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A Grammar of Karo, Tupí (Brazil)

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by

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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 *iʔaɔ rap* (from *iʔaɔ* 1ST PERSON INCLUSIVE pronoun, plus *tap* 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 postpositonal 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.

TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION.....1

1.1 The Karo language.....1

1.2 The Tupi languages.....1

1.3 History of the group.....2

1.4 Cultural overview.....3

1.5 Sociolinguistic situation.....4

1.6 Fieldtrips.....5

1.7 The data.....6

CHAPTER 2: PHONETICS AND PHONOLOGY.....8

2.1. Phonetic segments.....8

2.1.1 Consonants.....8

2.1.2. Vowels.....15

2.2 Syllabic pattern.....19

2.3 Nasal spreading.....21

2.4 Phonological assimilation.....22

2.5 Stress.....30

2.5.1 Segmental conditioning of stress placement.....30

2.5.2 Suprasegmental conditioning of stress placement.....33

2.6 Pitch.....34

2.6.1 Tone spreading.....36

2.6.2 Phonetic properties of tone.....37

CHAPTER 3: MORPHOLOGY.....38

3.1 Word classes.....38

3.1.1 Pronouns.....38

3.1.2 Nouns.....41

3.1.3 Verbs.....45

3.1.4 Auxiliaries.....47

3.1.5 Adjectives.....49

3.1.6 Adverbs.....50

3.1.7 Particles.....52

3.1.8 Postpositions.....54

3.2 Affixes.....57
3.2.1 Inflectional affixes.....57
3.2.1.1 Indicative *–t*.....57
3.2.1.2 Indicative *–p*.....59
3.2.1.3 Gerunds.....61
3.2.2 Derivational affixes.....63
3.2.2.1 The simple causative.....63
3.2.2.2 The comitative causative.....65
3.2.2.3 The impersonal passive.....67
3.2.2.4 The reflexive.....69
3.2.2.5 The reciprocal.....70
3.2.2.6 The optative.....71
3.3 Clitics.....74
3.3.1 The plural *=to?*.....74
3.3.2 The adverbializer *=tem*.....76
3.3.3 Personal clitics.....80
3.4 Nominalization.....85
3.5 Compounding.....89
CHAPTER 4: SYNTAX.....94
4.1 Simple sentences.....94
4.1.1 Declarative sentences.....94
4.1.1.1 Basic declaratives.....94
4.1.1.2 Focused declaratives.....95
4.1.1.2.1 Nominal argument focusing.....95
4.1.1.2.2 Clause complement focusing.....98
4.1.2 Interrogative sentences.....100
4.1.2.1 Yes-no questions.....100
4.1.2.2 Information questions.....102
4.1.3 Imperative clauses.....104
4.2 Major predicate types.....106
4.3 Phrases.....108
4.3.1 Noun Phrases.....108
4.3.1.1 Noun phrase constituents.....109
4.3.1.2 Genitive constructions.....116

4.3.1.3 Association of noun phrases.....117
4.3.1.4 Case marking and grammatical relations.....119
4.3.2 Verb Phrases.....123
4.3.3 Postpositional Phrases.....128
4.3.4 Adverbial Phrases.....132
4.4 Tense.....137
4.4.1 Past.....137
4.4.2 Future.....139
4.4.2.1 The future auxiliary *kap*.....139
4.4.2.2 The future particle *yat*.....142
4.4.2.3 The future particle *iga*.....143
4.5 Negation.....144
4.5.1 The negative particle *iʔke*.....144
4.5.2 The negative particle *yahmãm*.....150
4.5.3 The negative particle *taykit*.....152
4.6 Reported speech.....153
4.7 Clause combining.....154
4.7.1 Clause chaining.....154
4.7.2 Subordination.....156
4.7.2.1 Time.....157
4.7.2.2 Purpose.....159
4.7.2.3 Cause.....162
CHAPTER 5: THE CLASSIFIER SYSTEM.....164
5.1 Formal properties.....167
5.1.1 Head nouns.....169
5.1.2 Genitives.....171
5.1.3 Compounds.....175
5.2 Semantic properties.....180
5.3 Discourse properties.....183
CHAPTER 6: THE IDEOPHONE SYSTEM.....184
6.1 Baekground.....184
6.2 The ideophones of Karo.....185
6.2.1 Phonetics and phonology.....185
6.2.2 Morphology.....186

6.2.3 Syntax....188
6.2.3.1 In simple clauses....188
6.2.3.2 In interrogative clauses....189
6.2.3.2.1 Yes-no questions....189
6.2.3.2.2 Information questions....190
6.2.3.3 In negation....191
6.2.3.4 In imperatives....192
6.2.3.5 In future clauses....193
6.2.3.6 In mixed types of clauses....193
6.2.3.6.1 Future + Negation....194
6.2.3.6.2 Imperative + Negation....195
6.2.3.6.3 Interrogative + Future....195
6.2.3.7 In nominalizations....196
6.2.3.8 In focus constructions....197
6.2.3.9 In combinations of clauses....197
6.2.4 Semantics....199
6.2.5 Discourse....202
6.2.6 List of ideophones in Karo....203
CHAPTER 7: THE EVIDENTIAL SYSTEM....207
7.1 Background....207
7.2 The evidential system of Karo....208
7.2.1 Syntactic contexts of occurrence....212
7.2.2 Evidential sequences....215
7.2.1.1 Co-occurrences of two evidentials....215
7.2.1.2 Co-occurrences of three evidentials....220
EPILOGUE....222
BIBLIOGRAPHY....224

TABLE OF TABLES

Table 1. Consonantal segments of Karo.....11

Table 2. Consonantal phonemes of Karo.....12

Table 3. Vocalic segments of Karo (oral and nasal).....20

Table 4. Vocalic phonemes of Karo (oral and nasal).....20

Table 5. Table 5 Karo free personal pronouns.....49

Table 6. Table 6 Karo possessive pronouns.....49

Table 7. Karo referential clitics.....104

Table 8. Karo coreferential clitics.....104

Table 9. The classifiers of Karo.....209

Table 10. Co-occurrences of two evidentials in Karo.....276

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 disappeared[1].

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:

1st fieldtrip:	June - August of 1987
2nd fieldtrip:	April of 1990
3rd fieldtrip:	August - September of 1990
4th fieldtrip:	July - August of 1992
5th fieldtrip:	July - August of 1993

6th fieldtrip: July - September of 1994

7th fieldtrip: October - December of 1995

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 analyzed[2].

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
Yarõk	male	born approximately in 1975
Wãk-wãk	male	born approximately in 1970
Rute	female	born approximately in 1980
Rosa	female	born approximately in 1975
Marli	female	born approximately in 1970

[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.

[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.

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.

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 2.4[3].

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).

2.1.1 CONSONANTS

The following phonetic consonants were found in Karo:

[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.

	bilabial	alveolar	palatal	velar	glottal
stops	p p: pˀ b	t t: tˀ	c c:	k k: kˀ g	ʔ
nasal	m m^{b} ^{b}m	n n^{d} ^{d}n		ŋ $ŋ^{g}$ $^{g}ŋ$	
flap		ɾ ɾ̃			
fricative	ß		ç	ɤ	h
approximant	w w̃		y ỹ		

Table 1. Consonantal segments[4]

The following table represents the consonantal phonemes of Karo:

	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.

[4] I also found a consonant cluster, [t͡p̃], which occurs, so far, in one word of Karo, [t͡p̃u], 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.

[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.

[ameˈkːɔ] 'jaguar'

[anaˈnᵈa] 'pineapple'

[maˈʔɨpˀ] 'log'

[naˈcːɛy] 'grazing ground'

[ˈmə̃ɾ̃õ] 'capibar'

[ˈnə̃m] 'breast'

[iˈyõm] 'father'

[ˈcə̃n] 'cat'

[ˈtẽŋ] 'to fly'

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

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

[oˈw̃ə̃] 'mother'

[ˈtə̃w̃] 'far'

[ˈw̃ĩn] 'to kill'

[ˈnə̃ỹa] 'corn'

[iˈỹõm] 'father'

[ˈỹə̃ỹ] 'tooth'

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

[ˈkə́ɾ̃ə̃m] 'hummingbird'

[ˈmə̃ɾ̃õ] 'capibar'

[ˈpə́ɾ̃ə̃m] 'tree (sp.)'

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

[kɨɾɨˈwɛpˀ]	'butterfly'
[wəˈwə]	'fan'
[ˈyaw]	'ray'
[iˈyɔ]	'bat'
[naʔˈwəy]	'monkey'
[yaˈyɔ]	'armadillo (sp.)'
[ˈpaɾatˀ]	'fish (sp.)'
[aˈɔɾɔ]	'parrot'
[eɾeˈɾẽtˀ]	'peacock'
[awaˈɾə̃]	'bird (sp.)'
[koˈɾẽ]	'wood (sp.)'

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

Voicing:

/p/ : /b/ =	/abipe/	[abiˈpɛ]	'his lip'	vs.
	/acibe/	[aciˈbɛ]	'root'	
/t/ : /r/ =	/matet/	[maˈtːɛtˀ]	'yesterday'	vs.
	/korét/	[koˈɾétˀ]	'bird (sp.)'	

Manner of articulation:

/p/ : /m/ =	/pako/	[paˈkːɔ]	'fish (sp.)'	vs.
	/makap/	[maˈkːapˀ]	'peanut'	
	/nãp/	[ˈnə̃pˀ]	'wasp (sp.)'	vs.
	/nãm/	[ˈnə̃m]	'breast'	
/t/ : /n/ =	/tãw/	[ˈtə̃w̃]	'far'	vs.
	/nãk/	[ˈnə̃kˀ]	'mouth'	
	/ʔĩt/	[ˈʔĩtˀ]	'small'	vs.
	/wĩn/	[ˈw̃ĩn]	'to kill'	
/k/ : /ŋ/ =	/káʔ/	[ˈkáʔ]	CL.CCV	vs.
	/ŋa/	[ˈŋᵍa]	3SF.FEM	
	/mẽk/	[ˈmẽkˀ]	'to smear'	vs.
	/tẽŋ/	[ˈtẽŋ]	'to fly'	
/p/ : /w/ =	/pɨy/	[ˈpɨy]	'lazy'	vs.
	/wɨy/	[ˈwɨy]	'to leave'	
	/capə/	[caˈpːə]	'penis'	vs.
	/wəwə/	[wəˈwə]	'fan'	
/h/ : /ʔ/ =	/nahek/	[naˈhɛkˀ]	'fontanel'	vs.
	/maʔɨp/	[maˈʔɨpˀ]	'log'	

	/ihyãy/	[ihˈỹãỹ]	'piranha'	vs.
	/piʔti/	[piʔˈti]	'heavy'	
/c/ : /y/ =	/cú/	[ˈcú]	'big'	vs.
	/yu/	[ˈyu]	'blood'	
	/cã/	[ˈcə̃]	'bitter'	vs.
	/iyã/	[iˈỹə̃]	'Brazil nut'	

Point of articulation:

/ʔ/ : /k/ =	/píʔ/	[ˈpɨʔ]	'CLASSIFIER'	vs.
	/tik/	[ˈtɨk˺]	'pick'	
	/maʔɨp/	[maˈʔɨp˺]	'log'	vs.
	/makap/	[maˈkːap˺]	'peanut'	
/c/ : /t/ =	/can/	[ˈca^{d}n]	'to pluck'	vs.
	/tan/	[ˈta^{d}n]	'to beat'	
	/icɨ/	[iˈcːɨ]	'water'	vs.
	/itɨ/	[iˈtːɨ]	'deer'	
/c/ : /k/ =	/nacap/	[naˈcːap˺]	'hair'	vs.
	/makap/	[maˈkːap˺]	'peanut'	
	/naco/	[naˈcːɔ]	'plantation field'	
	/pako/	[paˈkːɔ]	'fish (sp.)'	

2.1.2 VOWELS

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

	front	central	back
high	i ĩ	ɨ	u
mid-high	e ẽ	ə ə̃	o õ
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 ĩ	ɨ	u
mid	e ẽ	ə	o õ
low		a ã	

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 syllables[7]:

  [koˈɾétˀ] /korét/ 'guan (sp.)'

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

[oˈw̃ẽ]	/owẽ/	'baby'
[moˈc:ay]	/mocay/	'possum'
[ˈtóy]	/tóy/	'to disappear'
[ˈmᵇóá]	/móa/	'tortoise'

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

[paˈk:ɔ]	/pako/	'fish (sp.)'
[naʔˈtɔ]	/naʔto/	'tapir'
[ˈmᵇɔk˥]	/mok/	'rope'

The distribution of the phonetic segments [e]:[ɛ] and [o]:[ɔ] shows that their occurrence is not conditioned by segmental factors but

	/tɨn/	[ˈtɨᵈn]	'to burn'	vs.
	/tən/	[ˈtəᵈn]	'to walk'	
/ə/ : /a/ =	/kəy/	[ˈkəy]	DATIVE	vs.
	/kay/	[ˈkay]	AUX.FUTURE	
	/apəy/	[aˈpːəy]	'grandmother'	vs.
	/aʔ-pay/	[aʔˈpay]	'he died'	
/u/ : /o/ =	/up/	[ˈup˺]	'red'	vs.
	/op/	[ˈɔp˺]	'papaya'	
	/naʔtup/	[naʔˈtup˺]	'end'	vs.
	/naʔto/	[naʔˈtɔ]	'tapir'	
/i/ : /ɪ/ =	/win/	[ˈwiᵈn]	'to feed'	vs.
	/wĩn/	[ˈw̃ĩn]	'to kill'	
	/tati/	[taˈtːi]	'to bring'	vs.
	/kotĩ/	[koˈtːĩ]	'one'	
/e/ : /ẽ/ =	/aʔ-pey-a/	[aʔˈpɛya]	'do it'	vs.
	/aʔ-pẽy-a/	[aʔˈpẽỹa]	'step on it'	
	/korét/	[koˈrét˺]	'guan (sp.)'	vs.
	/carẽk/	[caˈɾẽk˺]	'slow'	
/a/ : /ã/ =	/kap/	[ˈkap˺]	'fat'	vs.
	/kãp/	[ˈkə̃p˺]	'delicious, tasteful'	

Open-closed:

/pe.wɨt/	'honey'
/i.gɨp/	'aunt'
/cõ.at/	'slippery'
/i.ɨt/	'to squeeze'
/ca.ro.gĩn/	'smoke, cloud'
/a.tĩŋ/	'worm'
/pe.ĩn/	'to ripe off'
/ma.pəy/	'rainbow'
/na.cey/	'plantation field'

Closed-open[8]:

/maʔ.pe/	'gourd'
/kaʔ.to/	'2PL'
/iʔ.ke/	NEGATIVE PARTICLE
/aʔ.ti/	'he came'
/ku.ruʔ.cu/	'saliva'
/yaʔ.cĩ/	'bad odor'
/ko.roʔ.pe/	'snake (sp.)'
/yaʔ.mo/	'sweet potato'

Closed-closed:

/aʔ.pem/	'otherwise'
/iʔ.net/	'wait!'
/naʔ.pɨt/	'path, road'
/caʔ.wət/	'thorn'

2.3 NASAL SPREADING

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

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 Karo[10]. They involve changes of the voiceless stops /p/, /t/ and /k/ both word-initially and word-finallly. With a few exceptions, these alternations are conditioned by an association of segmental factors (the position of specific vowels and consonant

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

/p/:

[war iyõm ***ib*** *an]*

wat iyõm ip at-t

1SG father fish bring.IND1

'my father brought a fish'

*[**cawab** wɨy]*

cawap wɨy-t

sun go.out-IND1

'the sun rose'

*[**naʔcab** yatep]*

naʔcap yatep

head.hair fall(ADJ.)

'fallen head hair'

/t/[11]:

*[**maʔwɨr** ameko roy]*

maʔwɨt ameko top-t

man jaguar see-IND1

'the man saw the jaguar'

[11] No change of /t/ to /r/ 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	mewɨt	**nyegat**	(2)	õn	aʔcegat	**nyanẽ**
	õn	pewɨt	yega-t		õn	aʔ-cega-t	yanẽ
	1SG	honey	search.for-IND1		1SG	3SG-turn.off-IND1	first
		'I searched for honey'			'I turned it off first'		

[maʔwɨr yét toy]

maʔwɨt yét top-t

man this see-IND1

'the man saw this one'

[õn ŋorér wĩn]

õn korét wĩ-n

1SG bird kill-IND1

'I killed a/the bird (sp.)'

/k/:

[maʔteg iʔke]

maʔtek iʔke

palm.tree NEG

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

[õn yaracewag yaʔti nãn]

õn yaracewak yaʔti nã-n

1SG wild.dog like COP-IND1

'I like the wild dog'

[yate naʔcəg wew]

yate naʔcək wew

pig nose large

'pig's large nose'

1b) /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'

[oyakõy ***bắttem]***

o-yakõp-t *pắt=tem*

1SG=dive-IND1 beautiful=ADVZ

'I dove beautifully'

[pew ***bət]***

pew *pət*

wound lots.of

'lots of wounds'

/t/:

mãygãra ***roba*** *at* *towɨya*

mãygãra *top-a* *aʔ=ʔe-t* *to=wɨy-a*

snake see-GER 3SG=AUX-IND1 3R=leave-GER

'He left to see the snake.'

[ar *inãw* ***rati]***

at *inãw* *tati-t*

3SG bird bring-IND1

'he brought a bird (sp.)'

[iʔnõ *gəy* ***rə]***

iʔ-nõ *kəy* *tə*

1PL.INCL=one.of DAT EVID

'for one of us, they say'

/k/:

[oti ***gán]***

o=ti-t *kán*

1SG=come-IND1 RPAST

'long ago I came'

[iyãy ***gõm]***

i=yãy *kõm*

3IMP=tooth like

'like a tooth'

[yaw ***gõam]***

yaw *kõam*

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/:

iyõm ***mát***

iyõm *pát-*

father beautiful

'beautiful father'

koran ***map***

koran *pap*

fish CL.CYLB

'fish (sp.)'

/t/:

kãram ***natia***

kãram *ta-ti-a*

hummingbird COM-take-GER

'Bring the hummingbird!'

haran ***narap***

haran *tarap*

monkey spotted

'spotted monkey (sp.)'

/k/:

iyõm ***ŋõm***

iyõm ***kõm***

father **SIMIL**

'like father'

okun ***ŋɨt***

o=kun ***kɨt***

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/ / $\tilde{v}$ __ # N

nãm *naká*

nãp *naká*

bee head

'head of (the/a) bee (sp.)'

epã́n *mãm* *ahyə*

e=pã́t *mãm* *ahyə*

2SG=beautiful X INTERR

'Are you good/alright?'

aʔwã́ŋ *naʔto* *wĩn*

aʔ=wã́k *naʔto* *wĩ-n*

3SG=sick tapir kill-IND1

'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 *mawɨ́ya*

cóp *ma-wɨ́y-a*

fly CAUS-go.out-GER

'make the

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]:

maʔwɨt	***tah***	*mõm*	*wɨ́y*
maʔwɨt	*tap*	*mõm*	*wɨ́y-t*
man	ASSOC	only	leave-IND1

'only men left'

naʔyoh	*nõ*
naʔyop	*nõ*
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'

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.

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

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/	[ˈyaba]	'rodent (sp.)'
/cobɨ/	[ˈcobɨ]	'hook'
/pibeʔ/	/ˈpibɛʔ/	'foot'
/pábeʔ/	/ˈpábeʔ/	'hand'
/aoro/	[aˈɔɾɔ]	'parrot'
/kiɾik/	[ˈkiɾik˺]	'green'
/waro/	[ˈ'waɾo]	'snail'
/mãro/	[ˈmə̃ɾõ]	'capibar'
/karo/	[ˈkaɾo]	'macaw'
/were/	[ˈwɛɾɛ]	'frog'
/yuri/	[ˈyuɾi]	'tatoo'
/macirup/	[maˈciɾup˺]	'bird (sp.)'
/ciɾɨp/	[ˈciɾɨp˺]	'bird (sp.)'
/yogo/	[ˈyɔgɔ]	'eel'
/cego/	[ˈcɛgo]	'monkey (sp.)'
/tágɨp/	[ˈtágɨp˺]	'bow'
/ígɨp/	[ˈígɨp˺]	'aunt'
/cigi/	[ˈcigi]	'spot'
/məga/	[ˈməga]	'mouse'
/ecigun/	[ɛˈciguᵈn]	'ant-eater (sp.)'
/iʔcogo/	[iʔˈcɔgɔ]	'quati (sp.)'
/manogon/	[maˈnᵈógoᵈn]	'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/	[pɛˈɔᵈn/	'skin'
/mopɨk/	[moˈpːɨkˀ]	'bird (sp.)'
/matek/	[maˈtːɛkˀ]	'palm tree (sp.)'
/kuruʔcu/	[kuruʔˈcu]	'saliva'
/pako/	[paˈkːɔ]	'fish (sp.)'
/yaʔo/	[yaˈʔɔ]	'lizard (sp.)'
/yaʔmo/	[yaʔˈmᵇɔ]	'yam (sp.)'
/anana/	[anaˈnᵈa]	'pineapple'
/maŋot/	[maˈŋᵍɔtˀ]	'again'
/nahɛk/	[naˈhɛkˀ]	'fontanel'
/kɨrɨwep/	[kɨɾɨˈwɛpˀ]	'butterfly'
/koyo/	[kɔˈyɔ]	'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/	[aciˈbɛ]	*[aˈcːibɛ]	'root'
/kiribop/	[kiɾiˈbɔpˀ]	*[kiˈɾibɔpˀ]	'frog (sp.)'
/pobo/	[pɔˈbɔ]	*[ˈpɔbɔ]	'owl'
/korem/	[koˈɾɛᵇm]	*[ˈkɔɾɛᵇm]	'also'
/mɨrɨrɨy/	[mɨɾɨˈɾɨy]	*[mɨˈɾɨɾɨy]	'toad (sp.)'
/koran/	[koˈɾaᵈn]	*[ˈkɔɾaᵈn]	'fish (sp.)'
/pirun/	[piˈɾuᵈn]	*[ˈpiɾuᵈn]	'round'

/pagon/	[paˈgɔᵈn]	*[ˈpagɔᵈn]	'friend'
/cagəp/	[caˈgəpˀ]	*[ˈcagəpˀ]	'dish'
/yogoy/	[yoˈgɔy]	*[ˈyɔgɔy]	'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 syllable[13].

Ultimate syllable stress:

/iyã/	[iˈỹə]	'Brazil nut'
/cokõy/	[coˈkːõỹ]	'parrot (sp.)'
/maʔõ/	[maˈʔõ]	'ant (sp.)'
/ayaʔnãp/	[ayaʔˈnãpˀ]	'branch'
/yaʔcĩ/	[yaʔˈcĩ]	'bad odor'
/cigã/	[ciˈgə]	'bone'

Penultimate syllable stress:

/wakãya/	[waˈkːəỹa]	'rodent (sp.)'
/ĩya/	[ˈĩỹa]	'bird'
/yogõyom/	[yoˈgõỹõm]	'beard, moustache'
/mãygãra/	[məỹˈgəɾə]	'snake'
/cimãran/	[ciˈməɾən]	'snake (sp.)'
/kõnam/	[ˈkõnəm]	'crazy'
/catõwa/	[caˈtːõw̃ə]	'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], *[yõca], *[tẽpan], 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. *[ˈpákã], *[ˈwétã], 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. *[ˈtápɨk˥], *[ˈcékə], etc.)

Examples of words with high pitch are[14]:

/yogá/	[yoˈgá]	'egg'
/korét/	[koˈrét˥]	'guan (sp.)'/'fowl'???
/napía/	[naˈpːíá]	'ant (sp.)'
/móa/	[ˈmóá]	'turtle (sp.)'
/pewít/	[pɛˈwít˥]	'sweet'
/nayúa/	[naˈyúá]	'ant's house'
/wíup/	[ˈwíúp˥]	'native, non-domesticated'

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).

[14] The phonetic convention I use to mark pitch is: high pitch : [ˊ]; mid pitch : [ˉ]; low pitch : unmarked.

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 distinghishable only by means of differences in pitch are:

/pḗn/	[ˈpḗn]	'to open'	vs.
/pēn/	[ˈpēn]	'to step'	
/cán/	[ˈcáᵈn]	'to wash'	vs.
/can/	[ˈcaᵈn]	'to pluck'	
/tóy/	[ˈtóy]	'to disappear'	vs.
/toy/	[ˈtɔy]	'to see'	

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

/maʔpe/	[maʔˈpɛ̄]	'gourd'
/parato/	[paraˈtːɔ̄]	'armadillo (sp.)'
/ameko/	[ameˈkːɔ̄]	'jaguar'
/yogá/	[yoˈgá]	'egg'
/pewít/	[pɛˈwítˀ]	'honey'
/korét/	[koˈrétˀ]	'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/	[naʔˈwə̄y]	'monkey (generic)'
/wayo/	[waˈyɔ̄]	'alligator'
/paramit/	[paraˈmīt˺]	'spider'

low-high:

/korét/	[koˈrét˺]	'guam (sp.)'
/cagá/	[caˈgá]	'eye'
/yogá/	[yoˈgá]	'tongue'

high-low:

/kárram/	[ˈkə̄r̄ə̄m]	'hummingbird'
/napía/	[naˈpːía]	'ant (sp.)'
/móa/	[ˈmᵇóá]	'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/	[naˈpːía]	'ant (sp.)'
/yaba/	[ˈyə̄βə̄]	'rodent (sp.)'
/párram/	[ˈpə́r̄ə̄m]	'wood (sp.)'
/karo/	[ˈkə̄rɔ̄]	'macaw'
/yogo/	[ˈyɔ̄gɔ̄]	'eel'
/káwan/	[ˈkáwán]	'be fat'
/morĭya/	[moˈr̄ĭ̄yə̄]	'bead'

/a-ma-kõ̋ma/ [ama'k:õ̋má] 'make it warm/warm it!'

/a-ma-pã̋na/ [ama'p:ã̋ná] 'make it beautiful!'

/pã̋ŋan/ ['pã̋ŋã̋n] '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 tones[16]), 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:gɨp'], 'bow' and [ī:gɨp'], '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 *ʔip* and *ik* plus *ʔip*.

[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) ideophones[17]. 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.

3.1.1 PRONOUNS

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

[17] Even though ideophones are considered a separate class of words, I will de[illegible]

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	õn	ẽn	at	ŋa
PL (INCL)	i?tə	ka?to	tap	
PL (EXCL)	té			

Table 5 Karo free personal pronouns

A set of possessive pronouns is used with alienable nouns. (See Genitive

nãn *mãygãra* *wĩn*

nãn *mãygãra* *wĩ-n*′

who snake kill-IND1

'Who killed the snake?'

nãn *ẽn* *itop*

nãn *ẽn* *i=top*

who 2SG 3IMP=see

'Who/what did you see?'

nãn *bihmãm* *ekerap*

nãn *pihmãm* *e=ket-ap*

who COMIT 2SG=sleep-IND2

'With whom did you sleep?'

The interrogative pronoun *kɨgomət* is used jointly with a noun (phrase). It also occurs at the beginning of clauses. The function of *kɨgomət* is to request more (precise) information about the noun to which it refers. *kɨgomət* may also occur in core or oblique function[18].

kɨgomət *ip* *pay*

kɨgomət *ip* *pap-t*

which fish die-IND1

'Which kind of fish died?'

kɨgomət *ĩya* *ẽn* *iwĩ*

kɨgomət *ĩya* *ẽn* *i=wĩ*

which bird 2SG 3IMP=kill

'Which kind of bird did you kill?'

[18] I have not found occurrences of *kɨgomət* in ergative (agentive) function.

kɨgomət	*iyá*	*naká*	*mã*	*at*	*yate*	*wĩm*
kɨgomət	*iyá*	*naká*	*mã*	*at*	*yate*	*wĩ-m*
which	stone	head	INSTR	3SG	pig	kill-IND2

'With which knife did he kil the pig?'

Both interrogative pronouns, *nãn* and *kɨgomət*, can be used with the interrogative particle *ahyə* in general information questions.

nãn	*ahyə*	*mẽr*	*ã*
nãn	*ahyə*	*mẽt*	*ã*
who	INTERR	here	X

'What is this here?'

nãn	*ahyə*
nãn	*ahyə*
who	INTERR

'What (happened)?; What/who is it?'

kɨgomət	*(+ noun)*	*ahyə*	*(mẽr*	*ã)*
kɨgomət	*(+ noun)*	*ahyə*	*(mẽt*	*ã)*
which	(...)	INTERR	(here	X)

'Which kind of (...) (is this one here)?'

Three demonstrative pronouns occur in Karo: *yét* 'this (close to speaker)', *tət* '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.

maʔwɨt	*paraʔkət*
maʔwɨt	*paraʔkək-t*
man	come.back-IND1

'The man came back.'

maʔpəy	*icɨ*	*tɛ́y*
maʔpəy	*icɨ*	*tɛ́p-t*
woman	**water**	boil-IND1

'The woman boiled the water.'

apəy	*ŋa*	*ʔet*	*topaba*	*mɨy*	*mãm*
apəy	*ŋa*	*ʔe-t*	*to=pap-a*	*mɨy*	*mãm*
grandmother	**CL.FEM**	AUX-IND1	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', *amãn*, 'rain', *mapəy* 'rainbow', etc.

INALIENABLE POSSESSED NOUNS:

with possessive clitics	**with full nouns**
opía	*naʔwəy bía*
o=pía	*naʔwəy pía*
1SG=liver	monkey liver
'my liver'	'monkey's liver'
enaká	*wayo naká*
e=naká	*wayo naká*
2SG=head	alligator head
'your head'	'alligator head'
aʔkun	*owẽ gun*
aʔ=kun	*owẽ kun*
3SG=belly	baby belly
'his/its belly'	'baby belly'

ALIENABLE POSSESSED NOUNS:

with possessive pronouns		**with full nouns**		
wat	*kaʔa*	*agóaʔpər*	*at*	*kaʔa*
wat	*kaʔa*	*agóaʔpət*	*at*	*kaʔa*
1SG.POSS	house	shaman	POSS	house
'my house'		'shaman's house'		
et	*tágɨp*	*Noep*	*at*	*tágɨp*
et	*tágɨp*	*Noep*	*at*	*tágɨp*
2SG.POSS	bow	Noep	POSS	bow
'your 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).

Kokõ rap

Kokõ 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)'

iʔtə rap

iʔtə 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.

maʔwɨt *cú*

maʔwɨt *cú*

man big

'big man'

maʔpəy *becép*

maʔpəy *pecép*

woman ugly

'ugly woman'

kɨrɨwep *pắt*

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.

ken	*oken*	*vs.*	*takéran*
ket-t	*o=ket-t*		*tap=kérat-t*
sleep-IND1	1SG=sleep-IND1		3PL=sleep-IND1

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.

mɨ̀y	*mãm*	*péŋ*	*ʔep*	***to ʔwa***
mɨ̀y	*mãm*	*péŋ*	***ʔe-p***	***to=ʔe-a***
long.ago	X	white.man	**AUX-IND2**	**3R=AUX-GER**

'Long ago there was a white man.'

məy	*maʔpəy*	*ŋa*	***waʔye***
məy	*maʔpəy*	*ŋa*	***waʔye***
so	woman	CL.FEM	**AUX**

'So, there was a woman.'

kanãy	*abagon*	*nap*	***waʔye***
kanãy	*aʔ=pagoñ*	*tap*	***waʔye***
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.)

aʔwero	*toba*	***okay***
aʔ=wero	*top-a*	***o=kap-t***
3SG=speech	see-GER	**1SG=AUX.FUT-IND1**

'I will listen to him.'

kõm	*iʔkay*	*Kabirera*	*wĩa*	*iʔkõna*
kõm	*iʔ=kap-t*	*Kabirera*	*wĩ-a*	*iʔ=kõna*
how	**1PL.INCL=AUX.FUT-IND1**	Kabirera	kill-GER	1PL.INCL=EMPH

'How will we kill Kabirera?'

tenaʔwara	***reʔkay***
teʔ=naʔwat-a	***teʔ=kap-t***
1PL.EXCL=leave-GER	**1PL.EXCL=AUX.FUT-IND1**

'We will leave.'

nãn	*mihmãm*	***ekab***	*eyaʔwara*
nãn	*pihmãm*	***e=kap-ap***	*e=yaʔwat-a*
who	COMIT	**2SG=AUX.FUT-IND2**	2SG=leave-GER

'With whom you will leave?'

kanãy	***iʔkap***	*aʔwĩa*
kanãy	***iʔ=kap-ap***	*aʔ=wĩ-a*
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'
yakõp	'hot'	yakõp + t	→	yakõy	'to be hot'
picorop	'hungry'	picotop + t	→	picori	'to be hungry'
pãt	'beautiful'	pãt + t	→	pãn	'to be beautiful'
picot	'naked'	picot + t	→	picon	'to be naked'
pewit	'sweet'	pewit + t	→	pewin	'to be sweet'
wãk	'sick'	wãk + t	→	wãt	'to be sick'
pitẽk	'cold'	pitẽk + t	→	pitẽgat	'to be cold'
ca?yõk	'sour'	ca?yõk + t	→	ca?yõgat	'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?pəy	*a?toy*	*?ittem*
ma?pəy	*a?=top-t*	*?it=tem*
woman	3SG=see-IND1	**little=ADVZ**

'The woman saw him/it briefly.'

at	*aʔpɨ̇y*	***gahmõmnem***
at	*aʔ=pɨ̇y-t*	***kahmõm=tem***
3SG	3SG=wait.for-IND1	**quiet=ADVZ**

'He waited for him quietly.'

õn	*wat*	*tap*	*yaʔti*	*nãn*	***cúrem***
õn	*wat*	*tap*	*yaʔti*	*nã-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.

cā́rem	'bitterly'
cúrem	'very much'
maŋaptem	'delayedly, longly'
cahmərəptem	'wisely'
kā́ptem	'deliciously'
pā́ttem	'beautifully', 'nicely'
ʔittem	'shortly'
carēktem	'slowly'
cehmāktem	'weakly'

kahmõmnem	'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.)

kotĩrem	'one'
cagáro komnem	'two'
pagon nóptem	'three'
pagon nopəttem	'four'
pagon bayrem	'five'
paʔpiktem	'many'

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

mẽt	'here'
tət	'there (close to speaker)'
meŋik	'there'
mẽm nu	'very far away'

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

matet	'yesterday'
mĩn	'today'
cãk mãm	'tomorrow'
tẽna	'now'
kanãy	'after'
miy mãm	'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*, *yahmãm* 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 adjective[19].

maʔpəy	***rah***	*mõm*	*ikérat*
maʔpəy	***tap***	*mõm*	*i=kérat*
woman	ASSOC	only	3IMP=sleep

'Only the women slept.'

maʔpəy	***rap***	*pãt*	***tah***	*mõm*	*ikérat*
maʔpəy	***tap***	*pãt*	***tap***	*mõm*	*i=kérat*
woman	ASSOC	beautiful	ASSOC	only	3IMP=sleep

'Only the beautiful women slept.'

The associative particle also differs from the plural marker *=toʔ* semantically. While the associative is employed to refer to the multiplicity of **different** entities somehow related to the noun with which it occurs, the plural is used to refer to the multiplicity of the **same** entity. In other words, the associative particle is used to group together (or associate), for some reason, referents necessarily distinct from each other, whereas the plural marker is used to refer to a group of the same referent.

This distinction can be better illustrated by comparing the pair of examples below, where the use of the associative refers necessarily to the heterogeneity of somebody's belongings, either animate, such as his/her relatives, or inanimate, such as personal items (e.g. a hammock, pots, pans, bows, arrows, etc.). The use of the plural marker, on the other hand, refers to the uniqueness of somebody's group of the same thing (in the case in question, houses).

[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.

wat	*tap*	*cf.*	*wat*	*ka?a*	*?a?to?*
wat	*tap*		*wat*	*ka?a*	*?a?=to?*
1SG.POSS	ASSOC		1SG.POSS	house	CL.RD=PL
'My relatives, stuff/things.'			'My houses.'		

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.	**mã**	INSTRUMENTAL	'with'
3.	**?erem**	DISPERSIVE	'through'
4.	**pe?**	LOCATIVE	'in/on'
5.	**kõm**	SIMILATIVE	'like'
6.	**pihmãm**	COMITATIVE	'with'
7.	**?ay**	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, *kõna*, is used for emphatic purposes. *kõna* 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 *kõna* is provided in Chapter 4, section 4.3.3 on Postpositional Phrases.

EMPHASIS ON THE ARGUMENTS OF A TRANSITIVE VERB: ERGATIVE ARGUMENTS

owagon	*oyakay*	***tokõna***
o=pagon	*o=yakap-t*	***to=kõna***
1SG=**friend**	1SG=push-IND1	**3R=EMPH**

'**My friend** pushed me.'

õn	*ip*	*ʔiy*	***okõna***
õn	*ip*	*ʔip-t*	***o=kõna***
1SG	fish	catch-IND1	**1SG=EMPH**

'I caught the fish'

EMPHASIS ON THE ARGUMENTS OF A TRANSITIVE VERB: ABSOLUTIVE ARGUMENTS

maʔpəy	***bãt***	***tokõna***	*at*	*ipiy*
maʔpəy	***pãt***	***to=kõna***	*at*	*i=piy-t*
woman	**beautiful**	**3R=EMPH**	3SG	3IMP=wait.for-IND1

'It was **a beautiful woman** whom he waited for.'

móa	***rokõna***	*ẽn*	*ibeʔtɨn*	*ahyə*
móa	***to=kõna***	*ẽn*	*i=peʔtɨt-t*	*ahyə*
tortoise	**3R=EMPH**	2SG	3IMP=roast-IND1	INTERR

'Was it **a/the tortoise** that you fried?'

EMPHASIS ON THE (ABSOLUTIVE) ARGUMENT OF INTRANSITIVE VERBS

maʔwɨt	*pekey*	***tokõna***
maʔwɨt	*pekep-t*	***to=kõna***
man	be.handicap	**3R=EMPH**

'The **man** is handicapped.'

aʔwét	***tokõna***
aʔ=wé-t	***to=kõna***
3SG=cry-IND1	**3R=EMPH**

'He cried.'

EMPHASIS ON THE ARGUMENT OF A PREDICATE ADJECTIVE CONSTRUCTION

taraptem	***õn***	***okõna***
tarap=tem	***õn***	***o=kõna***
spotted=ADVZ	**1SG**	**1SG=EMPH**

'I am spotted.'

cúrem	***at***	***tokõna***
cú=tem	***at***	***to=kõna***
big=ADVZ	**3SG**	**3R=EMPH**

'He is big.'

caropaptem	*gaʔto*	*garo=kõna*
caropap=tem	***kaʔto***	***karo=kõna***
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 –T [20]

The indicative (IND1) 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.

õn	*mãygãra*	*wĩn*	*təgana*	*pe?*	*cf.*
õn	*mãygãra*	*wĩ-**n***	*təgana*	*pe?*	
1SG	snake	kill-**IND1**	there	LOC	

'I killed the snake there.'

at	*towirup*	*?ot*	*cúrem*	*cf.*
at	*to=wirup*	*?o-**t*** __	*cú=tem*	
3SG	3R=food	eat-**IND1**	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.

oya?wan	*át*	*mãm*
o=ya?wat-t	*át*	*mãm*
1SG=leave-**IND1**	day	X

'I left during the day.'

õn	*ma?wɨt*	*-at*	*ka?a*	*toy*	*cf.*
õn	*ma?wɨt*	*at*	*ka?a*	*top-t*	
1SG	man	POSS	house	see-**IND1**	

'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

top + t	→ toy	'to see'
yakõp + t	→ yakõy	'be.hot'
pap + t	→ pay	'to die'
cérop + t	→ céri	'to be cured'
picorop + t	→ picori	'to be hungry'
cahmərəp + t	→ cahməri	'to be dizzy/drunk'

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

ya?wat + t	→ ya?wan	'to come back'
ket + t	→ ken	'to sleep'

ot + t	→ on	'to be born'
pắt + t	→ pấn	'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/

wɨy + t	→ wɨy	'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 begining 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*	*ʔop*
cú=tem	*at*	*to=wirup*	*ʔo-**p***
big=ADVZ	3SG	3R=food	eat-**IND2**

'A lot, he ate his own food.'

át	*mãm*	*oya ʔwa**rap***
át	*mãm*	*o=ya ʔwat-**ap***
day	X	1SG=leave-**IND2**

'During the day I left.'

maʔwɨt	*at*	*kaʔa*	*õn*	*itop*
maʔwɨt	*at*	*kaʔa*	*õn*	*i=top-**ap***
man	POSS	house	1SG	3IMP=see-**IND2**

'It was the white man's house what I saw.'

təgana peʔ	*õn*	*mãygãra*		*wĩ**m***
təgana peʔ	*õn*	*mãygãra*		*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'

pẽ + m	pẽm	'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.)

pe?cit + ap	pe?cirap	'to run'
ya?wat + ap	ya?warap	'to leave'
picot + ap	picorap	'to be naked'
nok + ap	nogap	'to eat'
pepak + ap	pepagap	'to wake up'
pitẽk + ap	pitẽgap	'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'
ya?wat + a	→ ya?wara	'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!'

*a?=tob-**a***
*a?=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, *pe ʔ-*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.

õn *amaken*

õn *aʔ=ma-ket-t*

1SG 3SG=CAUS-sleep-IND1

'I made it/him sleep.'

et *owã* *emakət*

et *owã* *e=ma-kə-t*

2SG mother 2SG=CAUS-walk-IND1

'Your mother made you walk.'

ŋa *omacopɨn*

ŋa *o=ma-copɨt-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.

at *amabaraʔkət*
at *aʔ=ma-paraʔkə-t*
3SG 3SG=CAUS-come.back-IND1
'He made it/him come back.'

õn *emaberopit* *ŋakəy*
õn *e=ma-peropi-t* *ŋa=kəy*
1SG 2SG=CAUS-pinch-IND1 3SG.FEM=DAT
'I made you pinch her.'

agóaʔpət *amagahmõm* *nãn*
agóaʔpət *aʔ=ma-kahmõm* *nã-n*
shaman 3SG=CAUS-be.quiet COP-IND1
'The shaman made him/it calm down.'

Otherwise there is no change.

õn ***amapəri***
õn ***aʔ=ma-pərəp-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.'

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

õn ***amaken***

õn *a?=**ma**-ket-t*

1SG 3SG=**CAUS**-sleep-IND1

'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	*owã*	*orakət*
wat	*owã*	*o=ta-kə-t*
1SG.POSS	mother	1SG=COM-walk-IND1

'My mother made me walk, walking with me.'

õn	*wat*	*awe*	*rabitẽy*
õn	*wat*	*awe*	*ta-bitẽp-t*
1SG	1SG.POSS	brother	COM-cross-IND1

'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-IND1

'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 /r/ after vowels (either oral or nasal) or glides. /t/ changes to /n/ after nasal consonants.

After vowels:

õn *wat* *owé* ***ra**ken*

õn *wat* *owé* ***ta**-ket-t*

1SG 1SG.POSS baby **COM**-sleep-IND1

'I put my baby to sleep, sleeping with it.'

õn *a?=**ra**ti*

õn *a?=**ta**-ti-t*

1SG 3SG=**COM**-come.IND1

'I brought him/it.'

After glides:

ẽn *yaw* *rati*

ẽn *yaw* *ta-ti-IND1*

2SG ray COM-come-IND1

'You brought the ray.'

at *mɨrɨrɨy* *ramoy*

at *mɨrɨrɨy* *ta-mop-t*

3SG toad COM-dive-IND1

'He dove with the toad.'

After nasal consonants:

agóa?pət *et* *iyõm* *nakõy*

agóa?pət *et* *iyõm* *ta-kõp-t*

shaman 2SG.POSS father COM-be.hot-IND1

'The shaman warmed your father (warming himself).'

cãn *nakəga*

cãn *takək-a*

cat COM-walk-GER

'Walk the cat!'

ʔiriŋ *nakəga*

ʔiriŋ *ta-kək-a*

girl COM-walk-GER

'Walk the (little) girl!'

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.

wat *awe* *orabitẽy*

wat *awe* *o=ta-pitẽp-t*

1SG.POSS brother 1SG=COM-cross-IND1

'My brother crossed with me.'

ŋa *toat* *owẽ* *ragahmõm* *nãn*

ŋa *toat* *owẽ* *ta-kahmõm* *nã-n*

3SG.FEM 3R.POSS child COM-be.quiet COP-IND1

'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.

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

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.

After glides and unround vowels:

oyãy *bemeŋãn*

o=yãy *pe-meŋã-n*

1SG=tooth IPASS-be.dirty-IND1

'My tooth got dirty.'

taykit yaw be *bewĩa*

taykit yaw pe? *pe-wĩ-a*

NEG ray CL.FLAT IPASS-kill-GER

'Isn't the ray going to get killed?'

taykit a?i ***bekiga***

taykit a?i ***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 *?et* *towa?para* *towewĩ-a*

boi *?e-t* *to=pa?pat-a* *to=**we**-wĩ-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 ʔtɨra

aʔ=pe-pe ʔtɨt-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.'

3.2.2.4 THE REFLEXIVE

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

õn *omãmnoy*

õn *o=mãm-top-t*

1SG 1SG=REFL-see-IND1

'I saw myself.'

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

at *tomãmwĩn*

at *to=mãm-wĩ-n*

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 *omãmkəy*

o=waká-n *o=mãm-kəy*

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

'I am angry at myself.'

aʔwero *wɨy* *tomãmkəy*

aʔ=wero *wɨ-y* *to=mãm-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:

owe ʔŋen

o=peʔ-ket-t

1SG=**OPT**-sleep-IND1

'Let me sleep.'

abe ʔŋət

aʔ=beʔ-kə-t

3SG=**OPT**-walk-IND1

'Let him/it walk.'

After glides:

naʔwəy ***be ʔŋət***

naʔwəy ***pe ʔ-ŋə-t***

monkey **OPT**-walk-IND1

'Let the monkey walk (free)!'

inãw ***be ʔnogat***

inãw ***pe ʔ-noga-t***

curassow **OPT**-eat-IND1

'Let the curassow eat!'

After nasal consonants:

kãram *me ʔnẽy*

kãram *pe ʔtẽp-t*

hummingbird OPT-fly-IND1

'Let the hummingbird fly!'

cãn *me ʔŋen*

cãn *pe ʔ-ket-t*

cat OPT-sleep-IND1

'Let the cat sleep!'

tĩŋ *me ʔŋət*

tĩŋ *pe ʔ-kə-t*

worm OPT-walk-IND1

'Let the worm go (free)!'

The changes triggered by *pe ʔ-* 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/, /n̥/ and /ŋ/, respectively.

/p/ → /m/

õn	*abe ʔmẽn*	*cf.*	*õn*	*a ʔpẽn*
õn	*a ʔ=pe ʔ-pẽ-t*		*õn*	*a ʔ=pẽ-t*
1SG	3SG=OPT-step-IND1		1SG	3SG=step-IND1
'Let me step on it/him.'			'I stepped on it/him.'	

/t/ → /n/

õn	*abe ʔ**noy***	*cf.*	*õn*	*a ʔtoy*
õn	*a ʔ=pe ʔ-**top-t***		*õn*	*a ʔ=top-t*
1SG	3SG=OPT-**see**-IND1		1SG	3SG=see-IND1
'Let me see it/him.'			'I saw it/him.'	

/k/ → /ŋ/

owe ʔŋət		*cf.*	*okət*	
o=pe ʔ-kə-t			*o=kə-t*	
1SG=OPT-walk-IND1			1SG=walk-IND1	
'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.

õn	*ip*	*pe ʔnɨy*	*cf.*	*õn*	*ip*	*ʔɨy*
õn	*ip*	*pe ʔ-nɨy-t*		*õn*	*ip*	*ʔɨy-t*
1SG	fish	OPT-catch-IND1		1SG	fish	catch-IND1
'Let me catch a/the fish.'				'I caught a/the fish.'		

abe ʔnan	*cf.*	*a ʔan*
a ʔ=pe ʔ- ʔat-t		*a ʔ= ʔat-t*
3SG=OPT-fall-IND1		3SG=fall-IND1
'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 *=to ʔ*

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

ka ʔaro ʔ

ka ʔa=to ʔ

house=**PL**

'houses'

vs.

ka ʔa ʔa ʔto ʔ

ka ʔa ʔa ʔ=to ʔ

house-CL.RD=**PL**

'houses'

vs.

wat *ka?a* *?a* *pɨk=to?*

wat *ka?a* *?a?* *pɨk=to?*

1SG.POSS house CLR rest.of=**PL**

'the rest of my houses'

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

inakáro?

i=naká=to?

3IMP=head=PL

'heads'

inãwro?

inãw=to?

curassow=PL

'curassows'

wat na?wəyro?

wat na?wəy=to?

1SG.POSS monkey=PL

'my monkeys'

kãramno?

kãram=to?

hummingbird=PL

'hummingbirds'

cibekonno?

cibekon=to?

vulture=PL

'vultures'

tuŋno?

tuŋ=to?

mortar=PL

'mortars'

=to? also occurs in a few lexicalized constructions, where the plurality of the referent(s) is somehow intrinsic[24]. 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.

pi	*vs.*	***piro***	*vs.*	***piro***	*cú*	*(cf. *ka?a=**ro** cú)*
pi		*pi=**to?***		*pi=**to?***	*cú*	
foot		foot=**PL**		foot=**PL**	big	
'foot'		'feet'		'big feet'		

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:

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

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

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

ŋa	*oʔtoy*	*maŋaptem*
ŋa	*o=top-t*	*maŋap=tem*
3SG.FEM	1SG=see-IND1	long=**ADVZ**
'She watched me for a long time'		cf.

maŋaptem	*ŋaap*	*otoba*
maŋap=tem	*ŋa=ʔe-p*	*o=top-a*
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.

cárarem	*õn*
cára=tem	*õn*
long=**ADVZ**	1SG
'I am tall.'	

*kắp**tem* *at* *ahyə*

*kắp=**tem*** *at* *ahyə*

delicious=**ADVZ** 3SG INTERR

'Is it delicious ?'

*pắt**tem*** *ma ʔpəy*

*pắt=**tem*** *ma ʔpəy*

beautiful=**ADVZ** woman

'The woman is beautiful.'

*pắt**tem*** *cúrem* *wat* *owế* *tap*

*pắt=**tem*** *cú=**tem*** *wat* *owế* *tap*

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 *ʔe* 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.

*otoy**rem*** *at*

*o=to-y=**tem*** *a ʔ- ʔe-t*

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.

*oken**nem*** *wet*

*o=ke-n=**tem*** *o=ʔe-t*

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/ /cúrem/ [ˈcúrɛᵇm] 'big'

big + ADVZ

/cɑ́/ + /=tem/ /cɑ́rem/ [ˈcɑ̃́rɛᵇm] 'bitter'

bitter + ADVZ

/piy/ + /=tem/ /piyrem/ [ˈpiyrɛᵇm] 'lazy'

lazy + ADVZ

/tɑ̃́w/ + /=tem/ /tɑ̃́wrem/ [ˈtəw̃rɛᵇm] 'far'

far + ADVZ

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

/pemẽm/ + /=tem/ /pemẽmnem/ [peˈmẽmnᵈɛᵇm] 'straight'

straight + ADVZ

/cagáro kõm/ + /=tem/ /cagáro kõmnem/ [caˈgáro ˈkõmnᵈɛᵇm] 'two'

two + ADVZ

/kĩn/ + /=tem/ /kĩnnem/ [ˈkĩnnᵈɛᵇm] 'hard'

hard + ADVZ

/wɨn/ + /=tem/	/wɨnnem/	[ˈwɨ^{d}nn^{d}ɛ^{b}m]	'curved'
curved + ADVZ			
/cawərəŋ/ + /=tem/	/cawərəŋnem/	[caˈwərəŋn^{d}ɛ^{b}m]	'deep'
deep + ADVZ			
/puruŋ/ + /=tem/	/puruŋnem/	[ˈpuruŋn^{d}ɛ^{b}m]	'deep (eye)'
deep + ADVZ			

After voiceless stops it remains unaltered.

/kap/ + /=tem/	/kaptem/	[ˈkaptɛ^{b}m]	'fat'
fat + ADVZ			
/pa̋t/ + /=tem/	/pa̋ttem/	[ˈpa̋tːɛ^{b}m]	'beautiful'
beautiful + ADVZ			
/wãk/ + /=tem/	/wãktem/	[ˈw̃ãktɛ^{b}m]	'sick'
sick + ADVZ			

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=	
PL (EXCL)	té=			
INDIEF	i=			

Table 7. Karo referential clitics

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

at *ecapét* *ahyə*

at *e=capé-t* *ahyə*

3SG **2SG**=beat-IND1 INTERR

'Did he beat **you**?'

õn *a ʔoy*

õn *a ʔ=top-t*

1SG **3SG**=see-IND1

'I saw **it/him**.'

WITH INTRANSITIVE VERBS:

oya ʔkoy

o=ya ʔkop-t

1SG=sweat-IND1

'**I** sweat.'

eya ʔi

e=ya ʔi-t

2SG=climb.down-IND1

'**You** climbed down.'

a ʔken

a ʔ=ket-t

3SG=sleep-IND1

'**He** slept.'

WITH ADJECTIVES:

maʔwɨt ***a*** *ʔkɨrɨk* *ʔan*

maʔwɨt ***a*** *ʔ=kɨrɨk* *ʔat-t*

man **3SG**=green bring-IND1

'The man brought **the green one**.'

WITH AUXILIARIES:

tocitóga ***a*** *ʔkay*

to=citók-a ***a*** *ʔ=kap-t*

3R=urinate-GER **3SG**=AUX.FUT-IND1

'**He** will go urinate.'

kanãy ***wep***[25] *okera*

kanãy ***o***=*ʔe=p* *o=ket-a*

then **1SG**=AUX-IND1 **1SG**=sleep-GER

'Then **I** slept.'

WITH POSTPOSITIONS:

owakán ***a*** *ʔkəy*

o=pakát-t ***a*** *ʔ=kəy*

1SG=be.angry-IND1 **3SG**=DAT

'I am angry at **him/it**.'

maʔwɨt *yaʔwan* ***ŋapik***

maʔwɨt *yaʔwat-t* ***ŋa***=*pik*

man leave-IND1 **3SG.FEM**=ALL

'The man left with **her**.'

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

wat	*iyõm*	*ip*	*ʔɨy*	***o**wihmãm*
wat	*iyõm*	*ip*	*ʔɨy-t*	***o**=pihmãm*
1SG.POSS	father	fish	catch-IND1	**1SG**=COM

'My father caught a/the fish with **me**.'

WITH COPULA:

mãygãra	*cú*	***a** ʔmãn*
mãygãra	*cú*	***a** ʔ=nã-n*
snake	big	**3SG**=COP-IND1

'**It** is a/the big snake.'

ma ʔpəy	*pãt*	*ŋanãn*
ma ʔpəy	*pãt*	*ŋa=nã-n*
woman	beautiful	**3SG.FEM**=COP-IND1

'**She** is a/the beautiful woman.'

péŋ	***a** ʔmãn*
péŋ	***a** ʔ=nã-n*
white.man	**3SG**=COP-IND1

'**He** is a/the white man.'

3.4 NOMINALIZATION

Verbs, verb phrases and whole clauses can be nominalized in Karo[26]. With the exception of the nominalization of verbs by me[illegible]

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 /r/ and /g/, respectively.

ʔo	'to eat'	ʔo + p	→	ʔop	'eater'

Transitive and intransitive verbs can also be nominalized by the particle *kanã*, 'thing', yielding place nouns.

o=kera	***kanã***
o=ker-a	***kanã***
1SG=sleep-GER	**NOMZ**

'My place to sleep.'

wat	*ip*	*ʔɨya*	***kanã***
wat	*ip*	*ʔɨy-a*	***kanã***
1SG	fish	catch-GER	**NOMZ**

'My place to catch fish.'

kanã is also used to nominalize verb phrases as absolutive arguments of the verb 'to like', yielding terms for actions[27].

õn	*aʔwĩa*	***kanã***	*yaʔti*	*nãn*
õn	*aʔ=wĩ-a*	***kanã***	*yaʔti*	*nã-n*
1SG	3SG=kill-GER	**NOMZ**	like	COP-IND1

'I like to kill it.'

[27] *kanã* 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 *kanã* in these items, nevertheless, seems not to be of a nominalizer, but of a regular noun (*kanã* in Karo is a noun which means 'thing').

yãy	cob	it	kanã
yãy	cop	it	kanã
tooth	dirt–	clean	thing

'dental floss'

iʔnok	kanã
iʔ=nok	kanã
1PL.INCL=eat	thing

'restaurant'

õn	*wat*	*mok*	*pe*	*cára*	*kanã*	*ya ʔti*	*nãn*	*i ʔke*
õn	*wat*	*mok*	*pe ʔ*	*cát-a*	*kanã*	*ya ʔti*	*nã-n*	*i ʔke*
1SG	1SG.POSS	cotton	CL.FLAT	wash-GER	NOMZ	like	COP-IND1	NEG

'I do not like to wash my clothes.'

ẽn	*ekera*	*kanã*	*ya ʔti*	*nãn*	*ahyə*
ẽn	*e=ket-a*	*kanã*	*ya ʔti*	*nã-n*	*ahyə*
2SG	2SG=sleep-GER	NOMZ	like	COP-IND1	INTERR

'Do you like to sleep?'

ka ʔto	*karowéya*	*kanã*	*ya ʔti*	*nãn*	
ka ʔto	*karo=wé-a*	*kanã*	*ya ʔti*	*nã-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 [amãn an] 'the rain fell/falls' takes the non-finite form [amãn ʔara] and is nominalized by *ko=* to be

õn	*amãn*	*ara*	***go****toy*
õn	*amãn*	*at-a*	***ko****=top-t*
1SG	rain	fall-GER	NOMZ=see-IND.1

korét	*capõt*	*cf.*	*korét*	*capõt*	*pất*	*but*	* *korét pất capõt*
korét	*capõt*		*korét*	*capõt*	*pất*		
bird	purple		bird	purple	beautiful		
'bird (sp.)'			'beautiful bird (sp.)'				

cego	*bɨk*	*cf.*	*cego*	*bɨk*	*kãp*	*but*	* *cego kãp bɨk*
cego	*pɨk*		*cego*	*pɨk*	*kãp*		
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.

páro	*pɨ̇y*	*cf.*	* *páro*	*peʔ*	*pɨ̇y*
páro	*pɨ̇y*		*páro*	*peʔ*	*pɨ̇y*
hands	lazy		hands	CL.FLAT	lazy
'sloth'			'sloth'		

cagáro	*mərəp*	*cf.*	* *cagáro*	*ʔaʔ*	*mərəp*
cagáro	*mərəp*		*cagáro*	*ʔaʔ*	*mərəp*
eyes	hazy		eyes	CL.RD	hazy
'drunk'			'drunk'		

classifier of wayo 'alligator': *pap*

classifier of naká 'head': *ká?*

kɨrɨwep	*tem*	*cí?*	*cf.*	**kɨrɨwep*	*cí?*	*tem*
kɨrɨwep	*tem*	*cí?*		*kɨrɨwep*	*cí?*	*tem*
butterfly	wing	CL.TFLAT		butterfly	¯CL.TFLAT	wing
'butterfly wing'				'butterfly wing'		

classifier of kɨrɨwep 'butterfly': *pe?*

classifier of tem 'wing': *cí?*

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.

mok	***pe?***	*cakɨ*	*cf.*	**mok*	*cakɨ*	*pe?*

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.

wirik	*kanã*	*vs.*	*wirik*	*kanã*	***cú***	*but*	**wirik **cú** kanã*
wirik	*kanã*		*wirik*	*kanã*	***cú***		
edible	thing		edible	thing	**big**		
'edible thing'			'big edible thing'				

ip	*cahyoy*	*vs.*	*ip*	*cahyoy*	*kɨt*	*but*	**ip kɨt cahyoy*
ip	*cahyoy*		*ip*	*cahyoy*	*kɨt*		
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*	*pẽn*
at	*toat*	*kaʔaʔ*	*ʔaʔ*	*pẽ-t*
3SG	3R.POSS	house	CL.RD	make-IND1

'He made his own house.'

kanãy	*at*	*toat*	*kaʔa*	*ʔaʔ*	*pẽya*[29]
kanãy	*at*	*toat*	*kaʔa*	*ʔaʔ*	*pẽ-a*
then	3SG	3R.POSS	house	CL.RD	make-GER

'Then he (went and) made his own house.'

at	*toat*	*kaʔa*	*ʔaʔ*	*pẽ*	*mãm*
at	*toat*	*kaʔa*	*ʔaʔ*	*pẽ*	*mãm*
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

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

depending on the grammatical function of the argument, whether absolutive or ergative

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	*gãp*	*ar*	*iʔop*	*cf.*
wayo	*kãp*	*at*	*ī=ʔo-p*	
alligator	tasty	3SG	3IMP=eat-IND2	

'(It is) a tasty alligator (that) he ate.'

ar	*wayo*	*gãp*	*ʔot*
at	*wayo*	*kãp*	*ʔo-t*

ẽn	*mãygãra*	*cú*	*wĩn*	*ahyə*
ẽn	*mãygãra*	*cú*	*wĩ-n*	*ahyə*
2SG	snake	big	kill-IND1	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.

maʔwɨr	*yet*	*[Ø*	*mãygãra*	*roba]*
maʔwɨt	*i=ʔe-t*	*[Ø*	*mãygãra*	*top-a]*
man	3IMP=AUX-IND1	[Ø	snake	see-GER]

'(It was) the man (who) saw the snake.'

maʔpəy	*bãt*	*yet*	*[Ø*	*opɨya]*
maʔpəy	*pãt*	*i=ʔe-t*	*[Ø*	*o=pɨy-a]*
woman	beautiful	3IMP=AUX-IND1	[Ø	1SG=wait.for-GER]

'(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).

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

cắk	*mãm*	*okap*	*cĩm*	*ʔóa*
cắk	*mãm*	*o=kap-ap*	*cĩm*	*ʔó-a*
tomorrow	X	1SG=FUT.AUX-IND2	meat	eat-GER

'Tomorrow I will eat meat.'

ʔittem	*õn*	*aʔtop*
ʔit=tem	*õn*	*aʔ=top-ap*
small=ADVZ	1SG	3SG=see-IND2

'Briefly I saw it/him.'

wat	*kaʔa*	*ʔa*	*peʔ*	*web*	*aʔpɨya*
wat	*kaʔa*	*ʔaʔ*	*peʔ*	*o=ʔe-p*	*aʔ=pɨy-a*
1SG.POSS	house	CL.RD	LOC	1SG=AUX-IND2	3SG=wait.for-GER

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

et	*kaʔa*	*ʔa*	*peʔ*	*at*	*epɨyap*
et	*kaʔa*	*ʔaʔ*	*peʔ*	*at*	*e=pɨy-ap*
2SG	house	CL.RD	LOC	3SG	2SG=wait.for-IND2

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

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

cĩm	*ʔoa*	*okay*	*cắk*	*mãm*
cĩm	*ʔo-a*	*o=kap-t*	*cắk*	*mãm*
meat	eat-GER	1SG=FUT.AUX-IND1	tomorrow	X

'I will eat meat tomorrow.'

õn	*aʔtoy*	*ʔittem*
õn	*aʔ=top-t*	*ʔit=tem*
1SG	3SG=see-IND1	small=ADVZ

'I saw it/him briefly.'

aʔpɨya	*wet*	*wat*	*kaʔa*	*ʔa*	*peʔ*
aʔpɨy-a	*o=ʔe-t*	*wat*	*kaʔa*	*ʔaʔ*	*peʔ*
3SG=wait.for-GER	1SG=AUX-IND1	1SG.POSS	house	CL.RD	LOC

'I waited for him/it at my house.'

at	*epɨy*	*et*	*kaʔa*	*ʔa*	*peʔ*
at	*epɨy-t*	*et*	*kaʔa*	*ʔaʔ*	*peʔ*
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.

eken	***ahyə***
eket-t	***ahyə***
2SG=sleep-IND1	**INTERR**

'Did you sleep?'

eken	*mă̈ttem*	***ahyə***
eket-t	*pă̈t=tem*	***ahyə***
2SG=sleep-IND1	beautiful=ADVZ	**INTERR**

'Did you sleep well?'

eken	*wat*	*manikap*	*pe?*	*bă̆ttem*	***ahyə***
eket-t	*wat*	*manikap*	*pe?*	*pă̆t=tem*	***ahyə***
2SG=sleep-IND1	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 inf[redacted]

ẽn	***ahyə***	*iket*[32]
ẽn	***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.

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

wat	*manikap*	*pe?*	***ahyə***	*ekerap*
wat	*manikap*	*pe?*	***ahyə***	*e=ket-ap*
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 QUESTIONS

Information questions are marked by interrogative pronouns, listed below.

INTERROGATIVE PRONOUNS

kɨganape	where?
kɨganapət	from where?

[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?'

kɨgope	when?
kõm	how?
kõm igu	how much?
nãnã	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 *nãnã* 'why' questions, the *–p* indicative suffix is used.

kɨganape	*(ahyə)*	*ekerap*
kɨganape	*(ahyə)*	*e=ket-ap*
which.place	(INTERR)	2SG=sleep-IND2

'Where did you sleep?'

kɨganapət	*(ahyə)*	*at*	*etop*
kɨganapət	*(ahyə)*	*at*	*e=top-ap*
from.where	(INTERR)	3SG	2SG=see-IND2

'From

kõm	*(ahyə)*	*igu*	*ẽn*	*ip*	*yapít*[33]
kõm	*(ahyə)*	*igu*	*ẽn*	*ip*	*yapí-t*
how	(INTERR)	many	2SG	fish	bowshot-IND1

'How many fish did you shoot with a bow?'

nãnã	*(ahyə)*	*agóaʔpət*	*óra*	*wɨy*	*maŋaptem*
nãnã	*(ahyə)*	*agóaʔpət*	*óra*	*wɨy-t*	*maŋap=tem*
why	(INTERR)	shaman	music	go-IND1	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.

ewɨya	*karowɨya*
e=wɨy-a	*karo=wɨy-a*
2SG=leave-GER	2PL=leave-GER
'Leave!'	'Leave (you PL.)!'

[33] In some occurrences of the interrogative pronoun *kõm igu*, *kõm* and *igu* are kept apart, *kõm* 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:

kõm	*(ahyə)*	*et*	*péŋ*	*yapía*	*igu*
kõm	*(ahyə)*	*e=ʔe-t*	*péŋ*	*yapí-a*	*igu*
how	(INTERR)	2SG=AUX-IND1	white.man	bowshot-GER	many

'How many men did you shoot (with a bow)?'

kõm	*at*	*ip*	*yapía*	*igu*
kõm	*aʔ=ʔe-t*	*ip*	*yapí-a*	*igu*
how	3SG=AUX-IND1	fish	bowshot-GER	many

'How many fish did he shoot (with a bow)?'

ekera	*karokérara*[34]
e=ket-a	*karo=kérar-a*
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.

taptoba	*(ẽn / kaʔto)*
tap=top-a	*(ẽn / kaʔto)*
3PL=see-GER	(2SG / 2PL)
'Watch them!'	

owirup	*tɨra*	*(ẽn / kaʔto)*
o=wirup	*tɨt-a*	*(ẽn / kaʔto)*
1SG=food	cook-GER	(2SG / 2PL)
'Cook my food!'		

yét	*maʔpəy*	*bãt*	*toba*	*(ẽn / kaʔto)*
yét	*maʔpəy*	*pãt*	*top-a*	*(ẽn / kaʔto)*
this	woman	beautiful	see-GER	(2SG / 2PL)
'Watch this beautiful woman!'				

wat	*manikap*	*peya*	*(ẽn / kaʔto)*
wat	*manikap*	*pe-a*	*(ẽn / kaʔto)*
1SG.POSS	hammock	make-GER	(2SG / 2PL)
'Make my hammock!'			

[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.

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.)

kanãy yét péŋ [ʔet]
kanãy yét péŋ [ʔe-t]
then this white.man [AUX-IND1]
'Then this white.man said/did.'

maʔwɨt [ken]
maʔwɨt [ket-t]
man [sleep-IND1]
'The man slept.'

õn [aʔweɾo toy]
õn [aʔ=wero top-t]
1SG [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 õn
cára=tem õn
tall=ADVZ 1SG
'I am tall.'

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

'My house is big.'

pãttem	*et*	*owẽ*	*rap*
pãt=tem	*et*	*owẽ*	*tap*
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.

kopɔt	*to*	*wecéb*	*aʔnãn*
kopɔt	*to*	*pecép*	*aʔ=nã-n*
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*.

Antônio	*yãn*	*kaʔa*	*ʔa*	*naʔot*	*peʔ*
Antônio	*yã-n*	*kaʔa*	*ʔaʔ*	*naʔot*	*peʔ*
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*).

tik	*wán*	*ahyə*	*et*	*kaʔa*	*ʔa*	*peʔ*
tik	*wát-t*	*ahyə*	*et*	*kaʔa*	*ʔa*	*peʔ*
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'.

õn	*wat*	*kaʔa*	*ʔa*	*kət*	*cagáro*	*kõmnem*
õn	*wat*	*kaʔa*	*ʔa*	*kə-t*	*cagáro*	*kõm=tem*
1SG	1SG.POSS	house	CL.RD	walk-IND1	two	X=ADVZ

'I have two houses.' (lit. 'My two houses walk.')

at	*toat*	*makãri*	*rakət*
at	*toat*	*makãri*	*ta-kə-t*
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 order[35]:

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

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] *paʔpan*

[yét péŋ] *paʔpat-t*

[DEM white.man] fall-IND1

'This man fell.'

kanãy [yét] ʔet *tocaropaba*

kanãy [yét] ʔe-t *to=caropap-a*

then [DEM] AUX-IND1 3R=be.sad-GER

[wat *owẽ]* *wét*

[wat *owẽ]* *wé-t*

[1SG.POSS child] cry-IND1

'My child cried.'

[karoat] *yãn* *iʔke* *tẽna*

[karoat] *yã-t* *iʔke* *tẽna*

2PL.POSS be.IND1 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.

maʔwɨt *at* *tágɨp*

maʔwɨt *at* *tágɨp*

man POSS bow

'man's bow'

agóaʔpət *at* *kaʔa* *ʔaʔ*

agóaʔpət *at* *kaʔa* *ʔaʔ*

shaman POSS house CL.RD

'shaman's house'

maʔpəy *at* *manikap*

maʔpəy *at* *manikap*

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.

aʔpábe *cigá*
aʔ=pábe *cigá*
3SG=hand blister
'the blister on his hand (his hand blister)'

tanaká *peon*
tap=naká *peon*
3PL=head skin
'the skin of their heads'

onakɨra *cop*
o=nakɨra *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.

mãygãra *capóp* *pɨ?*

mãygãra *capóp* *pɨ?*

snake tail CL.CYLS

'tail of a snake'

agóaʔpət *naká*

agóaʔpət *naká*

shaman head

'shaman's head'

owẽ *nakɨra* *cop*

owẽ *nakɨra* *cop*

child ear dirt

'the dirt of the ear of the child' cf.

war *owẽ* *nakɨra* *cop*

wat *owẽ* *nakɨra* *cop*

1SG.POSS child ear dirt

'the dirt of the ear of my child' cf.

ite *at* *owẽ* *nakɨra* *cop*

ite *at* *owẽ* *nakɨra* *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 ma?pəy ***ŋa*** *?et at chapéu* ***ká?*** *tiga ɨgana pe?*

məy ma?pəy ŋa ?e-t at chapéu ká? tik-a ɨgana pe?

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?pəy ***pãt***

ma?pəy ***pãt***

woman **beautiful**

'beautiful woman'

ma?ip ***cakot***

ma?ip ***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-IND1

'I slept hungry (or, better: 'I-hungry slept').'

a ʔwãk	*toba*	*agóa ʔpət*	*ʔet*
a ʔ=wãk	*top-a*	*agóa ʔpət*	*ʔe-t*
3SG=sick	see-GER	shaman	AUX-IND1

'The shaman went to see him-sick.'

kanãy	***a ʔpap***	*ʔet*	*towecɨra*
kanãy	***a ʔ=pap***	*ʔe-t*	*to=wecɨt-a*
then	**3SG=hurt**	AUX-IND1	3R=run-GER

'Then it-hurt ran.'

abakán	***a ʔpap***	*kəy*
a ʔ=pakát-t	***a ʔ=pap***	*kəy*
3SG=be.angry-IND1	**3SG=hurt**	DAT

'He was angry at the hurt one.'

pecéptem	***a ʔtarap***
pecép=tem	***a ʔ=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***	*a ʔwĩn*
at	***topə***	*a ʔ-wĩ-n*
3SG	**EVID**	3SG=kill-IND1

'He was seen to have killed it.'

pagon nóptem nakõm nap tə

pagon tóp=tem nakõm 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 kohmãy ʔerem tokəga,*

məy ***péŋ*** *ʔe-t kohmãy ʔerem to=kək-a*

then **white.man** AUX-IND1 top DISP 3R=walk-GER

'Then (I saw that) the white man was walking through the top (of the tree),

tomanẽ mãŋa tə,

to=manẽ mãŋ-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 *=to ʔ* were discussed in chapter 3, section 3.3.1 above.

kanãy péŋ ʔep toat mok ***pero ʔ*** *cára ici pe ʔ*

kanãy péŋ ʔe-p toat mok pe ʔ=to ʔ cát-a ici pe ʔ

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.

ocãp	*itɨ cãp*
ocãp	*itɨ cãp*
1SG=leg	deer leg
'my leg'	'deer's leg'

ekap	*yate gap*
ekap	*yate kap*
2SG=fat	pig fat
'your fat'	'pig's fat'

acagá	*aoro cagá*
acagá	*aoro cagá*
3SG=eye	parrot eye
'his/its 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*	*maʔwɨr*	*at*	*kaʔa*
wat	*kaʔa*	*maʔwɨt*	*at*	*kaʔa*
1SG.POSS	house	man	POSS	house
'my house'		'man's house'		

er	*icɨ*	*maʔpəy*	*at*	*icɨ*
et	*icɨ*	*maʔpəy*	*at*	*icɨ*
2SG.POSS	water	woman	POSS	water
'your water'		'woman's water'		

at	*tágɨp*	*agóaʔpət*	*at*	*tágɨp*
at	*tágɨp*	*agóaʔpət*	*at*	*tágɨp*
3SG.POSS	bow	shaman	POSS	bow
'his 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 *pihmãm*.

at	*ip*	*ʔɨy*	*Naʔkɨt*	*pihmãm*
at	*ip*	*ʔɨy-t*	*Naʔkɨt*	*pihmãm*
3SG	fish	catch-IND1	Naʔkɨt	COMIT

'He and Naʔkɨt caught the fish.' (lit.: 'He caught the fish with Naʔkɨt')

owakán	*matet*	*wat*	*iyõm*	*pihmãm*	*(towakára)*
o=pakát-t	*matet*	*wat*	*iyõm*	*pihmãm*	*(to=pakát-a)*
1SG=be.angry-IND1	yesterday	1SG.POSS	father	COMIT	(3R=be.angry-GER)

'My father and I were angry yesterdaȳ.'

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 *kõam*, 'also', occurs at the end of the second, non-finite clause.

at	*ỹya*	*wĩn*	*kokõ*	*wĩa*	*kõam*
at	*ỹya*	*wĩ-t*	*kokõ*	*wĩ-a*	*kõam*
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 *kõm*.

agóaʔpət	*cú*	*aʔnãn*	*Cabirera*	*kõm*
agóaʔpət	*cú*	*aʔ=nã-n*	*Cabirera*	*kõm*
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 *koãm*, 'also'.

kaʔtay	*at*	*naʔwəy*	*kəy*	*aʔi*	*kəy*	*kõam*
kaʔtay	*aʔ=ʔe-t*	*naʔwəy*	*kəy*	*aʔi*	*kəy*	*kõam*
shoot	3SG=AUX-IND1	monkey	DAT	sloth	DAT	also

'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 *koãm*, 'also'.

maʔwɨr	*at*	*pewit,*	*ŋaat*	*pewit*	*koãm*
maʔwɨt	*at*	*pewit,*	*ŋaat*	*pewit*	*koãm*
man	POSS	honey,	3SG.FEM.POSS	honey	also

'the man's honey, and her honey also'

opábe ʔ, *epábe ʔ* *koãm*

o=pábe ʔ, *e=pábe ʔ* *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, [illegible]

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.

iyõm wat awe capét
iyõm wat awe capé-t
father 1SG.POSS brother beat-IND1
'Father beat my brother.'

wat awe iyõm capét
wat awe iyõm capé-t
1SG.POSS brother father 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 absolutives are marked by a set of pronominal clitics. The free pronouns and the pronominal clitics are in complementary distribution with lexical noun phrases.

oken	*cf.*	*owara ʔkət*
o=ket-t		*o=para ʔkə-t*
1SG=sleep-IND1		1SG=go.back-IND1
'I slept.'		'I went back.'
maʔwɨt ken	*cf.*	*aʔ=ken*
maʔwɨt ket-t		*aʔ=ket-t*
man sleep-IND1		3SG=sleep-IND1
'The man slept.'		'He/it slept.'

agóaʔpət	*paraʔkət*	*cf.*	*abaraʔkət*
agóaʔpət	*paraʔkə-t*		*aʔ=paraʔkə-t*
shaman	go.back-IND1		3SG=go.back-IND1
'The shaman went back.'			'He/it went back.'

õn	*ameko*	*toy*	*cf.*	*ameko*	*otoy*
õn	*ameko*	*top-t*		*ameko*	*o=top-t*
1SG	jaguar	see-IND1		jaguar	1SG=see-IND1
'I saw the jaguar.'				'The jaguar saw me.'	

õn	*aʔtoy*	*cf.*	*at*	*otoy*
õn	*aʔ=top-t*		*at*	*o=top-t*
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,

aʔwaʔye,
aʔ=waʔye
3SG=AUX
he,

yét ***ma ʔwɨt,***

yét ***ma ʔwɨt***

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.

õn	*[er*	*iyõm*	*noy]$_{VP}$*	*[matet]$_{Adv.P}$*
õn	*[et*	*iyõm*	*top-t]*	*[matet]*
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.

[tər	*i ʔke]$_{Adv.P}$*	*õn*	*[a ʔtop]$_{VP}$*
[tət	*i ʔke]*	*õn*	*[a ʔ=top-ap]*
[there	NEG]	1SG	[3SG=see-IND2]

'It was not there that I saw it/him.'

[mĩn mãm i ʔke]$_{Adv.P}$	*péŋ*	*[yowarap]*
[mĩn mãm i ʔke]	*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 absolutives form a constituent can be seen in the fact that they may appear together at the beginning of sentences in negative focus constructions.

agóaʔpət	***[mãygãra***	***roy***	***iʔke]***
agóaʔpət	***[mãygãra***	***top-t***	***iʔke]***
shaman	**[snake**	**see-IND1**	**NEG]**

'The shaman did not see the snake.' *cf.*

[mãygãra	***toba***	***iʔke]***	*agóaʔpət*	*ʔet*
[mãygãra	***top-a***	***iʔke]***	*agóaʔpət*	*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.

maʔwɨt	*ken*	*iʔke*	*cf.*
maʔwɨt	*ket-t*	*iʔke*	
man	sleep-IND1	NEG	

'The man did not sleep.'

[to=kera	*iʔke]*	*maʔwɨt*	*ʔet*
[to=ket-a	*iʔke]*	*maʔwɨt*	*ʔe-t*
[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 ʔpət *wɨy*

agóa ʔpət *wɨy-t*

shaman **leave-IND1**

'The shaman left.'

õn ***māygāra*** ***toy***

õn ***māygāra*** ***top-t***

1SG snake see-IND1

'I saw a/the snake.'

kanãy ***péŋ*** *ʔet* *(...)*

kanãy ***péŋ*** *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.)

õn *epɨy* *co*

õn *epɨy-t* *co*

1SG 2SG=wait.for-IND1 **PAST**

'I waited for you'

owa ʔpan	*a ʔpẽya*	***gán***
owa ʔpat-t	*a ʔpẽy-a*	***kán***
1SG=fall.down-IND1	3SG=step-GER	**RPAST**

'I fell stepping on it long ago'

õn	*omẽn*	*meropir*	***yar***	*i ʔke*
õn	*o=mẽn*	*peropi-t*	***yat***	*i ʔke*
1SG	1SG=husband	pinch-IND1	**FUT**	NEG

'I will not pinch my husband.'

péŋ	*ya ʔi*	*toat*	*mok*	*pe ʔ*	*cán*	***iga***
péŋ	*ya ʔi-t*	*toat*	*mok*	*pe ʔ*	*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, *i ʔke* and *yahmãm*. 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:

õn	*péŋ*	*yati*	*nãn*	***i ʔke***
õn	*péŋ*	*yati*	*nã-n*	***i ʔke***
1SG	white.man	like	COP-IND1	**NEG**

'I do not like the white man.'

tap	*táy*	*nãn*	***i ʔke***
tap	*táy*	*nã-n*	***i ʔke***
3PL	few	COP-IND1	**NEG**

'They are not few.'

te ʔyoy	***iʔke***	*tã́wrem*	
te ʔ=yop-t	***iʔke***	*tã́w=tem*	
1PL.INCL=live-IND1	**NEG**	far=ADVZ	

'We do not live far.'

ewét	***yahmãm***
e=wé-t	***yahmãm***
2SG=cry-IND1	**NEG**

'Do not cry!'

ip	*ʔɨya*	*aʔkay*	***yahmãm***
ip	*ʔɨy-a*	*aʔ=kap-t*	***yahmãm***
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	*mãygãra*	*wĩn*	***menə***
at	*mãygãra*	*wĩ-t*	***menə***
3SG	snake	kill-IND1	EVID

'It is wondered whether he killed the snake.'

at	*mãygãra*	*wĩn*	***nãnin***
at	*mãygãra*	*wĩ-t*	***nãnin***
3SG	snake	kill-IND1	EVID

'He really killed the snake.'

at	*mãygãra*	*wĩn*	***tə***
at	*mãygãra*	*wĩ-t*	***tə***
3SG	snake	kill-IND1	EVID

'He killed the snake, they say.'

at	*mãygãra*	*wĩn*	***igã***
at	*mãygãra*	*wĩ-t*	***igã***
3SG	snake	kill-IND1	EVID

'He must have killed the snake.'

at	*mãygãra*	*wĩn*	***coke***
at	*mãygãra*	*wĩ-t*	***coke***
3SG	snake	kill-IND1	EVID

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

wat	*owẽ*	*ŋa*	*kət*	*yat*	*iʔke*	***menə***
wat	*owẽ*	*ŋa*	*kə-t*	*yat*	*iʔke*	***menə***
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 *kõna* 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 a 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*	***tágɨh***	***mã***
péŋ	*aʔ=wĩ-t*	***tágɨp***	***mã***
white.man	3SG=kill-IND1	bow	**INSTR**

'the white man killed it with a/the bow.'

aʔwɨ̃y	*naco*	***ʔerem***
aʔwɨ̃y-t	*naco*	***ʔerem***
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	*ẽn*	*et*	***iyõm***	***ŋõm***
pecép=tem	*ẽn*	*et*	***iyõm***	***kõm***
ugly=ADVZ	2SG	2SG	**father**	**SIMIL**

'You are ugly like your father.'

ŋabenaoy	***abihmãm***
ŋa=penaop-t	***aʔ=pihmãm***
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	*ina ʔwara*	***a ʔpik***
ək	*i ʔ=na ʔwat-a*	***a ʔ=pik***
let's	1PL.INCL=leave-GER	**3SG=ALL**

'Let's leave (go out) to him/it.'

ip	*cú*	*gət*	*icɨ*	***bət***
ip	*cú*	*kə-t*	*icɨ*	***pət***
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	***ba ʔpe***	***bem***	*wep*	*owara ʔkəga*
ci	***pa ʔpe***	***pem***	*o=ʔe-p*	*o=para ʔkək-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 *kõna*. The noun (or noun phrase) to be emphasized is marked coreferentially in the postpositional phrase by a pronominal argument which is attached to kõna. 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 subject[36].

[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.

õn	*ip*	*ʔɨy*	***okõna***
õn	*ip*	*ʔɨp-t*	***o=kõna***
1SG	fish	catch-IND1	**1SG=EMPH**

'**I** caught the fish.'

õn	***okõna***	*ip*	*ʔɨy*
õn	***o=kõna***	*ip*	*ʔɨp-t*
1SG	**1SG=EMPH**	fish	catch-IND1

'**I** caught the fish.'

ŋa	***tokõna***	*icɨ*	*an*	*yat*	*aʔkəy*
ŋa	***tokõna***	*icɨ*	*at-t*	*yat*	*aʔ=kəy*
3SG.FEM	**3R=EMPH**	water	bring-IND1	FUT	3SG=DAT

'**She** will bring water to him/it.'

oken	***okõna***
o=ket-t	***o=kõna***
1SG=sleep-IND1	**1SG=EMPH**

'**I** slept.'

õn	***okõna***	*okera*
õn	***o=kõna***	*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	***[mirirɨy***	*ʔet]*	*[iʔpéya]*
wəŋ=tem	***[mirirɨy***	*ʔe-t]*	*[iʔ=pé=a]*
far=ADVZ	**[toad**	AUX-IND1]	[1PL.INCL=confuse=GER]

'From afar, **the toad** confuses us,

[iʔca	*macahmərəba]*	***rokõna***
[iʔ=ca	*ma-cahmərəp-a]*	***to=kõna***
[1PL.INCL=eye	CAUS-haze-GER]	**3R=EMPH**

making our sight hazy.'

On the other hand, if the noun to be emphazised 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 [illegible]

at	*péŋ*	*wĩn*	***paʔpiktem***	***mɨy***	***mãm***
at	*péŋ*	*wĩ-n*	***paʔpik=tem***	***mɨy***	***mãm***
3SG	white.man	kill-IND1	**many=ADVZ**	**long.ago**	**X**

'He killed many men long ago.'

mẽganape	*õn*	*ameko*	*top*	*matet*
mẽganape	*õn*	*ameko*	*top-ap*	*matet*
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 + *mãm*)
2. Negative particle
3. Emphatic particle

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

wat	*apəy*	*ŋa*	*pepat*	***cək***	***mãm***
wat	*apəy*	*ŋa*	*pepak-t*	***cək***	***mãm***
1SG.POSS	grandmother	CL.FEM	wake.up-IND1	**early**	**X**

'My grandmother woke up early.'

[37] The meaning of the particle *mãm* is not yet completely understood.

õn	*aʔtoy*	***pãttem***
õn	*aʔtop-t*	***pãt=tem***
1SG	3SG=see-IND1	**beautiful=ADVZ**

'I saw it nicely.'

agóaʔpət	*péŋ*	*wĩn*	***paʔpiktem***
agóaʔpət	*péŋ*	*wĩ-n*	***paʔpik=tem***
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.

tẽna	***iʔke***	*maʔpəy*	*icɨ*	*arap*
tẽna	***iʔke***	*maʔpəy*	*icɨ*	*at-ap*
now	**NEG**	woman	water	bring-IND2

'It was not now that the woman brought water.'

pãttem	***iʔke***	*ap*	*towerowɨya*
pãttem	***iʔke***	*aʔ=ʔe-p*	*to=werowɨy-a*
beautiful	**NEG**	3SG=AUX-IND2	3R=speak-GER

'It was not beautifully that he spoke.'

matet	***iʔke***	***rokõna***	*Petɨp*	*ʔep*	*towetõa*
matet	***iʔke***	***to=kõna***	*Petɨp*	*ʔe-p*	*to=petõ-a*
yesterday	**NEG**	**3R=EMPH**	Petɨp	AUX-IND2	3R=tell-GER

'It was not yesterday that Petɨp 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	*icɨ*	*an*	*iʔke*	***rẽna***
maʔpəy	*icɨ*	*at-t*	*iʔke*	***tẽna***
woman	water	bring-IND1	NEG	**now**

'The woman did not bring water now.'

aʔwero	*wɨy*	*iʔke*	***bắttem***
aʔ=wero	*wɨy-t*	*iʔke*	***pắt=tem***
3SG=speech	go-IND1	NEG	**beautiful=ADVZ**

'He did not speak beautifully.'

Petɨp	*petõn*	*iʔke*	***matet***
Petɨp	*petõ-n*	*iʔke*	***matet***
Petɨp	tell-IND1	NEG	**yesterday**

'Petɨp 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).

maʔwɨt		*ip*	*ʔɨy*	***matet***	***cagárokõmnem***
maʔwɨt		*ip*	*ʔɨy-t*	***matet***	***cagárokõm=tem***
man	fish	catch-IND1	**yesterday**	**two=ADVZ**	

'The man caught two fish yesterday.'

maʔwɨt		*ip*	*ʔɨy*	***cagárokõmnem***	***matet***
maʔwɨt		*ip*	*ʔɨy-t*	***cagárokõmnem***	***matet***
man	fish	catch-IND1	**two=ADVZ**	**yesterday**	

'The man caught two fish yesterday.'

ar	*atati*	***ba ʔpiktem***	***meŋik to***
at	*aʔ=ta-ti-t*	***paʔpik=tem***	***meŋik to***
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.

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

'My mother was angry at me.'

war	*owã*	*ŋa*	*bakán*	***okəy***	***matet***
wat	*owã*	*ŋa*	*pakát-t*	***o=kəy***	***matet***
1SG=POSS	mother	CL.FEM	angry-IND1	**1SG=DAT**	**yesterday**

'My mother was angry at me yesterday.'

war	*owã*	*ŋa*	*bakán*	***okəy…***
wat	*owã*	*ŋa*	*pakát-t*	***o=kəy***
1SG=POSS	mother	CL.FEM	angry-IND1	**1SG=DAT**

'My mother was angry at me…

…matet	***péŋ***	***at***	***kaʔa***	***ʔa***	***peʔ***
matet	***péŋ***	***at***	***kaʔa***	***ʔaʔ***	***peʔ***
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***	*bă̈ttem*
e=ket-t		*ahyə*	***co***	*pă̈t=tem*
2SG=sleep-IND1		INTERR	**PAST**	beautiful=ADVZ

'Did you sleep well?'

õn	*ĩriŋ*	*macéri*	***gán***
õn	*ĩriŋ*	*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.

iyõm *ŋen* ***co*** ***matet***

iyõm *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.'

toto *ibetõ* ***mɨy*** ***mãm*** *ŋán*

toto *i=betõ* ***mɨy*** ***mãm*** *kán*

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*.

war *icɨ* *ʔara* ***okay*** ***co***

wat *icɨ* *ʔat-a* ***o=kap-t*** ***co***

1SG.POSS water bring-GER 1SG=**AUX.FUT-IND1** **PAST**

'I was going to bring my water.'

iyõm ***ikap*** *towenaoba* ***co***

iyõm ***i=kap-ap*** *to=penaop-a* ***co***

father **3IMP=AUX.FUT-IND2** 3R=dance-GER **PAST**

'Dad was going to dance.'

õn *cĩm* *yegat* ***yat*** ***co***

õn *cĩm* *yega-t* ***yat*** ***co***

1SG meat hunt-IND1 **FUT** **PAST**

'I was going to hunt.'

õn	*owirap*	*tɨn*	***yat***	***co***
õn	*o=wirap*	*tɨt-t*	***yat***	***co***
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 clause[38]. In all of the cases found so far, the simple past marker *co* occurs before the remote past marker *kán*.

wat	*kanã*	*rakəga*	*wet*	***co***	***kán***	
wat	*kanã*	*takək-a*	*o=ʔe-t*	***co***	***kán***	
1SG.POSS	thing	COMIT-walk-GER	1SG=AUX-IND1		**PAST**	**RPAST**

'I had my things long ago.'

õn	*opit*	*məy*	*mãm*	***co***	***kán***
õn	*o=pi-t*	*məy*	*mãm*	***co***	***kán***
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*.

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.

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

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.

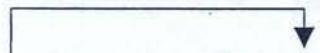
In the first type of construction, the intransitive verb in the gerund form occurs first, followed by a Noun Phrase + AUXILIARY FUTURE, which receives the indicative mood marking.

tokera ***[maʔwɨt*** ***cú]*** *kay*

to=ket-a ***[maʔwɨt*** ***cú]*** *kap-t*

3R=sleep-GER **[man** **big]** AUX.FUT-IND1

'The big man is going to sleep.'



owɨya *okay*

o=wɨy-a *o=kap-t*

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.

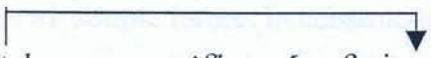
(Ø)	*mãygãra*	*wĩa*	*[wat*	*owẽ]*	*kay*
(Ø)	*mãygãra*	*wĩ-a*	*[wat*	*owẽ]*	*kap-t*
(Ø)	snake	kill-GER	[1SG.POSS	**child]**	AUX.FUT-IND1

'My son is going to kill a/the snake.'

(Ø)	*aʔtoba*	*cúrem*	*aʔkay*
(Ø)	*aʔ=toba*	*cúrem*	*aʔ=kap-t*
(Ø)	3SG=see-IND1	big=ADVZ	3SG=AUX.FUT-IND1

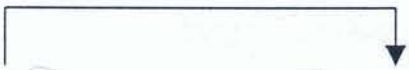
'He is going to see it well.'

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*	*[maʔwɨt*	*cú]*	*gay*
to=ket-a	*iʔke*	*[maʔwɨt*	*cú]*	*kap-t*
3R=sleep-GER	NEG	[man	big]	AUX.FUT-IND1

'The big man is not going to sleep.'



owɨya	*iʔke*	*okay*
o=wɨy-a	*iʔke*	*o=kap-t*
1SG=leave-GER	NEG	1SG=AUX.FUT-IND1

'I am not going to leave.'

(Ø)	*mãygãra*	*wĩa*	*iʔke*	***[war***	***owẽ]***	*gay*
(Ø)	*mãygãra*	*wĩ-a*	*iʔke*	***[wat***	***owẽ]***	*kap-t*
(Ø)	snake	kill-GER	NEG	**[1SG.POSS**	**child]**	AUX.FUT-IND1

'My son is not going to kill a/the snake.'

(Ø)	*aʔtoba*	*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].

wat	*ka ʔa*	*ʔa*	*yat*
wat	*ka ʔa*	*ʔa ʔ*	*yat*
1SG.POSS	house	CL.RD	FUT

'My future house.'

a ʔcey	*ŋa*	*yat*
a ʔ=cey	*ŋa*	*yat*
3SG=wife	CL.FEM	FUT

'his future wife'

The future particle *yat* may also occur with the negative particle *i ʔke*. In these cases, the latter particle follows the former.

ameko cú	*ya ʔwan*	*nyat*	*i ʔke*	
ameko cú	*ya ʔwat-t*	*yat*	*i ʔke*	
jaguar big	leave.IND1	FUT	NEG	

'The big jaguar will not leave.'

õn	*a ʔtoy*	*yar*	*i ʔke*
õn	*a ʔ=top-t*	*yat*	*i ʔke*
1SG	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 clauses[39]. In these clauses, the negative particle

[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:

oya ʔwara	*okay*	*oken*	*iga*	*or*
o=ya ʔwar-a	*o=kap-t*	*o=ket-t*	*iga*	
1SG=leave-GER	1SG=FUT	1SG=sleep-IND1	FUT	

'I am going to leave to sleep'-

taykit occurs first, followed by the transitive or intransitive verb in a finite form with indicative marking.

taykir	*at*	*aʔtoy*	*iga*
taykit	*at*	*aʔ=top-t*	*iga*
NEG	3SG	3SG=see-IND1	FUT

'Isn't he going to seē it/him?'

taykir	*aʔken*		*iga*
taykit	*aʔ=ket-t*		*iga*
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*, *yahmãm*, 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

---

oyaʔwan	*nyat*	*oken*	*iga*	
o=yaʔwat-t	*yat*	*o=ket-t*	*iga*	
1SG-leave-IND1	FUT	1SG=sleep-IND1	FUT	

'I will leave to sleep'

oyaʔwara	*okay*	*aʔtoy*	*iga*	*or*
o=yaʔwar-a	*o=kap-t*	*aʔ=top-t*	*iga*	
1SG=leave-GER	1SG=FUT-IND1	1SG=sleep-IND1	FUT	

'I am going to leave to see him/it'

oyaʔwan	*nyar*	*aʔtoy*	*iga*
o=yaʔwat-t	*yat*	*aʔ=top-t*	*iga*
1SG-leave-IND1	FUT	3SG=see-IND1	FUT

'I will leave to see him/it'

beginning of the clause followed by the negative particle *i?ke*. The different occurrences of *i?ke* 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:

oken	*i?ke*
oket-t	*i?ke*
1SG=sleep-IND1	NEG

'I did not sleep.'

ar	*otoy*	*i?ke*
at	*o=top-t*	*i?ke*
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:

[õn	*i?ke]*	*mãygãra*	*roy*
[õn	*i?ke]*	*mãygãra*	*top-t*
[1SG	NEG]	snake	see-IND1

'It wasn't me who saw the snake.'

[ar	*owẽ*	*rab*	*i?ke]*	*ewirup*	*?ot*
[at	*owẽ*	*tap*	*i?ke]*	*e=wirup*	*?o-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 *i?ke*. The verb (transitive or intransitive) takes the impersonal proclitic *i=* and the unmarked form:

[mãygãra iʔke] õn itop

[mãygãra iʔke] õn 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] ŋa icát

[ẽn iʔke] ŋa 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 pãt iʔke] iyaʔwat

[maʔpəy pãt 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 *ʔe* 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	*¬iʔke*	*ekəy*
o=pakát-t	*iʔke*	*e=kəy*
1SG=be.angry.IND1	NEG	2SG=DAT

'I am not angry with you.' *cf.*

[ekəy	*iʔke]*	*wep*	*owakára*
[e=kəy	*iʔke]*	*o=ʔe-p*	*o=pakát-a*
[2SG=DAT	NEG]	1SG=AUX-IND2	1SG=be.angry-GER

'It is not with you that I am angry'

õn	*aʔtoy*	*iʔke*	*at*	*kaʔa*	*ʔa*	*peʔ*
õn	aʔ=top-t	iʔke	at	kaʔa	ʔaʔ	peʔ
1SG	3SG=see-IND1	NEG	3SG.POSS	house	CL.RD	LOC

'I did not see him/it at his house.' *cf.*

[at	*kaʔa*	*ʔa*	*peʔ*	*iʔke]*	*wep*	*aʔtoba*
[at	*kaʔa*	*ʔaʔ*	*peʔ*	*iʔke]*	*o=ʔe-p*	*aʔ=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:

pă̈ttem	*i ʔke*	*web*	*okera*[40]
pă̈t=tem	*i ʔke*	*o=ʔe-p*	*o=ket-a*
beautiful=ADVZ	NEG	1SG=AUX-IND2	1SG=sleep-GER

'It was not nicely that I slept.'

mekõm	*i ʔke*	*i ʔyat*	*kotigap*	*mɨy*	*mãm*
mekõm	*i ʔke*	*i ʔyat*	*kotiga-p*	*mɨy*	*mãm*
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:

pă̈ttem	*i ʔke*	*õn*
pă̈t=tem	*i ʔke*	*õn*
beautiful=ADVZ	NEG	1SG

'I am not beautiful.'

paʔpiktem	*i ʔke*	*war*	*owẽ*	*rap*
paʔpik=tem	*i ʔke*	*wat*	*owẽ*	*tap*
many=ADVZ	NEG	1SG.POSS	child	ASSOC

'My children are not many (children).'

On the other hand, when the scope of negation falls on the noun described, the noun is put into focus, followed by the negative particle and the adjective + adverbializer:

[40] A construction with similar meaning where no auxiliary occurs is:

oken	*i ʔke*	*pă̈ttem*
oket-t	*i ʔke*	*pă̈t=tem*
1SG=sleep-IND1	NEG	beautiful=ADVZ

'I did not sleep nicely/well.'

ar *iʔke* *pắttem* *cf.* **pắttem at iʔke*

at *iʔke* *pắt=tem*

3SG NEG beautiful=ADVZ

'It is not him who is beautiful.'

war *owē* *rab* *iʔke* *baʔpiktem* *cf.* **paʔpiktem wat owe tap iʔke*

wat *owē* *tap* *iʔke* *paʔpik=tem*

1SG.POSS child ASSOC NEG many=ADVZ

'It is not my children who are many.'

7) Finally, when the negation occurs in a predicate nominal construction, the negative particle occurs at the end of the predicative noun phrase:

maʔpəy *iʔke* *aʔnãn*

maʔpəy *iʔke* *aʔ=nã-n*

woman NEG 3SG=COP-IND1

'He/it is not a woman/female.'

péŋ *mecéb* *iʔke* *aʔnãn*

péŋ *pecép* *iʔke* *aʔnã-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		*i ʔke*	*okay*
o=ket-a		*i ʔke*	*o=kap-t*
1SG=sleep-GER		NEG	1SG=AUX.FUT-IND1

'I am not going to sleep.'

cĩm	*cára*	*i ʔke*	*a ʔkay*
cĩm	*cát-a*	*i ʔke*	*a ʔ=kap-t*
meat	wash-GER	NEG	3SG=AUX.FUT-IND1

'He is not going to wash his prey.'

When *i ʔke* is in a future clause with the future particle *yat*, it occurs immediately after *yat*.

a ʔwɨy		*yat*	*i ʔke*
a ʔ=wɨy-t		*yat*	*i ʔke*
3SG=go.out-IND1		FUT	NEG

'He will not go out.'

õn	*a ʔtoy*	*yat*	*i ʔke*	*pãttem*
õn	*a ʔ=top-t*	*yat*	*i ʔke*	*pãt=tem*
1SG	3SG=see-IND1	FUT	NEG	beautiful=ADVZ

'I will not see it/him nicely.'

4.5.2 THE NEGATIVE PARTICLE *YAHMÃM*

The negative particle *yahmãm* 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 *yahmãm*

e=wé-t *yahmãm*

2SG=cry-IND1 NEG

'Don't cry!'

karokéran *yahmãm*

karo=kérat-t *yahmãm*

2PL=sleep-IND1 NEG

'Don't sleep (you PL.)!'

ayowan *yahmãm*

a?=yowat-t *yahmãm*

3SG=leave-IND1 NEG

'Don't leave it.'

cĩm *yegat* *yahmãm* *tẽna*

cĩm *yek-at* *yahmãm* *tẽna*

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 mood[41]:

kõm *ar* *otoy* *yahmãm*

kõm *at* *o=top-t* *yahmãm*

how 3SG 1SG=see-IND1 NEG

'How (come) he did not see me?'

[41] Some speakers seem to employ the gerund form *–a* on the verb of the second clause as in:

kanape *wep* *omatia* *yahmãm*

kanape *o=?e-p* *o=ma-ti-a* *yahmãm*

here(?) 1SG=AUX-IND2 1SG=CAUS-go-GER NEG

'I did not come here.'

kõm	*péŋ*	*ʔet*	*nyahmãm*	*apik*
kõm	*péŋ*	*ʔe-t*	*yahmãm*	*aʔ=pik*
how	white.man	AUX-IND1	NEG	3SG=ALL

'How (come) the white man did not go with him/it?'

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/.

kɨganape	*ap*	*naʔto*	*roy*	*yahmãm*
kɨganape	*aʔ=ʔe-p*	*naʔto*	*top-t*	*yahmãm*
where	3SG=AUX-IND2	tapir	see-IND1	NEG

'Where did he not see the tapir?'

kɨganape	*ep*	*eken*	*yahmãm*
kɨganape	*e=ʔe-p*	*e=ket-t*	*yahmãm*
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.

taykir	*iʔwirup*	*toba*
taykit	*iʔ=wirup*	*top-a*
NEG	1PL.INCL=food	see-GER

'Aren't/weren't (you) watching our food?'

taykir	*ekera*	*et*	*ka?a*	*?a*	*pe?*
taykit	*e=ket-a*	*et*	*ka?a*	*?a?*	*pe?*
NEG	2SG=sleep-GER	2SG.POSS	house	CL.RD	LOC

'Weren't you sleeping at your house?'

taykit	*péŋ*	*ekiga*
taykit	*péŋ*	*e=kiga-a*
NEG	white.man	2SG=hold-GER

'Isn't/wasn't the white man holding you?'

taykit may also co-occur with the future marker *iga*, producing:

taykit	*eyamoy*	***iga***
taykit	*e=yamoy-t*	***iga***
NEG	2SG=bathe-IND1	**FUT**

'Aren't you going to bathe?'

taykit	*ebia?an*	***iga***	*mɨrɨrɨy*	*kəy*
taykit	*e=pia?at-t*	***iga***	*mɨrɨrɨy*	*kəy*
NEG	2SG=be.afraid-IND1	**FUT**	toad	DAT

'Aren't you going to be afraid of the toad?'

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].

məy	*yét*	*maʔpəy*	*ŋa*	*waʔye*	*cán*	*nã*	*makɨra,*
məy	*yét*	*maʔpəy*	*ŋa*	*waʔye*	*cán*	*nã*	*ma-kɨt-a*
then	this	woman	CL.FEM	AUX	fire	CL	CAUS-fire-GER

'"Then this woman started a fire",

war	***iyõm***	***ʔet***	***(okəy***	***matet)***
wat	***iyõm***	***ʔet***	***(o=kəy***	***matet)***
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 oppositon 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 it[42].

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.

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 clause is *transitive*, the (ergative) subject is omitted. The sentence below exemplifies both ways of marking same subjects in clause chaining.

Ø ci ba?pe mawɨga,
Ø ci pa?pe ma-wɨk-a
Ø water edge CAUS-be.dirty-GER
'(He) dirtied the edge of the water,'

Ø ci mininĩ ʔa mõm mawɨya,
Ø ci mininĩ ʔa mõm ma-wɨy-a
Ø water bubble CL.RD only CAUS-go.out-GER
'(he) made the water bubbles to come up,'

Ø ŋaramãya,
Ø ŋa=ta-mãy-a
Ø 3SG.FEM=COMIT-bring-GER
'(he) took her (in),'

[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.

Ø ŋaʔóa,

Ø ŋa=ʔó-a

Ø 3SG.FEM=eat-GER

'(he) ate her,'

toyãy ʔa binõ ya,

to=yãy ʔaʔ pinõ ya-a

3R=tooth CL.RD noise leave-GER

'(he) cracked his own teeth'

at.

aʔ=ʔe-t

3SG=AUX-IND1

'He (the alligator) did.'

A mixture of clause chaining and subordination (see section below on

(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 clauses[43], marked by three types of connectors 1) time, marked with *kanãp* 'after, while, when'; 2) purpose, marked with *nãt* 'in order to/for'; and 3) cause, marked with *yəye* 'because'.

4.7.2.1 TIME

Constructions which express a temporal relation between events in a sentence are marked by the subordinator *kanãp*. 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.

oya ʔwan	*a ʔkera*	*kanãp*
o=ya ʔwat-t	*a ʔ=ket-a*	*kanãp*
1SG=leave-IND1	3SG=sleep-GER	TIME

'I left when he slept.'

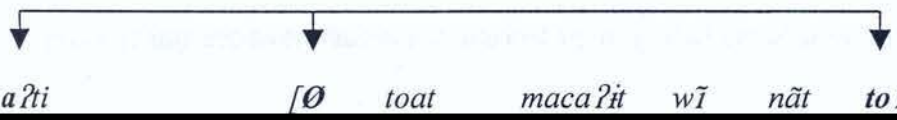
õn	*a ʔtop*	*mãm*	*at*	*towirap*	*ʔo*	*kanãp*
õn	*a ʔ=top*	*mãm*	*at*	*to=wirap*	*ʔo*	*kanãp*

When the subjects are not coreferential, either a new overt subject (with transitive verbs) or a normal, non-coreferential pronominal clitic (with intransitive verbs) occurs.

owe ʔcɨn	*[**at***	*oto*	*kanãp]*
o=pe ʔcɨt-t	*[**at***	*o=top-a*	*kanãp]*
1SG=run-IND1	[**3SG**	1SG=see-GER	TIME]

'I

sentence, in the gerund form. The subject of this auxiliary is always coreferential with the subject of the main clause.



aʔti *ʃØ* *toat* *macaʔit* *wĩ* *nãt* ***to*** *ʔwɔ*

Purposive constructions follow a nominative-accusative pat[redacted]

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 sema[redacted]

pap

məga pap	'rat (sp.)'
makara pap	'heron'
parat pap	'fish (sp.)'
paramit pap	'spider'
macõm pap	'shrimp'
ma?pe pap	'basket'
ite pap	'uncle'

ɨp

motogo ?ɨp	'monkey (sp.)'
ĩya ?ɨp	'bird'
imo ?ɨp	'fish (sp.)'
mate ?ɨp	'fruit (sp.)'
wáya ?ɨp	'spoon'
toto ?ɨp	'grandson'

pí?

cắp pí?	'leg'
wakãya pí?	'rodent (sp.)'
kắram pí?	'hummingbird'
cawãy pí?	'fish (sp.)'
ma?ɨp pí?	'handle of an axe'
capop pí?	'tail'

pe?

magoyapan pe?	'wild dog'
cibekon pe?	'vulture'
yaw pe?	'river ray'

kap

ʔõt kap	'caterpillar'
makap kap	'peanut'
iya kap	'gravel'
pĩu kap	'maraca'
yãy kap	'tooth'
yoʔkĩ kap	'palm tree (sp.)'

maʔ

maʔta maʔ	'bean'
cicɨ maʔ	'mosquito (sp.)'
koropía maʔ	'edible root (sp.)'

ŋa

corap ŋa	'girlfriend'
cey ŋa	'wife'
owã ŋa	'mother'
toto ŋa	'granddaughter'
apəy ŋa	'grandmother'
anãt ŋa	'sister'

nãʔ

cán nãʔ	'fire'
mani nãʔ	'cooked manioc'

5.1 Formal properties

From a strictly formal point of view, the classifiers of Karo can be categorized as

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 -mõy 'powder', igana 'dirt', etc.;

2) referents whose shape is not perceived as unique or stable, like cimĩto 'shadow', carogĩn 'cloud, smoke', -piru 'footprint', -caki 'slice, piece', cĩm 'meat', -pacop 'paste', -pe?wap 'mash', -wirap 'food', -mõy 'dust, powder', -cək 'hole', etc.;

3) body parts, or things somehow connected to the body, like -capə 'penis', -cere 'vagina', -cigã 'bone', -mot 'body hair', -na?cap 'head hair', -?ora cək 'anus', -na?cək 'nostril', -?ora 'excrement', -wero 'speech', -ce 'smell', etc.;

4) elements of nature, like anaŋot 'wind', amãn 'rain', ca?wap 'sun', mapəy 'rainbow';

[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.

icãp	***pɨ́ʔ***	*icapop*	***pɨ́ʔ***
i=cãp	***pɨ́ʔ***	*i=capop*	***pɨ́ʔ***
3IMP=leg	**CL.CYLS**	3IMP=tail	**CL.CYLS**
'leg'		'tail'	

ibeon	***meʔ***	*ipá*	***beʔ***
i=peon	***peʔ***	*i=pá*	***peʔ***
3IMP=skin	**CL.FLAT**	3IMP=hand	**CL.FLAT**
'skin'		'hand'	

naʔyop	***cɨ́ʔ***	*wəwə*	***cɨ́ʔ***
naʔyop	***cɨ́ʔ***	*wəwə*	***cɨ́ʔ***
leaf	**CL.TFLAT**	fanner	**CL.TFLAT**
'leaf (also: money)'		'hand fanner'	

karo	***ʔaʔ***	*icagá*	***ʔaʔ***
karo	***ʔaʔ***	*i=cagá*	***ʔaʔ***
macaw	**CL.RD**	3IMP=eye	**CL.RD**
'macaw'		'eye'	

inãk	***káʔ***	*maʔẽ*	***gáʔ***
i=nãk	***káʔ***	*maʔẽ*	***káʔ***
3IMP=mouth	**CL.CCV**	pan	**CL.CCV**
'mouth'		'pan'	

makap	***kap***	*iyãy*	***gap***
makap	***kap***	*i=yãy*	***kap***
peanut	**CL.BSS**	3IMP=tooth	**CL.BSS**
'peanut'		'teeth'	

[48] One exception I found was *cĩm maʔwa-p peʔ* 'frying pan', which has the classifier *peʔ*, used for flat objects.

maʔta	***maʔ***	*cicɨ*	***maʔ***
maʔta	***maʔ***	*cicɨ*	***maʔ***
bean	**CL.BDS**	mosquito	**CL.BDS**
'beans'		'mosquito'[49]	

maʔpəy	*ŋa*	*icey*	*ŋa*
maʔpəy	*ŋa*	*i=cey*	*ŋa*
woman	**CL.FEM**	3IMP=wife	**CL.FEM**
'woman'		'wife'	

mani	***nãʔ***	*cán*	***nãʔ***
mani	***nãʔ***	*cán*	***nãʔ***
manioc	**CL**	fire	**CL**
'manioc'		'fire'	

5.1.2 GENITIVES

Classifiers can also occur in genitive constructions, if the head noun is classifiable

ei *nãk* *ká?*

ei *nãk* *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

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.

kãram *nãk* ***pí?***
kãram *nãk* ***pí?***
hummingbird mouth CL.CYLS
'mouth of (a) hummingbird'

where the classifier of *kãram* is *pí?*, and the classifier of *nãk* is *ká?*.

kãram *yogá* ***bí?***
kãram *yogá* ***pí?***
hummingbird tongue CL.CYLS
'tongue of (a) hummingbird'

where the classifier of *kãram* is *pí?*, and the classifier of *yogá* is *pe?*.

karo *nãg* ***a?***
karo *nãk* ***?a?***
macaw mouth CL.RD
'mouth of (a) macaw'

where the classifier of *karo* is *?a?*, and the classifier of *nãk* is *ká?*.

karo *yogá* ***?a?***
karo *yogá* ***?a?***
macaw tongue CL.RD
'tongue of (a) macaw'

where the classifier of *karo* is *?a?*, and the classifier of *yogá* is *pe?*.

Finally, when the head noun is not classifiable, the sequence [N + N_{head}] does not take any classifier[51].

wayo *biru*
wayo *piru*
alligator footprint
'footprint of (an) alligator'

ameko ʔora
ameko ʔora
jaguar excrement
'excrement of (a) jaguar'

kãram *wirap*
kãram *wirap*
hummingbird food
'hummingbird's food'

---

[51] Some speakers do employ the classifier of the modifying noun in these constructions.

wayo *biru* ***bap***
wayo *piru* ***pap***
alligator footprint CL.LONG.BIG
'footprint of (an) alligator'

ameko *ʔora* ***ʔaʔ***
ameko *ʔora* ***ʔaʔ***
jaguar excrement CL.ROUND
'excrement of (a) jaguar'

kãram *wirap* ***píʔ***
kãram *wirap* ***píʔ***
hummingbird food CL.LONG.SML
'hummingbird's food'

parato *cək* ***peʔ***
parato *cək* ***peʔ***
armadillo hole CL.FLAT
'hole of (an) armadillo (sp.)'

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.

ɨu ***bap*** *ci*

ɨu ***pap*** *ci*

açaí CL.CYLB water

'açaí wine'

cat ***pap*** *cakɨ*

cat ***pap*** *cakɨ*

log CL.CYLB piece

'wood piece (piece of wood)'

nãya ***gap*** *pe ʔwap*

nãya ***kap*** *pe ʔwap*

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 concord[52].

a) with head nouns:

wayo	***bap***	*cú*	***bap***
wayo	***pap***	*cú*	***pap***
alligator	CL.CYLB	big	CL.CYLB

'big alligator'

ĩya	***ʔip***	*pã́r*	***ip***
ĩya	***ʔip***	*pã́t*	***ʔip***
bird	CL.CYLM	beautiful	CL.CYLM

'beautiful bird'

icã́p	***píʔ***	*cára*	***bíʔ***
i=cã́p	***píʔ***	*cára*	***píʔ***
3IMP=leg			

karo *2a 2* *pár*

b) in genitive constructions:

wayo	*nãk*	***pap***	*cú*	***bap***
wayo	*nãk*	***pap***	*cú*	***pap***
alligator	mouth	CL.CYLB	big	CL.CYLB

'big alligator mouth'

ei	*nãk*	***ká?***	*cú*	***gá?***
ei	*nãk*	***ká?***	*cú*	***ká?***
honey-eater	mouth	CL.CCV	big	CL.CCV

'big mouth of (a) honey-eater'

wayo	*yogá*	***be?***	*cára*	***be?***
wayo	*yogá*	***pe?***	*cára*	***pe?***
alligator	tongue	CL.FLAT	long	CL.FLAT

'long tongue of (an) alligator'

kãram	*nãk*	***pí?***	*?ĩt*	***pí?***
kãram	*nãk*	***pí?***	*?ĩt*	***pí?***
hummingbird	mouth	CL.CYLS	small	CL.CYLS

'small mouth of (a) hummingbird'

karo	*nãg*	***a?***	*pĩg*	***a?***
karo	nãk	?a?	pĩk	?a?
macaw	mouth	CL.RD	black	CL.RD

'black mouth of (a) macaw'

c) in compounds:

ɨu	***bap***	*ci*	*kãp*	***pap***
ɨu	***pap***	*ci*	*kãp*	***pap***
açaí	CL.CYLB	water	delicious	CL.CYLB

'delicious açaí wine'

cat	***pap***	*cakɨ*	*wɨn*	***map***
cat	***pap***	*cakɨ*	*wɨn*	***pap***
log	**CL.CYLB**	piece	curved	**CL.CYLB**

'curved piece of wood'

nãya	***gap***	*peʔwap*	*paʔpik*	***kap***
nãya	***kap***	*peʔwap*	*paʔpik*	***kap***
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

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 gender[53].

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 nature[54]. As can be seen in Table 9 above, seven out of the 11 classifiers which occur in Karo (*pap, ʔip, píʔ, peʔ, cíʔ, ʔaʔ*, and *káʔ*) pertain to the shape of the referent they classify.

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 *maʔ* is used).

Gender is used to refer to female referents, particularly with kin terms (cf. maʔpəy 'woman', -cey 'wife', owã '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

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[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 *ʔaʔ* '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.).

b) changing reference:

iyá	***gap***	*cf.*	*iyá*	***be?***	*cf.*	*iyá*	***?a?***
iyá	***kap***		*iyá*	***pe?***		*iyá*	***?a?***
stone	CL.BSS		stone	CL.FLAT		stone	CL.RD
'gravel'			'digging stick'			'stone'	

were	***be?***	*cf.*	*were*	***bí?***	
were	***pe?***		*were*	***pí?***	
frog	CL.FLAT		frog	CL.CYLS	
'toad'			'frog'		

ipá	***be?***	*cf.*	*ipá*	***gap***	*cf.*	*ipá*	***gá?***
i=pá	***pe?***		*i=pá*	***kap***		*i=pá*	***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.

ca?wət	***pab***	***a?***
ca?wət	***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 PROPE[redacted]

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 langua[redacted]

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:

[t͡p̄] : voiceless dental bilabial stop with bilabial trill release

This sound occurs in an ideophone which has the meaning of 'jump', as in:

t͡p̄u ameko ʔet

t͡p̄u 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 ['parak'] 'perforate', or mīrik ['mīr̄ik'] 'pinch', are usually pronounced as ['prak'] and ['mr̄ik'], respectively[57].

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

OPTATIVE *pe ʔ-* , RECIPROCAL *mãm-* or REFLEXIVE *toro-*); and do not occur with any clitics (PLURAL *=to ʔ*, 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:

púŋ	*wet*	*péŋ*	*kəy*	
púŋ	*o=ʔe-t*	*péŋ*	*kəy*	
shoot	1SG=AUX-IND1	white.man	DAT	

'I shot the white man once.' cf.

puŋ	*púŋ*	*wet*	*péŋ*	*kəy*	
puŋ	*púŋ*	*o=ʔe-t*	*péŋ*	*kəy*	
shoot	shoot	1SG=AUX-IND1	white.man	DAT	

'I shot the white man several times.'

tuy	*Babesáya*	*ŋa*	*ʔet*	*yate*	*taʔwara*	
tuy	*Babesáya*	*ŋa*	*ʔe-t*	*yate*	*taʔwat-a*	
pull	Babesáya	CL.FEM	AUX-IND1	pig	bring-GER	

'Babesáya brought the pig by pulling it once.' cf.

tuy	*tuy*	*Babesáya*	*ŋa*	*ʔet*	*yate*	*taʔwara*
tuy	*tuy*	*Babesáya*	*ŋa*	*ʔe-t*	*yate*	*taʔwat-a*
pull	pull	Babesáya	CL.FEM	AUX-IND1	pig	bring-GER

'Babesáya brought the pig by pulling it repeatedly.'

[58] The one exception is the clitic *=tem* which can in fact occur with some ideophones.

Although ideophones frequent

weri *weri* *at* *cahwíptem*

weri *weri* *a?=?e-t* *cahwíp=tem*

paddle paddle 3SG=AUX-IND1 fast=ADVZ

'He paddled very fast.'

wen *wen* *we* *mãm*

wen *wen* *o=?e* *mãm*

write write 1SG=AUX X

'I am writing.'

6.2.3.2 In interrogative clauses

Ideophones pattern differently in yes-no questions and information questions.

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 *ʔe* 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?'

ẽn *ahyə* *púŋ* *ye*
ẽn *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.

nãn *oturum* *to ʔwa*
nãn *oturum* *to=ʔe-a*
who climb.down 3R=AUX-GER
'Who climbed down?'

nãn *ŋərəŋ* *to ʔwa*
nãn *ŋərəŋ*

6.2.3.3 In negation

In clauses with ideophones, the negative particle *i ʔke* 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].

kãy	*kãy*	*wet*	*i ʔke*
kãy	*kãy*	*o=ʔe-t*	*i ʔke*
scratch	scratch	1SG=AUX-IND1	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).

púŋ	*wa*	*i ʔke*	*wet*
púŋ	*o=ʔe-a*	*i ʔke*	*o=ʔe-t*

õn *iʔke ~ púŋ* *wa*

õn *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* *karo ʔwa*

puŋ *púŋ* *karo=ʔe-a*

shoot shoot 2PL=AUX-GER

'(You PL.) shoot!'

kãy *kãy* *ʔa* *et* *kaʔa* *ʔa* *peʔ*

kãy *kãy* *e=ʔe-a* *et* *kaʔa* *ʔa* *peʔ*

scratch scratch 2SG=AUX-GER 2SG.POSS house CL.RD LOC

'(You sg.) scratch (at your house)!'

Combinations of ideophones plus regular transitive or intransiti[redacted]

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.

iyit	*okay*	*o ʔa*	*ecáp*	*píʔto ʔ*	*pe ʔ*
iyit	*o=kap-t*	*o= ʔe-a*	*e=cáp*	*píʔ=to ʔ*	*pe ʔ*
pinch	1SG=AUX.FUT-IND1	1SG=go-CER	2SG=leg	CL.CYLS=PL	LOC

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 *yahmãm*. In these clauses, the

cok	*cok*	*maʔpəy*	*ʔet*	*yat*	*iʔke*
cok	*cok*	*maʔpəy*	*ʔe-t*	*yat*	*iʔke*
grind	grind	woman	AUX-IND1	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 *yahmãm*. No personal marking (either proclitic or pronominal) or auxiliary occurs.

õn	*cá*	*cá*	*kotoy*
õn	*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*	*to ʔwa*
mēt	*a ʔ=(ʔe)-p*	*púŋ*	*to=ʔe-a*
here	3SG=(AUX)-IND2	shoot	3R=AUX-GER

'Here he shot.'

ka ʔa	*ʔa*	*pe ʔ*	*ap*	*kãy*	*kãy*	*to ʔwa*
ka ʔa	*ʔa ʔ*	*pe ʔ*	*a ʔ=ʔe-p*	*kãy*	*kãy*	*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	*aʔkɨgat*	*t͡pu*	*toʔwa*
ameko	*aʔ=kɨga-t*	*t͡pu*	*to=ʔe-a*
jaguar	3SG=catch-IND1	jump	3R=AUX-GER

'The jaguar caught it/him (by) jumping.'

onaká	*yakṍy*	*wen*	*wen*	*kanãp*	*cúrem*
o=naká	*yakṍp-t*	*wen*	*wen*	*kanãp*	*cú=tem*
1SG=head	be.hot-IND1	write	write	when	big=ADVZ

'My head gets hot when I write too much.'

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:

at	*otoy*	*cf.*	*mõm*	*at*	*(okəy)*
at	*o=top-t*		*mõm*	*a?=?e-*	

aʔtóy	*cf.*	*yɛ́p*	*at*
aʔ=tóp-t		*yɛ́p*	*aʔ=ʔe-t*
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:

məy	*aʔwaʔye*	***totia***	***oyuruŋ***	*aʔwaʔye*
məy	*aʔ=waʔye*	***to=ti-a***	***oyuruŋ***	*aʔ=waʔye*
then	3SG=AUX	**3R=come-GER**	**come**	3SG=AUX

'Then he came.'

onoroŋ	*at*	*tocit*	***paʔpara***
onoroŋ	*aʔ=ʔe-t*	*to=cit*	***paʔpar-a***
fall	3SG=AUX-IND1	3R=cover	**fall.down-GER**

'He fell from his bike.'

tik	***tik***	*at*	*toat*	*wirik*	*kanã*	***təga***	*tə*
tik	***tik***	*aʔ=ʔe-t*	*toat*	*wirik*	*kanã*	***tək-a***	*tə*
pluck	**pluck**	3SG=AUX-IND1	3R.POSS	food	thing	**pick-GER**	EVID

'He was picking his pears, they say.'

məy	***mõm***	*aʔwaʔye*	*yét*	*kanã*	*cit*	***toba***
məy	***mõm***	*aʔ=waʔye*	*yét*	*kanã*	*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', *wĩt wĩaw* '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 (ŋərəŋ '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.

at	*otoy*	*cf.*	*mõm*	*ʔat*	*(okəy)*
at	*o=top-t*		*mõm*	*aʔ=ʔe-t*	*(o=kəy)*
3SG	1SG=see-IND1		look	3SG=AUX-IND1	(1SG=DAT)
'He/it saw me.'			'He/it saw something/(me).'		

õn	*aʔyamon*	*cf.*	*kahyep*	*wet*	*(aʔkəy)*
õn	*aʔ=yamot-t*		*kahyep*	*o=ʔe-t*	*(aʔ=kəy)*

õn	*aʔtigat*	*cf.*	*kaʔmep*	*wet*	*(aʔkəy)*
õn	*aʔ=tiga-t*		*kaʔmep*	*o=ʔe-t*	*(aʔ=kəy)*
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'
3.	caraŋ	'light match'
4.	círup	'walk fast'
5.	cok	'crush (in mortar)'
6.	cɔ́n	'kick'
7.	cɔ̃n	'poke (without tip)'
8.	curuŋ	'light (paper, fire)'
9.	érom	'lick'
10.	e?niyãm	'blow baby's nose'
11.	i	'shout'
12.	it	'call (someone by 'ssss')'
13.	kahmi	'kill prey and it stays quiet'
14.	kãm	'hold'
15.	kamari	'brake'
16.	kãn	'sing'
17.	kap	'shoot arrow'
18.	kaw	'chew'
19.	kãy	'scratch'
20.	ka?curuŋ	'get in (smoothly)'
21.	ka?mɨk	'poke hole with arrow'
22.	ka?pet	'fart'
23.	ka?pew	'throw sand'

24. kaʔpot	'jump'
25. kaʔtan	'throw (stone at house)'
26. kaʔtɨk	'brake'
27. konõŋ	'turn'
28. korot	'pull (hair, feather)'
29. kot	'swallow (liquid)'
30. kururut	'pull with (fishing) line'
31. kət	'cut'
32. kɨw	'cut'
33. ma	'slap (to kill insects on the body)'
34. mãn	'tie up'
35. mari	'thresh'
36. maʔ	'beat'
37. maʔã	'beat (with stick, hand)'
38. mi	'hatch'
39. mõm	'look'
40. morap	'touch/shuffle (things)'
41. moŋ	'hold'
42. mĩrik	'pinch'
43. məŋ	'nod'
44. mɨk	'drill'
45. nay	'bite'

53. onoroŋ	'fall down'
54. onuru	'fall (tree)'
55. opɨw	'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. pãŋ	'cut'
62. pegat	'stick'
63. poroŋ	'get in'
64. pu	'blow (at fire)'
65. put	'fart'
66. puŋ	'shoot'
67. pĩp	'blow'
68. pəgəp	'climb up'
69. pɨk	'punch, step with the heel'
70. ʧ̃pu	'jump'
71. tan	'beat (finger on table)'
72. tãn	'cut (wood)'
73. tay	'pull (strongly)'
74. tãŋ	'drop'
75. tẽŋ	'beat on wood'
76. tuk	'beat'
77. tuy	'pull'
78. tuŋ	'pound (in mortar)'
79. wãy	'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. wĩm	'whistle'
88. wəri	'dig'
89. wərəŋ	'spin'
90. wɨk	'go down'
91. wɨga	'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 *qualifiying 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 subcatetories 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.

Evidential	*Category*	*Subcategory*	*Specification*	*Gloss*
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. **igã**	mode of knowing	inference	from expectation	must
6. **memã**	mode of knowing	inference	from pattern	be.supposed
7. **iʔkɨy**[61]	mode of knowing	belief		I guess
8. **manã**	reliability	+ probability	with no evidence	obviously
9. **nãnin**	reliability	+ probability	with evidence	really
10. **menə**	reliability	+- probability		wonder
11. **pə**	reliability	- probability		maybe

[61] Some consultants use the form *aʔkɨy* instead.

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;

péŋ	*ʔet*	***topə***	*toat*	*macaʔit*	*wĩa*
péŋ	*ʔe-t*	***topə***	*to=at*	*macaʔit*	*wĩ-a*
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)

tə: when the information conveyed comes from/is attributed to someone else's speech;

ayaʔwan	*tə*
aʔ=yaʔwat-t	*tə*
3SG=leave-IND1	**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	*mãygãra*	*wĩn*	***coke***
at	*mãygãra*	*wĩ-n*	***coke***
3SG	snake	kill-IND1	**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	*aʔwĩn*	***aket***
péŋ	*aʔ=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)

igã: used when the information conveyed comes from inference which is based on expectation;

tokera	*at*	***igã***
to=ket-a	*aʔ=ʔe-t*	***igã***
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)

memã: used when the information conveyed comes from inference which is based on a known pattern;

aʔken	***memã***
aʔ=ket-t	***memã***
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)

i?kɨy: used in a situation where the fact(s) described/talked about come(s) from belief, without necessarily any supporting evidence;

a?ken	*i?kɨy*
a?=ket-t	*i?kɨy*
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)

manã: 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	*a?wĩn*	*iga*	***manã***
at	*a?=wĩ-n*	*iga*	***manã***
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)

nãnin: 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;

õn	*a?toy*	***nãnin***	*kán*
õn	*a?=top-t*	***nãnin***	*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	*ŋa*	*ʔet*	*at*	*chapéu*	*káʔ*	*tiga*	***menə***
maʔpəy	*ŋa*	*ʔe-t*	*at*	*chapéu*	*káʔ*	*tiga-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	*aʔwĩn*	***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

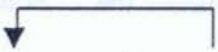
Evidentials in Karo were found to occur at the end of clauses as well as inside noun phrases. In the latter type of occurrence, only four evidentials were found to occur: *menə, nãnin, topə* and *iʔkɨy*. They occur in noun phrases qualifying the information about the head noun and the proposition. It 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.

ẽn	*ahyə*	***menə***	*kanã*	*tayãn*	***menə***
ẽn	*ahyə*	***menə***	*kanã*	*ta-yã-t*	***menə***
2SG	INTERR	**wonder**	thing	COM-be.standing-IND1	**wonder**

'Are you really the one who has many things?'

péŋ	***nãnin***	*aʔwĩn*	***nãnin***
péŋ	***nãnin***	*aʔ=wĩ-n*	***nãnin***
white.man	**really**	3SG=kill-IND1	**really**

'It was really the white man who killed it/him.'



péŋ	***topə***	*toat*	*macaʔit*	*nõ*	*wĩn*
péŋ	***topə***	*toat*	*macaʔit*	*nõ*	*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	***iʔkɨy***	*aʔwĩa*	*wet*
péŋ	***iʔkɨy***	*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:

mɨrɨrɨy	*imatẽran*	***nãnin***	*to ʔwa*
mɨrɨrɨy	*i=matẽra-t*	***nãnin***	*to=ʔe-a*
toad	3IMP=CAUS-go.astray-IND1	**really**	3R=AUX-GER

'The toad would certainly make people get lost.'

IN INFORMATION QUESTIONS:

kõm	*aʔcet*	***menə***
kõm	*aʔ=cet*	***menə***
how	3SG=name	**wonder**

'I wonder what his name is.'

IN FOCUS CONSTRUCTIONS:

nãn	*mã*	*at*	*aʔwĩm*	***menə***
nãn	*mã*	*at*	*aʔ=wĩ-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

pãttem	*at*	***topə***
pãt=tem	*at*	***topə***
beautiful=ADVZ	3SG	**be.seen**

'I saw that he/it is beautiful.'

IN PREDICATE NOMINAL CONSTRUCTIONS

agóaʔpət	*aʔnãn*	***igã***
agóaʔpət	*aʔ=nã-n*	***igã***
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				
9	topə	tə	coke	aket	igã	memã	i?kɨy	manã	nãnin	menə	pə
topə	—	√	*		√		*		√	*	
tə	*	—	*		*		*		*	*	*
coke	*	*	—		*		*		*	*	*
aket	*	√	*	—	√	√	*	*	√	?	*
igã	*	*	*		—		*		*	*	*
memã						—					
i?kɨy	*	√	√		√		—		*	√	*
manã								—			
nãnin	*	√	√	√	√		√		—	*	*
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.

More remains to be discovered about the details of the system, especially scope relations among evidentials in sequence.

Below are examples of sequences of two evidentials obtained in an interview with a consultant[62].

1. aket igã	**inference from evidence + [mode of knowing]**	**inference from expectation [mode of knowing]**

péŋ	*aʔwĩn*	***aket***	***igã***
péŋ	*aʔ=wĩ-n*	***aket***	***igã***
white.man	3SG=kill-IND1	**must**	**must**

'The white man must have been killing/beating it/him'

2. aket memã	**inference from evidence + [mode of knowing]**	**inference from pattern [mode of knowing]**

péŋ	*aʔwĩn*	***aket***	***memã***
péŋ	*aʔ=wĩ-n*	***aket***	***memã***
white.man	3SG=kill-IND1	**must**	**be.supposed**

'The white man must have supposedly killed it/him.'

3. iʔkɨy tə	**belief [mode of knowing]**	**+**	**they say evidence [mode of knowing]**

owekuy	*nãn*	*iʔkɨy*	*tə*
o=pekuy	*nã-n*	*iʔkɨy*	*tə*
1SG=dream	COP-IND1	**I.guess**	**they say**

'I guess it is said that I had a dream'

[62] In the interview, the consultant said the sequences were utterly possible, but I do not have actual examples of their occurrences in natural texts/conversations. I am also not certain about their precise translations.

4. aket nānin **inference from evidence + high probabiliby with evidence**
[mode of knowing] [reliability]

péŋ *aʔwĩn* ***aket*** ***nānin***
péŋ *aʔ=wĩ-n* ***aket*** ***nānin***
white.man 3SG=kill-IND1 **must** **really**
'The white man must really have killed it/him.'

5. topə nānin **visual evidence** **+ high probability with evidence**
[mode of knowing] **[reliability]**

ayaʔwan ***topə*** ***nānin***
aʔ=yaʔwat-t ***topə*** ***nānin***
3SG=leave-IND1 **be.seen** **really**
'It was seen that he really left.'

6. iʔkiy menə **belief** **+** **medium probability**
[mode of knowing] **[reliability]**

kõm *at* ***iʔkiy*** ***menə***
kõm *aʔ=ʔe-t* ***iʔkiy*** ***menə***
how 3SG=AUX-IND1 **I.guess** **wonder**
'I wonder how he might have done it?'

7. nānin aket **high probability with evidence + inference from evidence**
[reliability] **[mode of knowing]**

péŋ *aʔwĩn* ***nānin*** ***aket***
péŋ *aʔ=wĩ-n* ***nānin*** ***aket***
white.man 3SG=kill-IND1 **really** **must**
'The white man really must have killed it.'

8. nānin coke **high probability with evidence + lost evidence**
[reliability] [mode of knowing]

õn aʔtoy ***nānin coke***
õn aʔ=top-t ***nānin coke***
1SG 3SG=see-IND1 **really clearly**
'I really just saw him/it.'

9. nānin igã **high probability with evidence + inference from expectation**
[reliability] [mode of knowing]

ayaʔwan ***nānin igã***
aʔ=yaʔwat-t ***nānin igã***
3SG=leave-IND1 **really must**
'He really must have left.'

10. menə aket **medium probability + inference from evidence**
[reliability] [mode of knowing]

péŋ aʔwĩn ***menə*** ***aket***
péŋ aʔ=wĩ-n ***menə*** ***aket***
white.man 3SG=kill-IND1 **wonder** **must**
'It is wondered whether the white man must have killed it/him' (when the killing is certain but not seen)'

11. nānin tə **high probability with evidence + they say evidence**
[reliability] [mode of knowing]

amãn yat ***nānin tə***
amãn yat ***nānin tə***
rain fut **really they say**
'They say that the rain will really fall (or: They really say that the rain will fall.)'

12. pə coke	**low probability**	+	**lost evidence**
	[reliability]		**[mode of knowing]**

aʔken	*pə*	*coke*
aʔ=ket-t	*pə*	*coke*
3SG=sleep-IND1	**maybe**	**clearly**

'Clearly he may have slept.'

13. nānin menə	**high probability with evidence**	**+ medium probability**
	[reliability]	**[reliability]**

kōm	*co*	*iʔyat*	*ip*	*ʔiy*	***nānin***	***menə***
kōm	*co*	*iʔyat*	*ip*	*ʔiy-t*	***nānin***	***menə***
how	PAST	1PL.INCL	fish	catch-IND1	**really**	**wonder**

'I really wonder how we catch a fish.'

14. pə menə	**low probability**	+	**medium probability**
	[reliability]		**[reliability]**

aʔken	*pə*	***menə***
aʔ=ket-t	*pə*	***menə***
3SG=sleep-IND1	**maybe**	**wonder**

'It is wondered whether he is sleeping.'

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**	**i?kiy**		**coke**	
	[reliability]	**+**	**[reliability]**	**+**	**[mode of knowing]**
	medium probability		*belief*		*lost evidence*
	'I wonder, belief, clearly that…'				

2)	**menə**	**i?kiy**		**igā**	
	[reliability]	**+**	**[reliability]**	**+**	**[mode of knowing]**
	medium probability		*belief*		*inference from expectation*
	'I wonder, belief, should…'				

3)	**menə**		**i?kiy**	**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).

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