the event represented in the main clause. The purposive clause is marked by the conjunction *nāt* and occurs after the main clause. The verb in a purposive clause is unmarked for mood. The auxiliary *?e* also occurs at the end of the whole sentence, in the gerund form. The subject of this auxiliary is always coreferential with the subject of the main clause.



In some other cases, it may happen that the purposive clause occurs first in the sentence, when highlighting is desired. In these cases, the purposive clause is the main clause, since its verb shows the indicative verb mood, and the other clause is the dependent, since its verb occurs in the gerund form and has the special coreferential clitic pronoun.

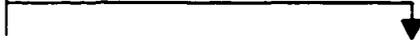


 [*at* *toat* *macaʔñ* *wĩm* *nãt*] *totia*

 [*at* *toat* *macaʔñ* *wĩ-n* *nãt*] *to=ti-a*

 [3SG 3SG.POSS animal kill-IND1 PURP] 3R=come-GER

‘(In order) to kill his animals he came.’



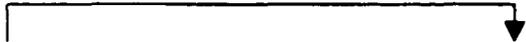
 [*oken* *nãt*] *oca ʔyõga*

 [*o=ket-t* *nãt*] *o=ca ʔyõk-a*

 [1SG=sleep-IND1 PURP] 1SG=be.drunk-GER

‘(In order) to sleep I got drunk.’

Purposive constructions follow a nominative-accusative pattern. When the subject of the purposive and the subject of the other clause are coreferential, they are marked in a special way: coreferential subjects of transitive clauses are omitted, and coreferential subjects of intransitive clauses are marked by a special set of pronominal clitics.

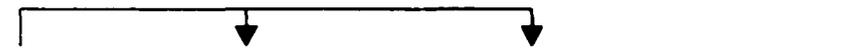


at *toat* *cĩm* *nati* [\emptyset *aʔcá* *nãt* *to ʔwa*]

at *toat* *cĩm* *tati* [\emptyset *aʔcá* *nãt* *to ʔwa*]

 3SG 3SG.POSS meat bring-IND [(3SG) 3SG=wash PURP 3R=AUX-GER]

‘He brought his hunt to wash it.’



abe ʔcɪn [*noorawa* *nā̃t* *to ʔwa* *rǎwrem*]

abe ʔcɪ-t [*to=orawa* *nā̃t* *to=ʔe-a* *tǎw=tem*]

3SG=run-IND1 [**3R=defecate** **PURP** **3R=AUX-GER** **far=ADVZ**]

 ‘He ran to defecate far away.’

As is the case with subordination by time, in subordination by purpose, when the subjects are not coreferential, either a new overt subject (in case of a transitive verb) or a non-coreferential pronominal clitic (in case of an intransitive verb) occurs.



ōn *ŋa* *tati* [*ēn* *ŋato* *nā̃t* *wa*]

ōn *ŋa* *ta-ti* [*ēn* *ŋa=top* *nā̃t* *o=ʔe-a*]

1SG **3SG.FEM** **COMIT-come-IND1** [**2SG** **3SG=see** **PURP** **1SG=AUX-GER**]

 ‘I brought her so that you could see her.’



ma ʔwɨ *owin* [*owəy* *nā̃* *nā̃t* *to ʔwa*]

ma ʔwɨ *o=wit-t* [*o=wəy* *nā̃* *nā̃t* *to=ʔe-a*]

man **1SG=feed-IND1** [**1SG=grow.up** **COP** **PURP** **3R=AUX-GER**]

 ‘The man fed me so that I would grow up.’

In the majority of the examples in my corpus, nevertheless, the semantically dependent clause in cause constructions does not occur sentence-finally (as in the examples above), but rather at the beginning of the sentence. In fact, in these examples, three clauses occur. The first clause, marked with the indicative mood –t, is the cause clause. The second clause, also marked with the indicative mood –t, is the clause where the subject of the sentence is specified. (It seems to have only a grammatical meaning.) And finally, the third clause, marked with the gerund mood –a, expresses the (re)action intended.

<i>[wawwaw bay]</i>	<i>ye</i>	<i>ŋaʔet</i>	<i>toyaʔwara</i>
<i>[wawwaw pap-t]</i>	<i>ye</i>	<i>ŋa=ʔe-t</i>	<i>to=yaʔwat-a</i>
[dog die-IND1]	CAUSE	3SG.FEM=AUX-IND1	3R=leave-GER

‘Because the dog died, she left.’

<i>[ar otoy]</i>	<i>ye</i>	<i>wer</i>	<i>oweʔcɪ̃a</i>
<i>[at o=top-t]</i>	<i>ye</i>	<i>o=ʔe-t</i>	<i>o=peʔcɪ̃-a</i>
[3SG 1SG=see-IND1]	CAUSE	1SG=AUX-IND1	1SG=run-GER

‘Because he/it saw me, I ran.’

<i>[ŋaken]</i>	<i>yəye</i>	<i>wer</i>	<i>oyaʔwara</i>
<i>[ŋa=ket-t]</i>	<i>yəye</i>	<i>o=ʔe-t</i>	<i>o=yaʔwat-a</i>
[3SG.FEM=sleep-IND1]	CAUSE	1SG=AUX-IND1	1SG=leave-GER

‘Because she slept, I left.’

Because I have no examples of cause constructions in which the absolutive argument of the *main* clause is coreferential with the absolutive argument of the *dependent* clause, it was not possible to establish a general pattern of grammatical relations for this type of construction.

CHAPTER 5

THE CLASSIFIER SYSTEM

Karo has a system of classifiers which occur with nouns in noun phrases. In Table 9 below I present the small set of Karo classifiers with the semantic categories to which they belong, their approximate meanings, and morphological glosses. In subsections 5.1 and 5.2, I describe the formal and semantic properties of Karo classifiers, discussing these properties in the light of current typological proposals. Section 5.3 deals with discourse properties of classifiers.

	CLASSIFIER	CATEGORY	MEANING (APPROXIMATE)	MORPH. GLOSS
1.	<i>pap</i>	shape	cylindrical, big	CL.CYLB
2.	<i>?ip</i>	shape	cylindrical, medium	CL.CYLM
3.	<i>pí?</i>	shape	cylindrical, small	CL.CYLS
4.	<i>pe?</i>	shape	flat	CL.FLAT
5.	<i>cí?</i>	shape	thin flat	CL.TFLAT
6.	<i>?a?</i>	shape	round	CL.RD
7.	<i>ká?</i>	shape	concave or convex	CL.CCV
8.	<i>kap</i>	arrangement	bunch, same source	CL.BSS
9.	<i>ma?</i>	arrangement	bunch, different source	CL.BDS
10.	<i>ŋa</i>	gender	feminine	CL.FEM
11.	<i>nā⁴⁶</i>	?	?	—

Table 9: The classifiers of Karo

⁴⁶ *nā?* was found to occur with two nouns, 'fire' and 'manioc'. Its meaning remains unknown.

Some examples of nouns with their correspondent classifiers are:

pap

məga pap	‘rat (sp.)’
makara pap	‘heron’
parat pap	‘fish (sp.)’
paramit pap	‘spider’
macōm pap	‘shrimp’
maʔpe pap	‘basket’
ite pap	‘uncle’

ip

motogo ʔip	‘monkey (sp.)’
īya ʔip	‘bird’
imo ʔip	‘fish (sp.)’
mate ʔip	‘fruit (sp.)’
wáya ʔip	‘spoon’
toto ʔip	‘grandson’

píʔ

cáp píʔ	‘leg’
wakāya píʔ	‘rodent (sp.)’
kāram píʔ	‘hummingbird’
cawāy píʔ	‘fish (sp.)’

maʔip píʔ ‘handle of an axe’

capop píʔ ‘tail’

peʔ

magoyapan peʔ ‘wild dog’

cibekon peʔ ‘vulture’

yaw peʔ ‘river ray’

kiriwep peʔ ‘butterfly’

pá peʔ ‘hand’

pí peʔ ‘foot’

koya peʔ ‘crab’

cíʔ

wəwə cíʔ ‘hand fanner’

tem cíʔ ‘wing’

naʔyop cíʔ ‘leaf (also: ‘money’)’

ʔaʔ

naʔto ʔaʔ ‘tapir’

wām ʔaʔ ‘bird (sp.)’

ip nakāra ʔaʔ ‘fish (sp.)’

koya ʔaʔ ‘crayfish’

op ʔaʔ ‘papaya’

wen ?a?	‘moon’
ka?a ?a?	‘house’
icagá ?a?	‘eye’
móa ?a?	‘turtle (sp.)’

ká?

yaracewak ká?	‘wild pig’
pecía ká?	‘bird (sp.)’
yomīt ká?	‘palm tree (sp.)’
makóp ká?	‘light bulb’
ma?ẽ ká?	‘pot/pan’
yomã ká?	‘thigh’
matek ká?	‘palm tree (sp.)’

kap

?õt kap	‘caterpillar’
makap kap	‘peanut’
iya kap	‘gravel’
pĩu kap	‘maraca’
yāy kap	‘tooth’
yo?kĩ kap	‘palm tree (sp.)’

ma?

ma?ta ma?	‘bean’
cici ma?	‘mosquito (sp.)’
koropía ma?	‘edible root (sp.)’

ŋa

corap ŋa	‘girlfriend’
cey ŋa	‘wife’
owā ŋa	‘mother’
toto ŋa	‘granddaughter’
apəy ŋa	‘grandmother’
anāt ŋa	‘sister’

nā?

cán nā?	‘fire’
mani nā?	‘cooked manioc’

5.1 FORMAL PROPERTIES

From a strictly formal point of view, the classifiers of Karo can be categorized as belonging to the class of particles, although it is possible to recognize a nominal or pronominal origin for some of them. *ʔa?* is also a free noun which means ‘fruit’, and *ŋa* is also the third person singular feminine pronoun. The phonological and morphological evidence used to establish this categorization is provided below.

PHONOLOGY: Classifiers in Karo carry their own stress and, in some cases high pitch (cf. in Table 9 eg. 3, 5 and 7).

The phonological alternations that occur with the classifiers in Karo are similar to those of other words. In these, an initial voiceless stop consonant becomes voiced following the vowel of a preceding word. Furthermore, the initial vowel of a particle, noun, verb or adjective causes the voiceless consonant at the end of a preceding word to be voiced.

MORPHOLOGY: No affixation can occur with classifiers in Karo. Classifiers, as well as other particles, do not participate in any process of inflection or derivation.

As is usual in classifier languages, not all nouns in Karo are classifiable. The non-classifiable nouns seem to fall into one of the following categories:

- 1) intrinsically shapeless referents, like liquids: *ici* ‘water’, *-yu*⁴⁷ ‘blood’, *-cik* ‘urine’, *kuru?cu* ‘saliva’, etc., or powdery substances, like *-mōy* ‘powder’, *igana* ‘dirt’, etc.;
- 2) referents whose shape is not perceived as unique or stable, like *cimīto* ‘shadow’, *carogīn* ‘cloud, smoke’, *-piru* ‘footprint’, *-caki* ‘slice, piece’, *cīm* ‘meat’, *-pacop* ‘paste’, *-pe?wap* ‘mash’, *-wirap* ‘food’, *-mōy* ‘dust, powder’, *-cək* ‘hole’, etc.;

⁴⁷ Nouns marked by a dash are inalienably possessed and thus require either a noun or a personal clitic before them. Nouns without the dash mark mean that they are alienably possessed and do not need anything preceding them to occur freely.

- 3) body parts, or things somehow connected to the body, like -capə 'penis', -cere 'vagina', -cigā 'bone', -mot 'body hair', -naʔcap 'head hair', -ʔora cək 'anus', -naʔcək 'nostril', -ʔora 'excrement', -wero 'speech', -ce 'smell', etc.;
- 4) elements of nature, like anaŋot 'wind', amān 'rain', caʔwap 'sun', mapəy 'rainbow';
- 6) abstract nouns, like oracece 'soul, spirit', toto 'God', etc.;
- 7) verb and adjective nominalizations⁴⁸, like magopi ʔop 'tick eater', macaʔit top 'domestic animal watcher', etc.

A noteworthy property of the classifiers in Karo is the fact that, since their occurrences are always associated with a (very) specific characteristic of the nouns with which they occur, there is no general default classifier, as is found in other classifier systems. Generally speaking, classifiers in Karo are not obligatory. Their occurrence is always associated with a (very) specific characteristic of the referent with which they occur.

Classifiers in Karo occur exclusively inside the noun phrase, in three basic types of constructions: a) with a head noun [N + CL]; b) in genitives [N + N + CL]; and c) in compounds [N + CL + N]. In sections 5.1.1, 5.1.2 and 5.1.3 below I give a complete description of each of these types, respectively.

5.1.1 HEAD NOUNS

The prototypical occurrence of classifiers in Karo is after the head noun of a noun phrase.

<i>wayo</i>	<i>bap</i>	<i>māygāra</i>	<i>bap</i>
<i>wayo</i>	<i>pap</i>	<i>māygāra</i>	<i>pap</i>
alligator	CL.CYLB	snake	CL.CYLB
‘alligator’		‘snake’	
<i>ṽya</i>	<i>ʔɸ</i>	<i>wáya</i>	<i>ʔɸ</i>
<i>ṽya</i>	<i>ʔɸ</i>	<i>wáya</i>	<i>ʔɸ</i>
bird	CL.CYLM	spoon	CL.CYLM
‘bird (general)’		‘spoon’	
<i>icāp</i>	<i>píʔ</i>	<i>icapop</i>	<i>píʔ</i>
<i>i=cāp</i>	<i>píʔ</i>	<i>i=capop</i>	<i>píʔ</i>
3IMP=leg	CL.CYLS	3IMP=tail	CL.CYLS
‘leg’		‘tail’	
<i>ibeon</i>	<i>meʔ</i>	<i>ipá</i>	<i>beʔ</i>
<i>i=peon</i>	<i>peʔ</i>	<i>i=pá</i>	<i>peʔ</i>
3IMP=skin	CL.FLAT	3IMP=hand	CL.FLAT
‘skin’		‘hand’	

⁴⁸ One exception I found was *cīm ma ʔwa-p peʔ* ‘frying pan’, which has the classifier *peʔ*, used for flat objects.

na ʔyop *cíʔ*
na ʔyop *cíʔ*
 leaf **CL.TFLAT**
 ‘leaf (also: money)’

wəwə cíʔ
wəwə cíʔ
 fanner **CL.TFLAT**
 ‘hand fanner’

karo ʔaʔ
karo ʔaʔ
 macaw **CL.RD**
 ‘macaw’

icagá ʔaʔ
i=cagá ʔaʔ
 3IMP=eye **CL.RD**
 ‘eye’

ināk káʔ
i=nāk káʔ
 3IMP=mouth **CL.CCV**
 ‘mouth’

maʔē gáʔ
maʔē káʔ
 pan **CL.CCV**
 ‘pan’

makap kap
makap kap
 peanut **CL.BSS**
 ‘peanut’

iyāy gap
i=yāy kap
 3IMP=tooth **CL.BSS**
 ‘teeth’

maʔta maʔ
maʔta maʔ
 bean **CL.BDS**
 ‘beans’

cicí maʔ
cicí maʔ
 mosquito **CL.BDS**
 ‘mosquito’⁴⁹

⁴⁹ These mosquitos are found always in swarms.

<i>maʔpəy</i>	<i>ŋa</i>	<i>icey</i>	<i>ŋa</i>
<i>maʔpəy</i>	<i>ŋa</i>	<i>i=cey</i>	<i>ŋa</i>
woman	CL.FEM	3IMP=wife	CL.FEM
‘woman’		‘wife’	
<i>mani</i>	<i>nāʔ</i>	<i>cán</i>	<i>nāʔ</i>
<i>mani</i>	<i>nāʔ</i>	<i>cán</i>	<i>nāʔ</i>
manioc	CL	fire	CL
‘manioc’		‘fire’	

5.1.2 GENITIVES

Classifiers can also occur in genitive constructions, if the head noun is classifiable. In these constructions, the classifier occurs after the sequence [N + N_{head}], and has its scope over the resulting [N + N_{head}] construction, not over the first or second noun alone.

This fact can be seen by comparing the examples below, where the classifier used to refer to ‘alligator’ and ‘honey-eater’ is the same, *pap*, whereas the classifiers used to refer to the final genitive constructions ‘mouth of alligator’ and ‘mouth of honey-eater’ are different. In the first case the classifier used is *pap*, in conformity with the shape of the mouth of an alligator, and in the second case the classifier used is *káʔ*, in conformity with the shape of the mouth of a honey-eater⁵⁰.

⁵⁰ *káʔ* is also the classifier for ‘mouth’ alone.

wayo *nāk* *pap*
wayo *nāk* *pap*
alligator mouth **CL.CYLB**
'mouth of (an) alligator'

ei *nāk* *ká?*
ei *nāk* *ká?*
honey-eater mouth **CL.CCV**
'mouth of (a) honey-eater'

It is also very common that a classifier referring to the whole genitive construction matches the classifier of the head noun. This can be explained by the fact that the semantic properties of the whole genitive construction usually coincide with the semantic properties of the head noun. One example is the second of the two examples above, where the classifier of the final genitive construction, *ká?*, is the same used for 'mouth' alone. Other examples are below:

wayo *yogá* *be?*
wayo *yogá* *pe?*
alligator tongue **CL.FLAT**
'tongue of (an) alligator'

where the classifier of *wayo* is *pap*, and the classifier of *yogá* is *pe?*

wayo *nak̄ra be?*
wayo *nak̄ra pe?*
 alligator ear CL.FLAT
 ‘ear of (an) alligator’

where the classifier of *wayo* is *pap*, and the classifier of *nak̄ra* is *pe?*

aʔi *nāk* *ká?*
aʔi *nāk* *ká?*
 sloth mouth CL.CCV
 ‘mouth of (a) sloth’

where the classifier of *aʔi* is *ʔa?*, and the classifier of *nāk* is *ká?*

Furthermore, in some other cases, the classifier employed in the genitive construction is equivalent to the classifier of the first noun alone. In these instances, it can be assumed that the semantic classification of the referent is somehow identified with the semantic property of the referent of the first noun.

kāram *nāk* *pí?*
kāram *nāk* *pí?*
 hummingbird mouth CL.CYLS
 ‘mouth of (a) hummingbird’

where the classifier of *kāram* is *pí?*, and the classifier of *nāk* is *ká?*,

kāram *yogá* *bí?*

kāram *yogá* *pí?*

hummingbird tongue CL.CYLS

‘tongue of (a) hummingbird’

where the classifier of *kāram* is *pí?*, and the classifier of *yogá* is *pe?*,

karo *nāg* *a?*

karo *nāk* *ʔa?*

macaw mouth CL.RD

‘mouth of (a) macaw’

where the classifier of *karo* is *ʔa?*, and the classifier of *nāk* is *ká?*,

karo *yogá* *ʔa?*

karo *yogá* *ʔa?*

macaw tongue CL.RD

‘tongue of (a) macaw’

where the classifier of *karo* is *ʔa?*, and the classifier of *yogá* is *pe?*.

Finally, when the head noun is not classifiable, the sequence [N + N_{head}] does not take any classifier⁵¹.

wayo *biru*
wayo *piru*
alligator footprint
‘footprint of (an) alligator’

ameko *ʔora*

ameko *ʔora*

jaguar excrement
‘excrement of (a) jaguar’

⁵¹ Some speakers do employ the classifier of the modifying noun in these constructions.

<i>wayo</i>	<i>biru</i>	<i>bap</i>
<i>wayo</i>	<i>piru</i>	<i>pap</i>
alligator	footprint	CL.LONG.BIG
‘footprint of (an) alligator’		

<i>ameko</i>	<i>ʔora</i>	<i>ʔaʔ</i>
<i>ameko</i>	<i>ʔora</i>	<i>ʔaʔ</i>
jaguar	excrement	CL.ROUND
‘excrement of (a) jaguar’		

<i>kāram</i>	<i>wirap</i>	<i>píʔ</i>
<i>kāram</i>	<i>wirap</i>	<i>píʔ</i>
hummingbird	food	CL.LONG.SML
‘hummingbird’s food’		

<i>parato</i>	<i>cək</i>	<i>peʔ</i>
<i>parato</i>	<i>cək</i>	<i>peʔ</i>
armadillo	hole	CL.FLAT
‘hole of (an) armadillo (sp.)’		

kāram *wirap*
kāram *wirap*
 hummingbird food
 ‘hummingbird’s food’

parato *cək*
parato *cək*
 armadillo hole
 ‘hole of (an) armadillo (sp.)’

5.1.3 COMPOUNDS

Compounds in Karo always involve the conjunction of two nouns or noun roots. In compounds, a classifier occurs between the two nouns, where the second noun is also the head of the construction: [N + CL + N_{head}]. The first noun in a compound must be classifiable, though the second (head) noun need not be. This seems to account for the fact that it is always the classifier of the first noun which enters the compound construction, and has its scope over the first noun alone and not over the whole construction.

ñu *bap* *ci*
ñu *pap* *ci*
 açai CL.CYLB water
 ‘açai wine’

cat pap caki
cat pap caki
 log CL.CYLB piece
 ‘wood piece (piece of wood)’

nāya gap pe ḷwap
nāya kap pe ḷwap
 corn CL.BSS mash
 ‘corn mash’

Finally, when an adjective occurs in any of the three types of constructions above, the classifier also occurs obligatorily after the adjective, in concord⁵².

a) with head nouns:

wayo bap cú bap
wayo pap cú pap
 alligator CL.CYLB big CL.CYLB
 ‘big alligator’

ṽya ḷḗp pā́r ḗp
ṽya ḷḗp pā́t ḷḗp
 bird CL.CYLM beautiful CL.CYLM
 ‘beautiful bird’

⁵² I found only rare cases where two adjectives occur in a row, referring to the same noun.

ma ḷpəy ḡa pā́ra ḡa cú ḡa
ma ḷpəy ḡa pā́t ḡa cú ḡa
 woman CL.FEM beautiful CL.FEM big CL.FEM
 ‘beautiful and big woman’

<i>icǎp</i>	<i>pí?</i>	<i>cára</i>	<i>bí?</i>
<i>i=cǎp</i>	<i>pí?</i>	<i>cára</i>	<i>pí?</i>
3IMP=leg	CL.CYLS	long	CL.CYLS
‘long leg’			

<i>ibeon</i>	<i>me?</i>	<i>kĩn</i>	<i>me?</i>
<i>i=peon</i>	<i>pe?</i>	<i>kĩn</i>	<i>pe?</i>
3IMP=skin	CL.FLAT	hard	CL.FLAT
‘hard skin’			

<i>naʎyop</i>	<i>cí?</i>	<i>cú</i>	<i>cí?</i>
<i>naʎyop</i>	<i>cí?</i>	<i>cú</i>	<i>cí?</i>
leaf	CL.TFLAT	big	CL.TFLAT
‘big leaf’			

<i>karo</i>	<i>ʎa?</i>	<i>pǎr</i>	<i>a?</i>
<i>karo</i>	<i>ʎa?</i>	<i>pǎt</i>	<i>ʎa?</i>
macaw	CL.RD	beautiful	CL.RD
‘beautiful macaw’			

<i>i-nǎk</i>	<i>ká</i>	<i>becép</i>	<i>ká?</i>
<i>i-nǎk</i>	<i>ká?</i>	<i>pecép</i>	<i>ká?</i>
3IMP=mouth	CL.CCV	ugly	CL.CCV
‘ugly mouth’			

<i>makap</i>	<i>kap</i>	<i>cú</i>	<i>gap</i>
<i>makap</i>	<i>kap</i>	<i>cú</i>	<i>kap</i>
peanut	CL.BSS	big	CL.BSS

‘big peanut’

<i>maʔta maʔ</i>	<i>kǎp</i>	<i>maʔ</i>	
<i>maʔta maʔ</i>	<i>kǎp</i>	<i>maʔ</i>	
bean	CL.DS	delicious	CL.BDS

‘delicious beans’

<i>maʔpəy</i>	<i>ŋa</i>	<i>pǎra</i>	<i>ŋa</i>
<i>maʔpəy</i>	<i>ŋa</i>	<i>pǎt</i>	<i>ŋa</i>
woman	CL.FEM	beautiful	CL.FEM

‘beautiful woman’

<i>mani nǎʔ</i>	<i>cú</i>	<i>nǎʔ</i>	
<i>mani nǎʔ</i>	<i>cú</i>	<i>nǎʔ</i>	
manioc	CL	big	CL

‘big manioc’

b) in genitive constructions:

<i>wayo</i>	<i>nǎk</i>	<i>pap</i>	<i>cú</i>	<i>bap</i>
<i>wayo</i>	<i>nǎk</i>	<i>pap</i>	<i>cú</i>	<i>pap</i>
alligator	mouth	CL.CYLB	big	CL.CYLB

‘big alligator mouth’

<i>ei</i>	<i>nāk</i>	<i>ká?</i>	<i>cú</i>	<i>gá?</i>
<i>ei</i>	<i>nāk</i>	<i>ká?</i>	<i>cú</i>	<i>ká?</i>
honey-eater	mouth	CL.CCV	big	CL.CCV
'big mouth of (a) honey-eater'				

<i>wayo</i>	<i>yogá</i>	<i>be?</i>	<i>cára</i>	<i>be?</i>
<i>wayo</i>	<i>yogá</i>	<i>pe?</i>	<i>cára</i>	<i>pe?</i>
alligator	tongue	CL.FLAT	long	CL.FLAT
'long tongue of (an) alligator'				

<i>kāram</i>	<i>nāk</i>	<i>pí?</i>	<i>ʔn</i>	<i>pí?</i>
<i>kāram</i>	<i>nāk</i>	<i>pí?</i>	<i>ʔn</i>	<i>pí?</i>
hummingbird	mouth	CL.CYLS	small	CL.CYLS
'small mouth of (a) hummingbird'				

<i>karo</i>	<i>nāg</i>	<i>a?</i>	<i>pīg</i>	<i>a?</i>
<i>karo</i>	<i>nāk</i>	<i>ʔa?</i>	<i>pīk</i>	<i>ʔa?</i>
macaw	mouth	CL.RD	black	CL.RD
'black mouth of (a) macaw'				

c) in compounds:

<i>ñu</i>	<i>bap</i>	<i>ci</i>	<i>kāp</i>	<i>pap</i>
<i>ñu</i>	<i>pap</i>	<i>ci</i>	<i>kāp</i>	<i>pap</i>
açai	CL.CYLB	water	delicious	CL.CYLB
'delicious açai wine'				

<i>cat</i>	<i>pap</i>	<i>cakɪ</i>	<i>wɪn</i>	<i>map</i>
<i>cat</i>	<i>pap</i>	<i>cakɪ</i>	<i>wɪn</i>	<i>pap</i>
log	CL.CYLB	piece	curved	CL.CYLB
'curved piece of wood'				
<i>nāya</i>	<i>gap</i>	<i>pe ʔwap</i>	<i>pa ʔpik</i>	<i>kap</i>
<i>nāya</i>	<i>kap</i>	<i>pe ʔwap</i>	<i>pa ʔpik</i>	<i>kap</i>
corn	CL.BSS	mash	lots.of	CL.BSS
'lots of corn mash'				

When these formal properties of Karo are examined in the light of the current typologies of noun classification, especially the typology of noun classes vs. noun classification proposed by Dixon (1986), it appears that Karo does not seem to belong to either type.

Roughly speaking, Dixon establishes a set of criteria which can be used to distinguish noun classes (as a grammatical category which occurs prototypically with Bantu languages) from noun classification (as a lexico-syntactic phenomenon which includes numeral classifiers). Three criteria are proposed, a) size, b) realization, and c) scope.

According to the first criterion, *noun class* systems are those in which all nouns are grouped into a smaller number of classes, each noun necessarily belonging to one specific class. *Noun classifier* languages, on the other hand, have the opposite characteristics of presenting a richer number of classifiers (over 100 being common), allowing some nouns not to be classifiable, as well as allowing some other nouns to be classifiable in more than one way. The Karo classifier system seems to fit into his second type of languages, except that it contains a small inventory of classifiers.

The second criterion postulates that *noun classes* are closed grammatical sets, usually coded by means of affixes or clitics, whereas *noun classifiers* are always free forms. By this criterion, Karo fits into the second type perfectly.

The last criterion postulates that the marking of *noun classes* ‘is never entirely within the noun word’ but spread ‘concordially to some other words in the sentence’ (1986:106). *Classifiers*, on the other hand, are restricted in their occurrence to the ‘noun phrase in which they co-occur with the specific noun’ (1986:107). According to this last criterion, nevertheless, Karo should be characterized as a *noun class* language instead of a *classifier* language since, as we have seen in the description above, when an adjective in Karo modifies a noun plus its classifier, the same classifier occurs obligatorily after the adjective as well, in concord.

5.2 SEMANTIC PROPERTIES

Following the typology established by Allan 1977, it is possible to recognize three types of semantic properties conveyed by the classifiers of Karo: shape, arrangement and gender⁵³.

Shape seems to be the most prominent feature of the three. In Karo, a classifier is employed to refer to the most prominent **form** or **format** of the referents as they are found in nature⁵⁴. As can be seen in Table 9 above, seven out of the 11 classifiers which occur in Karo (*pap*, *?íp*, *pí?*, *pe?*, *cí?*, *?a?*, and *ká?*) pertain to the shape of the referent they classify.

⁵³ The semantic property of ‘gender’ is labeled ‘material’ in Allan’s typology. The difference is merely terminological, not empirical.

⁵⁴ The category of shape in Karo does not refer, as is usual to occur with other classifier languages, to the number of dimensions of the referents, one vs. two vs. three dimensions. This can be seen, for example, with the classifier *?a?* ‘round’, which occurs with referents perceived as having either one dimension (such as ‘moon’, ‘eye’, etc.), two dimensions (such as ‘coin’, ‘turtle’, etc.) or three dimensions (such as ‘papaya’, ‘house’, etc.).

The category of **arrangement** refers to the way in which referents occur intrinsically arranged in nature. In Karo, only referents which are arranged in bunches are classifiable, according to two different perspectives, 1) those items which are found in bunches grouped together by means of a common source (in which case the classifier *kap* is employed), and 2) those items which are found in bunches without being tied by a common source (in which case the classifier *ma?* is used).

Gender is used to refer to female referents, particularly with kin terms (cf. *ma?pəy* ‘woman’, *-cey* ‘wife’, *owā* ‘mother’, *apəy* ‘grandmother’, etc.).

Furthermore, following Denny (1976) and his characterization of the use of classifiers as establishing a physical, social or functional interaction with the nouns to which they refer, the classifiers of Karo can be characterized as establishing primarily a **physical** interaction with their nouns. Nine out of the 11 classifiers of Karo refer to physical properties of the nouns, either shape or arrangement. A type of **social** interaction is also represented in Karo and is conveyed by the tenth known classifier, *ŋa* ‘feminine’⁵⁵. **Functional** interaction, as the third possible kind of interaction recognized by Denny, is not a property of Karo classifiers.

An interesting semantic characteristic of the Karo classifier system is the fact that a given noun may co-occur with a variety of classifiers. The alternatives have the effect of either highlighting different characteristics of the referent of the noun with which they occur or changing their reference. In the first case, there always seems to be an interaction between the two semantic forms of physical categorization, arrangement and shape, in which the reference can be made by

⁵⁵ Here I am considering the classifier *ŋa* ‘feminine’ to represent a **social** type of interaction since gender distinctions seem to fall, in one way or another, into social distinctions.

focusing on either the first or the second. When the focus is on **arrangement** the resulting effect is that of plurality of the referent.⁵⁶ When the focus is on **shape**, the resulting effect is on the singularity of the referent.

a) highlighting different aspects of nouns:

<i>opá</i>	gap	<i>cf.</i>	<i>opá</i>	gá?
<i>o=pá</i>	kap		<i>o=pá</i>	ká?
1SG=hand	CL.BSS		1SG=hand	CL.CCV
‘(all) my fingers’			‘my (one) finger’	
<i>iyã</i>	gap	<i>cf.</i>	<i>iyã</i>	?a?
<i>iyã</i>	kap		<i>iyã</i>	?a?
Brazil.nut	CL.BSS		Brazil.nut	CL.RD
‘Brazil nuts in their shell’			‘one Brazil nut’	
<i>oyã</i>	gap	<i>cf.</i>	<i>oyã</i>	gá?
<i>o=yã</i>	kap		<i>o=yã</i>	ká?
1SG=tooth	CL.BSS		1SG=tooth	CL.CCV
‘(all) my teeth’			‘my (one) tooth’	

⁵⁶ The semantic plurality conveyed by the two arrangement classifiers, *kap* and *ma?*, should be kept distinct from morphological plurality, marked by the enclitic *=to?*.

b) changing reference:

<i>iyá</i>	gap	<i>cf.</i>	<i>iyá</i>	be?	<i>cf.</i>	<i>iyá</i>	?a?
<i>iyá</i>	kap		<i>iyá</i>	pe?		<i>iyá</i>	?a?
stone	CL.BSS		stone	CL.FLAT		stone	CL.RD
'gravel'			'digging stick'			'stone'	

<i>were</i>	be?	<i>cf.</i>	<i>were</i>	bi?
<i>were</i>	pe?		<i>were</i>	pi?
frog	CL.FLAT		frog	CL.CYLS
'toad'			'frog'	

<i>ipá</i>	be?	<i>cf.</i>	<i>ipá</i>	gap	<i>cf.</i>	<i>ipá</i>	gá?
<i>i=pá</i>	pe?		<i>i=pá</i>	kap		<i>i=pá</i>	ká?
3IMP=hand	CL.FLAT		3IMP=hand	CL.BSS		3IMP=hand	CL.CCV
'hand'			'fingers'			'(one) finger'	

It is also possible, on the other hand, for two classifiers to co-occur with a single noun. This has been observed especially with the classifiers *pap* and *?a?*, used in this exact sequence to refer to a mixed shape of long and round referents.

<i>ca ?wə</i>	pab	a?
<i>ca ?wə</i>	pap	?a?
thorn	CL.CYLB	CL.RD
'thorn (sp.)'		

mok pab a?
mok pap ?a?
 cotton CL.CYLB CL.RD
 ‘hip ornament (made of cotton)’

paya bab a?
paya pap ?a?
 palm.tree CL.CYLB CL.RD
 ‘chest ornament (made of palm tree leaves)’

5.3 DISCOURSE PROPERTIES

Studies dealing with the discourse properties of classifiers are almost non-existent, probably because very little is known on the subject.

In Chafe (1994) we find a discussion of the the role of classifiers in languages where they do not occur as an obligatory category. Chafe suggests that the occurrence vs. non-occurrence of classifiers can be explained in terms of the importance of the referents in discourse. According to him, important referents tend to be introduced into the discourse by means of a N + CL construction, and to be subsequently mentioned by the use of a CL. Unimportant referents tend to be introduced by means of a noun and be mentioned subsequently by a pronoun.

Further research in Karo needs to be conducted in order to determine whether the same principles govern the discourse use of classifiers in Karo.

CHAPTER 6

THE IDEOPHONE SYSTEM

Karo has a set of words that should be regarded as forming a separate class from regular nouns, verbs, adjectives, adverbs, particles and conjunctions. The words of this set have several properties that they share with other word classes, but not exclusively. From the point of view of semantics, they are similar to verbs, in the way their meanings convey descriptions of actions or states, but they are not subject to the same derivational or inflectional processes as regular verbs or auxiliaries. From the point of view of morphology, they are closely related to particles, since they show no internal morphological structure, but they do not have the same syntactic distribution as particles in the language. Still from the point of view of morphology, they could be regarded as somehow related to verbs or adjectives, given that they receive the adverbializer clitic =*tem*, but, again, they do not show the same properties as regular verbs or adjectives. From the point of view of syntax, they show the same patterns of distribution in Karo clauses in a great number of cases as adverbs. But not in *all* cases, a fact that distinguishes them from adverbs. The facts just mentioned seem to justify the appropriateness of considering this class of words, given their coherence and independence, as a separate word category. For typological reasons, we will call them ideophones.

6.1 BACKGROUND

Ideophones are usually defined as a class of words of onomatopoeic form which have their own sound system different from the overall phonetic and phonological systems of the language in which they occur. Ideophones are also thought to be inherently salient semantically.

Although all languages seem to have expressions that could, at first sight, be regarded as ideophones, not all languages have ideophones as a grammatically consistent category.

The occurrence of ideophones was first noticed and described in African languages (cf. Doke 1935; Fivaz 1963; Moore 1969; Newman 1968; Samarin 1965, 1967, 1970a, 1970b, 1971a, 1971b, 1972). Later descriptions of ideophone systems also included a few Asian languages, such as Japanese (cf. Hirose 1989; Ono 1984), Korean (cf. Kim 1977; Lee 1992; Martin 1962; You 1989), Semai (cf. Diffloth 1976), and Telugu (cf. Selvam 1988). It is mostly within African languages, however, that ideophones are known to be a widespread phenomenon (cf. Awoyale 1981; Childs 1988; Courtenay 1976; Fordyce 1978, 1983; Hutchison 1989; Johnson 1975; Kulemeka 1993; Kunene 1972; Moshi 1993; Mphande and Rice 1989; Noss 1986; Ottenheimer and Primrose 1990; Von Staden 1974; Weakley 1973 among others).

The general characteristics of ideophones among these languages are, nevertheless, very diverse. Descriptions of ideophone systems are highly contestable and still an arena of debate. Some authors, for example, still dispute basic principles, such as whether ideophones should be considered a separate class of speech (cf. Awoyale 1981; Kunene 1972) or a subclass of adverbs (cf. Doke 1935; Ottenheimer and Primrose 1990) or even a subclass of adjectives (cf. Okonkwo 1974).

Given this controversy, a comparison between the phenomenon of ideophones and other grammatical subsystems like evidentials or classifiers shows that we are still far from a comprehensive understanding of their typology, function, historical development and cognitive basis. This will only be achieved when the research on the subject incorporates more descriptions from a variety of languages around the world.

6.2 THE IDEOPHONES OF KARO

Ideophones in Karo form an open class of words with verbal meanings. The full range of properties of Karo ideophones is described below from the point of view of phonetics/phonology, morphology, syntax, semantics and discourse, respectively. As I hope will become clear, the properties of the ideophones presented below will serve as grounds for characterizing them as a class of words apart from other classes of words in Karo. For the sake of exemplification, I provide a non-exhaustive list of Karo ideophones at the end of the chapter.

6.2.1 PHONETICS AND PHONOLOGY

It is commonly observed that the class of ideophones possesses phonetic and phonological characteristics that distinguish them from other word classes in the languages in which they occur. Karo is no exception. Although the majority of the phonetic elements that are used to form other classes of words are also used to form the ideophones, one specific sound found so far does not. There could be more than one, nevertheless, not yet registered in my records. The symbol used for this sound and its description are as follows:

[t̪p̪] : voiceless dental bilabial stop with bilabial trill release

This sound occurs in an ideophone which has the meaning of ‘jump’, as in:

t̪p̪u ameko ʔet

t̪p̪u ameko ʔe-t

jump jaguar AUX-IND1

‘The jaguar jumped.’

Another important phonetic/phonological characteristic of ideophones in Karo is the fact that it is only in this class of words that sequences of two consonants are allowed to occur in the same syllable. Although this is not a widespread phenomenon in the Karo community, several speakers of Karo do have a tendency to omit the first vowel in bisyllabic sequences if the second syllable begins with /r/. The resulting form is a monosyllabic element with an initial Cr cluster. Thus, ideophones like parak [ˈparakʔ] ‘perforate’, or m̄irik [ˈm̄irikʔ] ‘pinch’, are usually pronounced as [ˈprakʔ] and [ˈm̄rikʔ], respectively⁵⁷.

6.2.2 MORPHOLOGY

From the point of view of morphology, an important characteristic of ideophones in Karo is the fact that they do not receive inflectional markers. In fact, they do not participate in any derivational processes characteristic of verbs, nouns and adjectives. Ideophones do not receive any of the modal markers that verbs and auxiliaries do (INDICATIVE *-t* and *-p* or GERUND *-a*); they do not

⁵⁷ This shortening in syllable structure does not occur when the ideophone begins with either /w/ or /y/.

receive any personal proclitics as verb phrases or noun phrases do; they do not receive any of the valence changing prefixes that verbs do (CAUSATIVE *ma-*, COMITATIVE CAUSATIVE *ta-*, IMPERSONAL PASSIVIZER *pe-*, OPTATIVE *peʔ-*, RECIPROCAL *mām-* or REFLEXIVE *toro-*); and do not occur with any clitics (PLURAL =*toʔ*, ASSOCIATIVE =*tap*)⁵⁸.

A further important characteristic of ideophones in Karo is the fact that they allow reduplication of their roots. This is a process exclusive to the class of ideophones. The meaning achieved by reduplication of ideophones is one of iteration of the action or state being described. It should be noted that reduplication is a characteristic shared by ideophone systems in other languages of the world, with the same meaning as in Karo. As examples of reduplication, consider the pair of sentences below:

<i>púŋ</i>	<i>wet</i>	<i>péŋ</i>	<i>kəy</i>	
<i>púŋ</i>	<i>o=ʔe-t</i>	<i>péŋ</i>	<i>kəy</i>	
shoot	1SG=AUX-IND1	white.man	DAT	
'I shot the white man once.'				cf.

<i>pug</i>	<i>púŋ</i>	<i>wet</i>	<i>péŋ</i>	<i>kəy</i>
<i>pug</i>	<i>púŋ</i>	<i>o=ʔe-t</i>	<i>péŋ</i>	<i>kəy</i>
shoot	shoot	1SG=AUX-IND1	white.man	DAT
'I shot the white man several times.'				

⁵⁸ The one exception is the clitic =*tem* which can in fact occur with some ideophones.

<i>tuy</i>	<i>Babesáya</i>	<i>ŋa</i>	<i>ʔet</i>	<i>yate</i>	<i>taʔwara</i>	
<i>tuy</i>	<i>Babesáya</i>	<i>ŋa</i>	<i>ʔe-t</i>	<i>yate</i>	<i>taʔwat-a</i>	
pull	Babesáya	CL.FEM	AUX-INDI	pig	bring-GER	

‘Babesáya brought the pig by pulling it once.’ cf.

<i>tuy</i>	<i>tuy</i>	<i>Babesáya</i>	<i>ŋa</i>	<i>ʔet</i>	<i>yate</i>	<i>taʔwara</i>
<i>tuy</i>	<i>tuy</i>	<i>Babesáya</i>	<i>ŋa</i>	<i>ʔe-t</i>	<i>yate</i>	<i>taʔwat-a</i>
pull	pull	Babesáya	CL.FEM	AUX-INDI	pig	bring-GER

‘Babesáya brought the pig by pulling it repeatedly.’

Although ideophones frequently occur as the first element in Karo clauses, and are thus immune to phonological alternations, they can also occur internally and show the same changes observed in other classes of words. Roughly speaking, voiceless stops change to voiced stops after vowels or glides, and to nasal stops after nasal consonants.

6.2.3 SYNTAX

From the point of view of syntax, the category of ideophones in Karo occur in all sentence types, clause modifications (NEGATION and FUTURE), and clause combinations (clause chaining and subordination). In almost all cases, they occur accompanied by an auxiliary (either *ʔe*, *kap* or *waʔye*) and its argument. The only three types of constructions in which ideophones do not occur with an auxiliary are: 1) in negative imperative clauses, where the ideophone occurs alone with the negative marker *yahmām*; 2) in nominalizations, where the ideophone occurs with the nominalizers *kanā* or *ko=*; and 3) in time subordinate clauses, where the ideophone occurs with the conjunction *kanāp*.

A further syntactic feature of ideophones in Karo is the fact that they can co-occur with ‘normal’ verbs of related meaning.

A detailed description of these occurrences is given below.

6.2.3.1 IN SIMPLE CLAUSES

In simple clauses, ideophones occur with the auxiliary *ʔe* in the indicative or in the unmarked form of the verb⁵⁹. It is the first element in the clause, which may also have a postpositional phrase or an adverb phrase occurring at the end.

wéy wet tágɨp peʔ
wéy o=ʔe-t tágɨp peʔ
 stretch 1SG=AUX-IND1 bow LOC
 ‘I stretched the bow.’

weri weri at cahwíptem
weri weri aʔ=ʔe-t cahwíp=tem
 paddle paddle 3SG=AUX-IND1 fast=ADVZ
 ‘He paddled very fast.’

wen wen we mām
wen wen o=ʔe mām
 write write 1SG=AUX X
 ‘I am writing.’

⁵⁹ As we will see below, ideophones also occur with the auxiliary *ʔe* in the gerund mood, in other types of clauses.

6.2.3.2 IN INTERROGATIVE CLAUSES

Ideophones pattern differently in yes-no questions and information questions.

6.2.3.2.1 YES-NO QUESTIONS

In yes-no interrogatives, the ideophone occurs in different places depending upon the scope of the interrogation. When its scope is over the whole proposition (sentence), the ideophone occurs in its prototypical place, at the beginning of the sentence, followed by the auxiliary *?e* in the indicative mood, followed by the interrogative particle *ahyə*. If a postpositional phrase and/or an adverb phrase are present, they occur only after the interrogative particle.

<i>púŋ</i>	<i>at</i>	<i>ahyə</i>	
<i>púŋ</i>	<i>a?=?e-t</i>	<i>ahyə</i>	
shoot	3SG=AUX-IND I	INTERR	
‘Did he shoot?’			

<i>cut</i>	<i>cut</i>	<i>?et</i>	<i>ahyə</i>	<i>ŋakəy</i>	
<i>cut</i>	<i>cut</i>	<i>e=?e-t</i>	<i>ahyə</i>	<i>ŋa=kəy</i>	
kiss	kiss	2SG=AUX-IND I	INTERR	3SG.FEM=DAT	
‘Did you kiss her?’					

When the scope of interrogation is over the subject, then the subject nominal occurs first, followed by the interrogative particle, followed by the ideophone plus the impersonal pronominal clitic which is attached to the auxiliary *?e* in the unmarked form.

at ahyə úe úe ye
at ahyə úe úe i=ʔe
 3SG INTERR vomit vomit 3IMP=AUX
 ‘Was it him who vomited?’

ēn ahyə púŋ ye
ēn ahyə púŋ i=ʔe
 2SG INTERR shoot 3IMP=AUX
 ‘Was it you who shot?’

6.2.3.2.2 INFORMATION QUESTIONS

In interrogatives that request information, the interrogative pronoun occurs first in the sentence, followed by the ideophone plus the third person coreferential pronominal clitic *to=* attached to the auxiliary *ʔe* in the gerund mood.

nān oturum to ʔwa
nān oturum to=ʔe-a
 who climb.down 3R=AUX-GER
 ‘Who climbed down?’

nān ŋəʔŋ to ʔwa
nān ŋəʔŋ to=ʔe-a
 who turn.over 3R=AUX-GER
 ‘Who turned his head over?’

6.2.3.3 IN NEGATION

In clauses with ideophones, the negative particle *iʔke* may occur in different places, depending on the scope of negation. If it is over the whole clause, it occurs after the sequence [ideophone + AUX].

<i>kāy</i>	<i>kāy</i>	<i>wet</i>	<i>iʔke</i>
<i>kāy</i>	<i>kāy</i>	<i>o=ʔe-t</i>	<i>iʔke</i>
scratch	scratch	1SG=AUX-IND I	NEG

‘I did not scratch myself.’

If what is being negated is the action represented by the ideophone, then the ideophone occurs first in the clause, followed by a coreferential clitic pronoun attached to the auxiliary *ʔe* in the gerund form, plus the negative particle, followed once again by the auxiliary *ʔe* in the indicative form and its only argument (either pronominal or nominal).

<i>púŋ</i>	<i>wa</i>	<i>iʔke</i>	<i>wet</i>
<i>púŋ</i>	<i>o=ʔe-a</i>	<i>iʔke</i>	<i>o=ʔe-t</i>
shoot	1SG=AUX-GER	NEG	1SG=AUX-IND I

‘(What) I did (was) not shoot(ing).’

If the scope of negation is over the subject, then the subject nominal (either a pronoun or full noun phrase) occurs at the beginning of the clause, in focus position, followed by the negative particle. The ideophone then follows plus the auxiliary *ʔe* in the gerund form. The argument marked in the auxiliary is in its pronominal form and is always coreferential with the argument in focus.

maʔwɨ̄ iʔke cok cok toʔwa
maʔwɨ̄ iʔke cok cok to=ʔe-a
 man NEG grind grind 3R=AUX-GER
 ‘It was not the man who ground (it).’

ōn iʔke púŋ wa
ōn iʔke púŋ o=ʔe-a
 1SG NEG shoot 1SG=AUX-GER
 ‘It was not me who shot.’

6.2.3.4 IN IMPERATIVES

Imperative sentences with ideophones are formed simply by putting the ideophone first in the clause, followed by the second person pronominal clitic (either in the singular or in the plural) which is attached to the auxiliary *ʔe* in the gerund form. A postpositional phrase or adverbial phrase may also occur at the end of the clause.

puŋ púŋ karoʔwa
puŋ púŋ karo=ʔe-a
 shoot shoot 2PL=AUX-GER
 ‘(You PL.) shoot!’

<i>kāy</i>	<i>kāy</i>	<i>ʔa</i>	<i>et</i>	<i>kaʔa</i>	<i>ʔa</i>	<i>peʔ</i>
<i>kāy</i>	<i>kāy</i>	<i>e=ʔe-a</i>	<i>et</i>	<i>kaʔa</i>	<i>ʔa</i>	<i>peʔ</i>
scratch	scratch	2SG=AUX-GER	2SG.POSS	house	CL.RD	LOC

‘(You sg.) scratch (at your house)!’

Combinations of ideophones plus regular transitive or intransitive verbs may also occur in imperatives. In these cases, the ‘normal’ verb occurs first, in the gerund form, followed by the ideophone plus a second person pronominal clitic (again, in the singular or plural), attached to the auxiliary *ʔe* in the gerund form.

<i>aʔwīa</i>	<i>púŋ</i>	<i>ʔa</i>
<i>aʔ=wī-a</i>	<i>púŋ</i>	<i>e=ʔe-a</i>
3SG=kill-GER	shoot	2SG=AUX-GER

‘Kill it by shooting!’

6.2.3.5 IN FUTURE CLAUSES

Ideophones may occur with two types of future markers, the auxiliary *kap* ‘immediate future’, and the particle *yat* ‘future’. In both cases the ideophone is the first element in the clause.

In clauses with the auxiliary future *kap*, the ideophone is followed by *kap* and its argument (either in the pronominal or in the nominal form), then by the intransitive verb ‘go’ and its argument. The argument of the verb ‘go’ is always in the pronominal form, and it is also coreferential with the argument of the auxiliary *kap*. A postpositional phrase or an adverbial phrase may occur at the end of the clause.

<i>iyñ</i>	<i>okay</i>	<i>oʔa</i>	<i>ecǎp</i>	<i>píʔoʔ</i>	<i>peʔ</i>
<i>iyñ</i>	<i>o=kap-t</i>	<i>o=ʔe-a</i>	<i>e=cǎp</i>	<i>píʔ=toʔ</i>	<i>peʔ</i>
pinch	1SG=AUX.FUT-IND1	1SG=go-GER	2SG=leg	CL.CYLS=PL	LOC

‘I will pinch both your legs.’

In clauses with the particle *yat*, the ideophone is followed by the auxiliary *ʔe* and its only argument (either in the pronominal or in the nominal form). The future particle occurs after the auxiliary, which appears in the unmarked form.

<i>ué</i>	<i>ué</i>	<i>we</i>	<i>yat</i>
<i>ué</i>	<i>ué</i>	<i>o=ʔe</i>	<i>yat</i>
vomit	vomit	1SG=AUX	FUT

‘I will vomit.’

6.2.3.6 IN MIXED TYPES OF CLAUSES

Ideophones in Karo may also occur in clauses that mix the categories of future, negation, imperative and interrogation. The possible combinations are: [FUTURE + NEGATION], [IMPERATIVE + NEGATION], and [INTERROGATION + FUTURE].

6.2.3.6.1 FUTURE + NEGATION

Both types of futures, immediate and simple future, can occur in a negative clause with an ideophone. The type of the negative marker also changes according to the kind of future. In immediate futures, the negative particle used is

yahmām. In these clauses, the ideophone occurs first, followed by the auxiliary *ʔe* in the gerund form with a pronominal clitic attached to it. This pronominal clitic is always coreferential with the person of the argument of the future auxiliary *kap*, which occurs immediately following the auxiliary *ʔe*. The last item in the clause is the negative particle.

<i>púŋ</i>	<i>wa</i>	<i>okay</i>	<i>yahmām</i>
<i>púŋ</i>	<i>o=ʔe-a</i>	<i>o=kap-t</i>	<i>yahmām</i>
shoot	1SG=AUX-GER	1SG=AUX.FUT-IND1	NEG

‘I will not shoot.’

<i>ŋit</i>	<i>toʔwa</i>	<i>aʔkay</i>	<i>yahmām</i>
<i>ŋit</i>	<i>to=ʔe-a</i>	<i>aʔkay</i>	<i>yahmām</i>
stand.up	3R=AUX-GER	3SG=AUX.FUT-IND1	NEG

‘He will not stand up.’

In simple futures, the negative particle used is *iʔke*. In these clauses, the ideophone also occurs first, followed by the auxiliary *ʔe* in the indicative mood form. The argument of the auxiliary *ʔe* can be either pronominal or nominal. After the auxiliary the future particle *yat* occurs, followed by the negative particle *iʔke*.

<i>púŋ</i>	<i>wet</i>	<i>yat</i>	<i>iʔke</i>
<i>púŋ</i>	<i>o=ʔe-t</i>	<i>yat</i>	<i>iʔke</i>
shoot	2SG=AUX-IND1	FUT	NEG

‘I will not shoot.’

<i>cok</i>	<i>cok</i>	<i>maʔpəy</i>	<i>ʔet</i>	<i>yat</i>	<i>iʔke</i>
<i>cok</i>	<i>cok</i>	<i>maʔpəy</i>	<i>ʔe-t</i>	<i>yat</i>	<i>iʔke</i>
grind	grind	woman	AUX-INDI	FUT	NEG

‘The woman will not grind.’

6.2.3.6.2 IMPERATIVE + NEGATION

Negative-imperative clauses are formed simply by the juxtaposition of the ideophone plus the negative particle *yahmām*. No personal marking (either proclitic or pronominal) or auxiliary occurs.

<i>muturum</i>	<i>yahmām</i>
<i>muturum</i>	<i>yahmām</i>
jump	NEG

‘Don’t jump!’

6.2.3.6.3 INTERROGATIVE + FUTURE

Both types of interrogatives, yes-no question and information request, appear in future clauses with an ideophone. I have recorded only one type of future, immediate future, in these clauses.

In yes-no questions, the ideophone occurs first, followed by the interrogative particle *ahyə* and by two auxiliaries, the future auxiliary *kap* in the indicative form with its only argument (in either its pronominal or nominal form), and the auxiliary *ʔe* in the gerund form with a pronominal clitic which is always coreferential with the person of the future auxiliary. The scope of the interrogation is over the action represented by the ideophone.

<i>púŋ</i>	<i>ahyə</i>	<i>ekay</i>	<i>e ʔa</i>
<i>púŋ</i>	<i>ahyə</i>	<i>e=kap=t</i>	<i>e=ʔe-a</i>
shoot	INTERR	2SG=AUX.FUT-INDI	2SG=AUX-GER

‘Are you going to shoot?’

In information request questions, the interrogative pronoun occurs first in the clause, followed by the future auxiliary *kap* in the unmarked form with the impersonal proclitic *i=* attached. The ideophone then occurs after the future auxiliary, followed by the auxiliary *ʔe* in the gerund form, and with a pronominal proclitic that is always coreferential with the argument of the future auxiliary.

<i>nān</i>	<i>ikap</i>	<i>púŋ</i>	<i>púŋ</i>	<i>to ʔwa</i>
<i>nān</i>	<i>i=kap</i>	<i>púŋ</i>	<i>púŋ</i>	<i>to=ʔe-a</i>
who	3IMP=AUX.FUT	shoot	shoot	3R=AUX-GER

‘Who is going to shoot?’

6.2.3.7 IN NOMINALIZATIONS

An ideophone can be nominalized either by the particle *kanā* or by the clitic *ko=*. In the examples found in my corpus, a nominalized ideophone with *kanā* occurs as the absolutive argument of clauses with the predicate ‘to like’ and as the oblique argument of a postpositional phrase.

ōn púŋ kanā yaʔi nān
ōn púŋ kanā yaʔi nā-n
 1SG shoot NOMZ like COP-IND1
 ‘I like to shoot (shooting).’

ōn aʔoy púŋ kanā peʔ
ōn aʔ=top-t púŋ kanā peʔ
 1SG 3SG=see-IND1 shoot NOMZ LOC
 ‘I saw him at his shooting (place).’

A nominalized ideophone with *ko=*, on the other hand, occurs as the absolutive argument of a transitive verb, as in:

ōn cá cá kotoy
ōn cá cá ko=top-t
 1SG step step NOMZ=hear.IND1
 ‘I heard steps.’

6.2.3.8 IN FOCUS CONSTRUCTIONS

Either an adverbial phrase or a postpositional phrase can appear in initial focus position with an ideophone. In these cases, the auxiliary *ʔe* occurs twice in the clause. It occurs first with the –p indicative mood form after the initial focused phrase and before the ideophone. Then it occurs again, in the gerund mood form, after the ideophone. The argument of this second occurrence of the auxiliary *ʔe* is in its pronominal form and is always coreferential with the argument of the first occurrence of *ʔe*.

mēt wep púŋ wa
mēt o=ʔe-p púŋ o=ʔe-a
 here 1SG=AUX-IND2 shoot 1SG=AUX-GER
 ‘Here I shot.’

mēt ap púŋ toʔwa
mēt aʔ=(ʔe)-p púŋ to=ʔe-a
 here 3SG=(AUX)-IND2 shoot 3R=AUX-GER
 ‘Here he shot.’

kaʔa ʔa peʔ ap kāy kāy toʔwa
kaʔa ʔaʔ peʔ aʔ=ʔe-p kāy kāy to=ʔe-a
 house CL.RD LOC 3SG=AUX-IND2 scratch scratch 3R=(AUX)-GER
 ‘At the house he scratched.’

6.2.3.9 IN COMBINATIONS OF CLAUSES

Ideophones also occur in clause chaining and subordinate clauses. In clause chaining, the clause with an ideophone always occurs with the auxiliary *ʔe*, which can be either in the indicative (finite) or in the gerund (non-finite) mood. Both can be seen in the examples below.

ameko aʔkigat t̃p̃u toʔwa
ameko aʔ=kiga-t t̃p̃u to=ʔe-a
 jaguar 3SG=catch-IND1 jump 3R=AUX-GER
 ‘The jaguar caught it/him (by) jumping.’

tɕu ameko ʔet aʔkiga
tɕu ameko ʔe-t aʔ=kik-a
 jump jaguar AUX-IND1 3SG=catch-GER
 ‘The jaguar jumped (and) caught(ing) it.’

Ideophones can also occur in subordinate clauses with the time subordinator *kanāp*⁶⁰. In these clauses there is no auxiliary. Only the ideophone plus the subordinator *kanāp* form the subordinate clause.

ōn aʔtoy ué ué kanāp
ōn aʔ=top-t ué ué kanāp
 1SG 3SG=see-IND1 vomit vomit when
 ‘I saw him vomiting.’

oken kāy kāy kanāp
o=ket-t kāy kāy kanāp
 1SG=sleep-IND1 scratch scratch when
 ‘I slept scratching.’

onaká yakōy wen wen kanāp cúrem
o=naká yakōp-t wen wen kanāp cú=tem
 1SG=head be.hot-IND1 write write when big=ADVZ
 ‘My head gets hot when I write too much.’

⁶⁰ I have not registered, in my database, any occurrences of ideophones in subordinate sentences with the subordinators *nāi* PURPOSIVE, and *yəye* REASON.

6.2.4 SEMANTICS

A purely semantic definition of ideophones does not seem to be useful, since they form a class which is practically impossible to specify precisely. Ideophones have meanings equivalent to ‘normal’ verbs in the language in which they occur, including Karo, but they do not behave morphologically or syntactically like other verbs. Actually, it is not unusual for an ideophone to co-occur with a corresponding verb, generally to emphasize its meaning. Examples of ideophones and verb roots with similar meanings in Karo are:

<i>at</i>	<i>otoy</i>	<i>cf.</i>	<i>mōm at</i>	<i>(okəy)</i>
<i>at</i>	<i>o=top-t</i>		<i>mōm aʔ=ʔe-t</i>	<i>(o=kəy)</i>
3SG	1SG=see-IND1		look 3SG=AUX-IND1	(1SG=DAT)
	‘He/it saw me.’		‘He/it saw (me).’	
<i>ōn</i>	<i>aʔyamón</i>	<i>cf.</i>	<i>kahyep wet</i>	<i>(aʔkəy)</i>
<i>ōn</i>	<i>aʔ=yamót-t</i>		<i>kahyep o=ʔe-t</i>	<i>(aʔ=kəy)</i>
1SG	3SG=miss-IND1		miss	1SG=AUX-IND1
	(3SG=DAT)		‘I missed (him/it).’	
	‘I missed him/it.’			
<i>ōn</i>	<i>aʔigat</i>	<i>cf.</i>	<i>kaʔmep wet</i>	<i>(aʔkəy)</i>
<i>ōn</i>	<i>aʔ=tiga-t</i>		<i>kaʔmep o=ʔe-t</i>	<i>(aʔ=kəy)</i>
1SG	3SG=throw-IND1		throw 1SG=AUX-IND1	(3SG=DAT)
	‘I threw him/it.’		‘I threw (him/it).’	

<i>aʔóy</i>	<i>cf.</i>	<i>yéḗp</i>	<i>at</i>
<i>aʔ=tóp-t</i>		<i>yéḗp</i>	<i>aʔ=ʔe-t</i>
3SG=disappear-IND1		disappear	3SG=AUX-IND1
‘He/it disappeared.’		‘He/it disappeared.’	

Some examples of co-occurrences of ideophones with the corresponding regular verbs are:

<i>məy</i>	<i>aʔwaʔye</i>	<i>totia</i>	<i>oyuruŋ</i>	<i>aʔwaʔye</i>
<i>məy</i>	<i>aʔ=waʔye</i>	<i>to=ti-a</i>	<i>oyuruŋ</i>	<i>aʔ=waʔye</i>
then	3SG=AUX	3R=come-GER	come	3SG=AUX
‘Then he came.’				

<i>onoroŋ</i>	<i>at</i>	<i>tocit</i>	<i>paʔpara</i>
<i>onoroŋ</i>	<i>aʔ=ʔe-t</i>	<i>to=cit</i>	<i>paʔpar-a</i>
fall	3SG=AUX-IND1	3R=cover	fall.down-GER
‘He fell from his bike.’			

<i>tɪk</i>	<i>tɪk</i>	<i>at</i>	<i>toat</i>	<i>wirik</i>	<i>kanā</i>	<i>təga</i>	<i>tə</i>
<i>tɪk</i>	<i>tɪk</i>	<i>aʔ=ʔe-t</i>	<i>toat</i>	<i>wirik</i>	<i>kanā</i>	<i>tək-a</i>	<i>tə</i>
pluck	pluck	3SG=AUX-IND1	3R.POSS	food	thing	pick-GER	EVID
‘He was picking his pears, they say.’							

məy mōm aʔwaʔye yét kanā cit toba
məy mōm aʔ=waʔye yét kanā cit top-a
 then look 3SG=AUX this thing cover see-GER
 ‘Then he looked and saw this basket.’

Ideophones are generally characterized as onomatopoeic in nature, a characteristic not shared by other classes of words, but this is not true of all cases. In Karo, a few ideophones do have obvious onomatopoeic properties (e.g. *púŋ* ‘shoot’, *wī wīaw* ‘whistle used to call people’), etc.), but for the majority, a connection to sound is less obvious.

Another important characteristic of ideophones in Karo is the fact that, in the majority of cases, their meanings are quite specific. Some ideophones are used exclusively to refer to someone turning the head back (*ŋəŋəŋ* ‘turn the head back’), or to the arrow perforating the body of someone (*parak* ‘perforate somebody with arrow’). It is also important to stress that ideophones in Karo do not have the characteristics of sound symbolism in its conventional definition, i.e., no one-to-one correlation between sound and meaning was found to occur in the ideophones of Karo, as was reported to exist, for example, in a cousin language of Karo, Guaraní (Langdon 1994).

A last semantic characteristic of ideophones in Karo involves the choice a speaker has between an ideophone and a regular transitive verb. A preliminary analysis of the data has shown that the choice seems to affect the argument structure of clauses in that it provides a functional alternative to syntactic antipassive constructions. Generally speaking, if the semantic patient of a clause

is to be included in the predicate as a core argument, a transitive verb, which allows for two arguments, is the appropriate choice. But, in cases where the semantic patient, for one reason or another, is not in core position, an ideophone with an auxiliary plus its only argument becomes the other available choice. In the examples below, if the semantic patient is mentioned at all, it is done by means of a postpositional phrase indicating oblique case.

<i>at</i>	<i>otoy</i>	<i>cf.</i>	<i>mōm</i>	<i>ʔat</i>	<i>(okəy)</i>
<i>at</i>	<i>o=top-t</i>		<i>mōm</i>	<i>aʔ=ʔe-t</i>	<i>(o=kəy)</i>
3SG	1SG=see-IND1		look	3SG=AUX-IND1	(1SG=DAT)
	‘He/it saw me.’			‘He/it saw something/(me).’	
<i>ōn</i>	<i>aʔyamon</i>	<i>cf.</i>	<i>kahyep</i>	<i>wet</i>	<i>(aʔkəy)</i>
<i>ōn</i>	<i>aʔ=yamot-t</i>		<i>kahyep</i>	<i>o=ʔe-t</i>	<i>(aʔ=kəy)</i>
1SG	3SG=miss-IND1		miss	1SG=AUX-IND1	(3SG=DAT)
	‘I missed him/it.’			‘I missed something/(him/it).’	
<i>ōn</i>	<i>aʔtigat</i>	<i>cf.</i>	<i>kaʔmep</i>	<i>wet</i>	<i>(aʔkəy)</i>
<i>ōn</i>	<i>aʔ=tiga-t</i>		<i>kaʔmep</i>	<i>o=ʔe-t</i>	<i>(aʔ=kəy)</i>
1SG	3SG=throw-IND1		throw	1SG=AUX-IND1	(3SG=DAT)
	‘I threw him/it.’			‘I threw something/(him/it).’	

6.2.5 DISCOURSE

Descriptions and analyses of the discourse features of ideophones in the linguistic literature are almost non-existent (cf. Childs 1994:196). The predominant idea, nevertheless, is that the use of ideophones is correlated with a high degree of expressiveness. This seems to be the true in the case of Karo.

In Karo, a preliminary comparative analysis shows that ideophones tend to occur more frequently in narrative than in conversation. This is probably what we would expect if we take into consideration the fact that narratives are more highly structured than everyday conversations (Chafe 1980; Singer 1990). Evaluative and expressive mechanisms (in the sense of Labov 1972) tend to be used more frequently in narratives, since narrators seem to be naturally more pressured to “make a point” when telling a story than someone would when participating in a conversation. In this sense, ideophones would tend to be used by speakers as a means to bring attention to specific events in their narratives, because they express these events in special, colorful ways.

Although this analysis is merely preliminary, the point to be made is that systematic studies which describe and explain possible differences in the occurrence of ideophones in different genres are not found in the literature.

Further studies also need to be conducted regarding other discourse (or pragmatic) features of ideophones in Karo, among them:

- 1) Are they restricted to certain types of discourse genre (such as conversations. narratives)?;
- 2) Is there any correlation between the use of ideophones and social factors such as sex, age and degree of integration into the dominant population (speakers of Portuguese)?;

- 3) To what extent is there individual variation in the use of ideophones by Karo speakers?; and
- 4) What types of variation exist among speakers of Karo and speakers of other genetically related languages?

6.2.6 LIST OF IDEOPHONES IN KARO (PARTIAL)

IDEOPHONE	MEANING
1. ayam	'yawn'
2. cagam	'noise of eating'
0. caraŋ	'light match'
4. círup	'walk fast'
5. cok	'crush (in mortar)'
6. cǒn	'kick'
7. cōn	'poke (without tip)'
8. curuŋ	'light (paper, fire)'
9. érom	'lick'
10. eʔniyām	'blow baby's nose'
11. i	'shout'
12. it	'call (someone by 'ssss')'
13. kahmi	'kill prey and it stays quiet'
14. kām	'hold'
15. kamari	'brake'
16. kān	'sing'
17. kap	'shoot arrow'
18. kaw	'chew'
19. kāy	'scratch'
20. kaʔcuruŋ	'get in (smoothly)'
21. kaʔmik	'poke hole with arrow'

22.	kaʔpet	‘fart’
23.	kaʔpew	‘throw sand’
24.	kaʔpot	‘jump’
25.	kaʔtan	‘throw (stone at house)’
26.	kaʔtik	‘brake’
27.	konōŋ	‘turn’
28.	korot	‘pull (hair, feather)’
29.	kot	‘swallow (liquid)’
30.	kururut	‘pull with (fishing) line’
31.	kət	‘cut’
32.	kiw	‘cut’
33.	ma	‘slap (to kill insects on the body)’
34.	mān	‘tie up’
35.	mari	‘thresh’
36.	maʔ	‘beat’
37.	maʔā	‘beat (with stick, hand)’
38.	mi	‘hatch’
39.	mōm	‘look’
40.	morap	‘touch/shuffle (things)’
41.	moŋ	‘hold’
42.	mīrik	‘pinch’
43.	məŋ	‘nod’
44.	mik	‘drill’

45. nay	'bite'
46. noŋ	'poke (with tip)'
47. nuw	'thunder noise'
48. nīm	'blink'
49. ni	'push'
50. ohyuŋ	'dive'
51. omuw	'fall (heavy object)'
52. omik	'poke hole'
53. onoroŋ	'fall down'
54. onuru	'fall (tree)'
55. opiw	'fall'
56. oton	'fall (light object)'
57. oturum	'climb down'
58. oyarap	'go down'
59. parak	'perforate somebody w/ arrow'
60. paramu	'sit down'
61. pāŋ	'cut'
62. pegat	'stick'
63. poroŋ	'get in'
64. pu	'blow (at fire)'
65. put	'fart'
66. puŋ	'shoot'
67. pīp	'blow'

68. pəgəp	'climb up'
69. pik	'punch, step with the heel'
70. t̥p̥u	'jump'
71. tan	'beat (finger on table)'
72. t̥ān	'cut (wood)'
73. tay	'pull (strongly)'
74. t̥āŋ	'drop'
75. t̥ēŋ	'beat on wood'
76. tuk	'beat'
77. tuy	'pull'
78. tuŋ	'pound (in mortar)'
79. wāy	'waive'
80. wé (owé)	'vomit'
81. weret	'cut (hair)'
82. wirup	'sweep'
83. wi	'bend'
84. wen	'write'
85. məy	'stop'
86. əya	'burp'
87. wīm	'whistle'
88. wəri	'dig'
89. wərəŋ	'spin'
90. wik	'go down'

91. wiga	'shake (head)'
92. yap	'pull down'
93. yara	'saw'
94. yok	'copulate'
95. ĩ	'blow (nose)'
96. ĩm	'smell'
97. ʔu	'bee noise'
98. ŋit	'get up'
99. ŋuran	'swallow'
100. ŋərəŋ	'turn the head back'

CHAPTER 7

THE EVIDENTIAL SYSTEM

Karo has a rich system of phrase- or sentence-final particles which are used to convey evidentiality. In this chapter I first provide some background on evidentials, and then describe and categorize the main semantic properties of the evidential system of Karo.

7.1 BACKGROUND

Roughly, evidentiality can be described as the linguistic way in which a speaker conveys the source and/or reliability of the information or knowledge s/he possesses. In its strict sense, the label refers only to the source of information or knowledge acquired through some sort of evidence. In a broader sense, however, evidentiality also includes the speaker's attitudes towards the information or knowledge, qualifying the reliability of information communicated in four primary ways: 1) by specifying the source of information; 2) by conveying the degree of precision with which the information is communicated; 3) by specifying the degree to which the information fits with the speaker's view of reality; and 4) by rendering expectations concerning its reliability (Mithun 1986).

It was only recently, with the publication of a special volume on evidentiality (based on a symposium held in Berkeley in 1981), that the phenomenon of evidentiality was examined from a cross-linguistic perspective (Chafe and Nichols 1986). Among the important points raised in this volume was the realization that evidentiality is not a unified category, in that evidentials bear close relationships with other categories such as tense, aspect and especially mood, and evidentiality can be expressed formally in a variety of forms, such as

affixes, particles, auxiliaries and whole predicates, even within a single language. In discussing the properties of evidentials in Karo I will take the papers in Chafe & Nichols (1986) and elsewhere (Hoff 1986; Palmer 1986; Barnes 1984; Givón 1982; Wierzbicka 1996) as a basis.

7.2 THE EVIDENTIAL SYSTEM OF KARO

The evidential system of Karo consists of a set of particles which are not obligatory. They tend to occur at the ends of clauses, and the precise number of evidentials and their meanings are still under investigation. Eleven evidentials have been identified so far. They are used to qualify the information provided by speakers in two different ways: 1) by *specifying the modes* in which the information is conveyed (modes of knowing), and 2) by *qualifying the trustworthiness* of the information conveyed (reliability). Seven evidentials fall in the first category. Of these, three deal with evidence per se (visual, hearsay and evidence which was lost or is not available), other three deal with inference (either based on evidence, on expectation, or on a familiar pattern), and the last evidential deals with belief. The other four evidentials fall under the category of reliability, and are used to characterize the speaker's judgement of the information provided as highly probable, fairly probable, improbable. Highly probable information is further subdivided into two subcategories according to its assessment: it can be highly probable because it is based on some sort of evidence, or it can be highly probable even though it is not based on any evidence.

Below I give a list of the evidentials of Karo with their category, subcategory, specification and approximate gloss.

<i>Evidential</i>	<i>Category</i>	<i>Subcategory</i>	<i>Specification</i>	<i>Gloss</i>
1. topə	mode of knowing	evidence	visual	be.seen
2. tə	mode of knowing	evidence	hearsay	they say
3. coke	mode of knowing	evidence	lost evidence	clearly
4. aket	mode of knowing	inference	from evidence	must
5. igā	mode of knowing	inference	from expectation	must
6. memā	mode of knowing	inference	from pattern	be.supposed
7. iʔkiy ⁶¹	mode of knowing	belief		I guess
8. manā	reliability	+ probability	with no evidence	obviously
9. nānin	reliability	+ probability	with evidence	really
10. menə	reliability	+/- probability		wonder
11. pə	reliability	- probability		maybe

The specific circumstances of use of each of these evidentials, and examples of their occurrence are provided below.

topə: when the information conveyed is known by visual experience;

<i>péŋ</i>	<i>ʔet</i>	topə	<i>toat</i>	<i>macaʔɨ̃</i>	<i>wĩa</i>
<i>péŋ</i>	<i>ʔe-t</i>	topə	<i>to=at</i>	<i>macaʔɨ̃</i>	<i>wĩ-a</i>
white.man	AUX-IND1	be.seen	3R=POSS	pet	kill-GER

‘(It was seen that) the white man killed his pet.’

(used in a situation where the speaker went to the white man’s house and saw him killing his pet)

⁶¹ Some consultants use the form *aʔkiy* instead.

tə: when the information conveyed comes from/is attributed to someone else's speech;

aya λvan *tə*
aʔ=ya λvat-t *tə*
3SG=leave-INDI **they say**
'(It is said that) he left.'

(used in a situation where the speaker had been told by someone else that the person in question had left)

coke: used when the information conveyed is based on evidence which was lost (or is unavailable);

at *māygāra* *wīn* **coke**
at *māygāra* *wī-n* **coke**
3SG snake kill-INDI **clearly**
'He clearly killed the snake.'

(used when the speaker knew that the person in question had killed the snake, which somehow disappeared from the place it was killed)

aket: used when the information conveyed comes from inference which is based on some sort of evidence;

péŋ *aʎwĩm* **aket**

péŋ *aʎ=wĩ-n* **aket**

white.man 3SG=kill-IND1 **must**

‘The white man must have killed it.’

(used in a situation where it was known by the speaker that the white man had gone in the forest overnight to hunt and came back with his prey, but neither the speaker nor anybody else saw him killing it)

igā: used when the information conveyed comes from inference which is based on expectation;

tokera *at* **igā**

to=ket-a *aʎ=ʎe-t* **igā**

3R=sleep-GER 3SG=AUX-IND1 **must**

‘He must have gone to sleep.’

(used when the speaker kept waiting for a person for a long time, it was late at night, and the person did not show up. So, the speaker concludes that the person might have gone to sleep)

memā: used when the information conveyed comes from inference which is based on a known pattern;

<i>aʔken</i>	memā
<i>aʔ=ket-t</i>	memā
3SG=sleep-IND1	be.supposed

‘I suppose he is sleeping.’

(used in a situation where the speaker knew that the person in question was sleeping before)

iʔkiy: used in a situation where the fact(s) described/talked about come(s) from belief, without necessarily any supporting evidence;

<i>aʔken</i>	iʔkiy
<i>aʔ=ket-t</i>	iʔkiy
3SG=sleep-IND1	guess

‘It is possible that he is sleeping/slept.’

(used when the speaker was simply wondering about what might have happened to someone else)

manā: used in a situation where what is being described/talked about by the speaker is highly possible to occur/have occurred, but which is not based on any sort of evidence, but on experience;

at aʎvĩm iga manā

at aʎ=wĩ-n iga manā

3SG 3SG=kill-IND1 FUT **obviously**

‘He will most likely kill it’

(used in a situation where the speaker saw a person petting an animal so hard that he could eventually kill it)

nānin: used in a situation where what is being described/talked about by the speaker is highly possible to occur/have occurred, based on some sort of evidence;

ōn aʎtoy nānin kán

ōn aʎ=top-t nānin kán

1SG 3SG=see-IND1 **really** RPAST

‘I really saw him long ago.’

(used in a situation where the speaker had seen somebody (mythological creature) when she was almost sleeping)

menə: used in a situation where what is being described/talked about is possible to have occurred;

maʔpəy ɲa ʔet at chapéu káʔ tɪga menə
maʔpəy ɲa ʔe-t at chapéu káʔ tɪga-a menə
 woman CL.FEM AUX-IND1 3SG.POSS hat CL.CCV throw-GER **wonder**
 ‘Would it be that the woman threw his hat.’

(used in a situation where it was not clear what caused a person’s hat to be thrown away)

pə: used in a situation where what is being described/talked about is less probable;

at a ʔwĩm pə
at aʔ=wĩ-n pə
 3SG 3SG=kill-IND1 **maybe**
 ‘Maybe he killed it.’

(used in a situation where one person used to complain about a semi-domesticated animal which would often come to his house and make a mess, so the speaker wondered whether this person killed the animal or not)

7.2.1 SYNTACTIC CONTEXTS OF OCCURRENCES

Evidentials in Karo were found to occur at the end of clauses as well as inside noun phrases. In the latter type of occurrence, only four evidentials were found to occur: *menə*, *nānin*, *topə* and *iʔkiŋ*. They occur in noun phrases qualifying the information about the head noun and the proposition. It is often the case that the evidential which occurs inside the noun phrase also occurs at the end of the clause. The circumstances under which these occurrences take place remain unknown.

<i>ēn</i>	<i>ahyə</i>	<i>menə</i>
<i>ēn</i>	<i>ahyə</i>	<i>menə</i>
2SG	INTERR	wonder
	<i>kanā</i>	<i>tayān</i>
	<i>kanā</i>	<i>ta-yā-t</i>
	thing	COM-be.standing-IND1
		wonder

‘Are you really the one who has many things?’

<i>péŋ</i>	<i>nānin</i>	<i>aʔvĩn</i>
<i>péŋ</i>	<i>nānin</i>	<i>aʔ=wĩ-n</i>
white.man	really	3SG=kill-IND1
		really

‘It was really the white man who killed it/him.’



péŋ *topə* *toat* *macaʔɿ* *nō* *wĩn*
péŋ *topə* *toat* *macaʔɿ* *nō* *wĩ-n*
white.man **be.seen** 3R.POSS pet one.of kill-IND1
‘The white man was seen to have killed one of his own pets.’



péŋ *iʔkiy* *aʔwĩa* *wet*
péŋ *iʔkiy* *aʔ=wĩ-a* *o=ʔe-t*
white.man **guess** 3SG=kill-GER 1SG=AUX-IND1
‘The white man is supposed to have killed it/him’

All eleven Karo evidentials occur in different types of constructions: 1) declarative clauses; 2) information questions; 3) focus constructions; 4) focus + negation constructions; 5) predicate adjective constructions; and 6) predicate nominal constructions.

IN DECLARATIVE CLAUSES:

mɿ ɿ ɿy *imatēran* *nānin* *to ʔwa*
mɿ ɿ ɿy *i=matēra-t* *nānin* *to=ʔe-a*
toad 3IMP=CAUS-go.astray-IND1 **really** 3R=AUX-GER
‘The toad would certainly make people get lost.’

IN INFORMATION QUESTIONS:

kōm aʔcet menə
kōm aʔ=cet menə
how 3SG=name **wonder**
'I wonder what his name is.'

IN FOCUS CONSTRUCTIONS:

nān mā at aʔwīm menə
nān mā at aʔ=wī-m menə
what INSTR 3SG 3SG=kill-IND2 **wonder**
'I wonder with what he killed it/him.'

IN FOCUS + NEGATION CONSTRUCTIONS

péŋ iʔke aʔtoy tə
péŋ iʔke aʔ=top-t tə
white.man NEG 3SG=see-IND1 **they say**
'It is said that it was not the white man who saw it/him.'

IN PREDICATE ADJECTIVE CONSTRUCTIONS

pāitem at topə
pāit=tem at topə
beautiful=ADVZ 3SG **be.seen**
'I saw that he/it is beautiful.'

IN PREDICATE NOMINAL CONSTRUCTIONS

<i>agóa ḡpɔ</i>	<i>a ḡnān</i>	<i>igā</i>
<i>agóa ḡpɔ</i>	<i>a ḡ=nā-n</i>	<i>igā</i>
shaman	3SG=COP-IND1	must

‘He must be the shaman.’

7.2.2 EVIDENTIAL SEQUENCES

A last and interesting characteristic of Karo evidentials is the fact that they may co-occur with each other. It seems to be possible for as many as three evidentials to co-occur. Not all eleven evidentials co-occur freely, and when they do there seems to be a special order that must be followed. (The restrictions may be semantically based.).

7.2.2.1 CO-OCCURRENCES OF TWO EVIDENTIALS

Evidentials from the two categories, ‘mode of knowing’ and ‘reliability’, seem to interrelate in all possible logical ways.

The table below represents the possible and non-possible sequences of two evidentials. The pairs consist of an initial member from the leftmost column followed by a second item identified in the row across the top. A check mark indicates that the given sequence is allowed. An asterisk indicates that the sequence is not possible. Blank boxes identify sequences not collected from a consultant or present in the corpus.

MODE OF KNOWING								RELIABILITY			
↳	EVIDENCE			INFERENCE			BELIEF				
	topə	tə	coke	aket	igā	memā	i?kiy	manā	nānin	menə	pə
topə	—	√	*		√		*		√	*	
tə	*	—	*		*		*		*	*	*
coke	*	*	—		*		*		*	*	*
aket	*	√	*	—	√	√	*	*	√	?	*
igā	*	*	*		—		*		*	*	*
memā						—					
i?kiy	*	√	√		√		—		*	√	*
manā								—			
nānin	*	√	√	√	√		√		—	*	*
menə	*	*	*	√	*		*		*	—	*
pə		√	√		*		*		√	√	—

Table 10. Co-occurrences of two evidentials in Karo

From the information available in the table above, it is possible to state that all four logical types of co-occurrences of evidentials within different categories and subcategories are possible: 1) [mode of knowing] + [mode of knowing], 2) [mode of knowing] + [reliability], 3) [reliability] + [mode of knowing], and 4) [reliability] + [reliability]. Furthermore, whereas there seems to be a high number of sequences of evidentials of the type [mode of knowing + mode of knowing] and [reliability + mode of knowing] (8 occurrences each type out of 21), the other two types of sequences, [mode of knowing + reliability], and [reliability + reliability] occurred only five times, three occurrences for the first type, and two occurrences for the latter type.

7.2.2.2 CO-OCCURRENCES OF THREE EVIDENTIALS

The list of occurrences of three evidentials in sequence should, in principle, be longer than the list of two evidentials, given all the logical possibilities of combinations. It is shorter, nevertheless, because 1) I did not make an exhaustive list of all possible occurrences of three evidentials for evaluation by consultants, and 2) speakers probably do not use three evidentials very often.

The sequences of three evidentials found so far involve only two types of sequences of evidential categories: [reliability] + [reliability] + [mode of knowing] and [reliability] + [reliability] + [reliability].

- 1) **menə** **iʔkiy** **coke**
[reliability] + [reliability] + [mode of knowing]
medium probability belief lost evidence
'I wonder, belief, clearly that...'

- 2) **menə** **iʔkiy** **igā**
[reliability] + [reliability] + [mode of knowing]
medium probability belief inference from expectation
'I wonder, belief, should...'

- 3) **menə** **iʔkiy** **tə**
[reliability] + [reliability] + [mode of knowing]
medium probability belief they say
'I wonder, belief, it is said that...'

- 4) **pə** **menə** **igā**
[reliability] + **[reliability]** + **[mode of knowing]**
low probability *medium probability* *inference from expectation*
 ‘Maybe, I wonder, should...’
- 5) **menə** **?kiy** **nānin**
[reliability] + **[reliability]** + **[reliability]**
medium probability *belief* *high probability with evidence*
 ‘I wonder, belief, really...’

EPILOGUE

The present grammar is meant to be a contribution to the study of Amazonian languages in general, and the Tupian languages in specific.

Although research regarding the Karo language is far from complete, some of the features of the language may enrich our understanding of the typology of Amazonian languages. Of special interest, in order of presentation in the grammar, are the following characteristics:

- 1) As the reflex of a heavy interplay between segments and suprasegmental factors, vowels in Karo seem to interact with tone in ways not previously documented before (Fromkin 1978; Hyman 1973, 1975; Hyman and Schuh 1974). High tone appears to raise the mid vowels to [e] and [o], which appear otherwise as [ɛ] and [ɔ].
- 2) Karo can be classified as mildly synthetic, and its verbal morphology consists of only a set of 3 inflectional modal suffixes and a set of 5 derivational prefixes. Pronominal clitics can occur as verbal arguments, but they are in complementary distribution with lexical noun phrases. Previous reports noted the richness of verbal morphology in Amazonian languages in general (Payne 1990).
- 3) Different grammatical patterns emerge in different parts of the grammar. An ergative-absolutive pattern occurs in imperatives, focus constructions, yes-no questions, independent and clitic pronouns, and negative focus constructions. A nominative-accusative pattern (that is, a recognizable subject category) occurs in clause-chaining, emphatic constructions, associated noun phrase constructions, future clauses with the auxiliary *kap*, and time and purpose subordinations.

Although the motivations for the occurrence of ergative-absolutive patterning in *all* the systems above is not yet well understood (imperatives, for example, emerge from the grammaticization of *immediacy of involvement* (cf. Mithun and Chafe 1999)), the motivation for the occurrence of the *subject* category in all the nominative-accusative systems is explained in terms of the grammaticization of *starting points* (cf. Chafe 1994).

4) Karo does not seem to conform to the types of classifier languages proposed by Allan 1977: it is *not* a numeral, concordial, predicative (verb-incorporated) or intra-locative classifier language, but a *noun classifier* language. Furthermore, Karo cannot easily be classified as a classifier language according to Dixon's 1986 criteria: two of the criteria classify Karo as a classifier language, and another criterion classifies it as a noun class language. These facts, nevertheless, when taken altogether, seem to conform to the typology of Amazonian languages in general: they cannot be easily classified as one discrete type or another (Craig (ms.), 1986a, 1986b, 1992 ; Payne 1987; Derbyshire and Payne 1990; Aikhenvald 1994).

5) The intricate system of ideophones could be thought of as a powerful linguistic tool for expressing *discourse salience*. Although more research must be completed in this area, a preliminary analysis of Karo narratives and conversations points in this direction. Furthermore, the fact that ideophone constructions are intransitive, and that they sometimes serve as substitutes for regular transitive verbs, may explain the non-existence of antipassives in Karo (cf. Cooreman 1994).

I hope that with the present work I will be able to contribute to our still unfolding understanding of Amazonian linguistics, especially of the Tupian (non-Tupi-Guaranian) languages of Brazil.

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