Speedlang Challenge 7

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Contents

Chapter 1

Introduction

This is a sketch of Kàama, a speedlang constructed for the 7th CDN Speedlang Challenge set by miacomet. Since I didn't opt for the Diachronics DLC™, my speedlang has to obey the following phonological restrictions:

- A pitch accent-type tonal system. Pitch accent is a bit vaguely defined so here's what I mean: a prosodic system where words have lexically specified tone, but individual syllables do not. This might look like word-level tone melodies or multiple contrastive pitch patterns for a stressed syllable. For this challenge, these systems should not be able to be easily analyzed as stress systems.
- A vowel system with some feature other than frontness, height, or roundedness that is not orthogonal to those other features. That means that your vowel system should makesome other distinction, but that it has to be more complex than just "all vowels plus or minus X feature." For example, if your plain vowels are /aeiou/ and the feature you choose is nasalization, then your total vowels can't be /aãeẽiĩoõuũ/ since that's just your plain vowels with [±nasal]. Tone doesn't count as a vowel feature. Bonus points if this leads to interesting morphophonological alternations.

And the following grammatical restrictions:

- Use differential object marking, a phenomenon where direct objects are marked differently depending on some property, such as animacy, definiteness, or affectedness.

- Include at least two types of converb, non-finite verb forms that act as heads of adverbial clauses.
- Have some sort of commonly used ablaut/apophony. It doesn't have to be productive as long as it's visible and common in the language.

Kàama fulfills all these requirements. It has a simple two-pitch-accent system, much like Swedish and Norwegian, where stressed syllables are associated with one of two possible pitch accents. Its vowel system contrasts length, but only for /a o/. There is a system of differential object marking where specific objects get accusative marking and often move to a clause-initial position, and this process interacts in interesting ways with the presense of speech-act participant (first and second person) arguments. There are two kinds of converbs, traditionally termed the *gerund* and the *conjunct*. There is apophony in the domain of nominal declension, with a system of consonant gradation derived from historic intervocalic voicing of stops.

Chapter 2

Phonology

2.1 Consonants

Standard Kàama has a 15 consonant inventory, as depicted in Table 2.1.

	Labial	Coronal	Palatal	Velar	Labiovelar	Glottal
Plosive	**p** p (**b** b)	**t** t	**c** tʃ	**k** k	**q** k^w	
Nasal	**m** m	**n** n		**g** ŋ		
Fricative		**s** s		**gh** x		**h** h
Approximant		**l** l **r** r	**y** j		**w** w	

Table 2.1: Consonants

There used to be a historical voiced plosive series **b *d *dʒ *g *g^w*. This is useful to understand consonant gradation used to form the plural stem of certain nouns. Some more conservative dialects still preserve **b* as **b**, but this has completely vanished in Standard Kàama.

2.2 Vowels

Kàama has a basic 5 vowel inventory, as depicted in Table 2.2, with a length contrast for /a ɔ/. The source of the asymmetric vowel system is that /a:

o:/ come from the historic diphthongs **ai* **au* respectively. There are no diphthongs in Modern Kàama.

	Front	Back
High	**i** i	**u** u
Mid	**e** e	**o** o **oo** o:
Low	**a** a **aa** a:	

Table 2.2: Vowels

Short /a/ tends to be realized quite centralized in most contexts, as [ɐ] or even [ə], whereas long /a:/ is generally quite cardinal (which means it's typically quite fronted). Short /o/ is generally pretty cardinal, whereas long /o:/ tends to be realized quite low, as [ɔ:] or even sometimes [ɒ:]. For some speakers, especially younger ones in the cities, short /o/ tends to be unrounded [ɤ], and long /o:/ is relatively unrounded, approaching [ɑ].

2.3 Stress and accent

Primary stress can be associated with one of two pitch accents: H*, a high tone, or L* + H, a rising tone with the start of the rise aligning with the stressed syllable. I'll be calling the H* accent an *acute accent*, and the L* + H accent a *grave accent*. Acute accents are unmarked in the official orthography (though they will be marked with an acute accent ◌́ in lexical entries), and grave accents are marked with a grave accent ◌̀.

Chapter 3

The nominal domain

3.1 Nominal morphology

Nouns inflect for number and case, which are fused on a single suffix. There are singular and plural forms, as well as nominative and accusative forms. There are four main declension classes, which can be broken down along two lines: *thematic* versus *athematic*, and *gradating* versus *nongradating*.

The thematic-athematic contrast has to do with whether the noun stem ends in a vowel or consonant—thematic stems are those that end in a vowel, and athematic stems are those that end in a consonant (which sometimes might go missing in the nominative singular). The thematic class can be divided into three subclasses: a-stems, e-stems, and o-stems. Interestingly, a-stems only have a nongradating paradigm; e-stems and o-stems have both gradating and nongradating paradigms.

Kàama has a system of consonant gradation, where certain consonants lenite when followed by a suffix beginning with a vowel. The gradating consonants are the stops **p t c k q**. Historically, they voiced to **b *d *ʤ *g *gʷ*. In the modern language, however, the voiced stop series has been lost, and the correspondence between the stops and their lenited forms is less transparent. The correspondences are as follows, with stops on top and their corresponding gradated forms below:
Note that both **t** and **k** gradate to **gh, n**, which originates from the historic merger of **d* and **g*. Typically, they gradate to **gh**, but if there is a **gh** or **h** in the preceding syllable then they gradate to **n**. For more conservative speakers who still preserve **b*, **p** lenites to **b** instead of **m**.

p	t	c	k	q
m, (**b**)	**gh**, **n**	**y**	**gh**, **n**	**w**

Table 3.1: Consonant gradation

3.1.1 Athematic stems

Athematic stems end in a consonant in the nominative singular, and they have both gradating and nongradating paradigms. Gradation applies in the accusative forms. The general paradigm is depicted in Table 3.2.

	SG	PL
NOM	**-Ø**	**-(p)pe**
ACC	**-e/u**	**-ot**

Table 3.2: Athematic declension

The **-u** accusative singular appears after nasals, and the geminate nominative plural **-ppe** shows up with stems that have an eliding consonant in the nominative singular.

3.1.1.1 Nongradating athematic stems

	SG	PL
NOM	**raam**	**raam-pe**
ACC	**raam-e**	**raam-ot**

Table 3.3: **raam, raame** *ruler*

	SG	PL
NOM	**gora**	**gorá-ppe**
ACC	**goraw-e**	**goraw-ot**

Table 3.4: **gora, gorawe** *crowd, gang*

There are some nongradating athematic stems whose final consonants disappear in the nominative singular, like **gora** *crowd*. The eliding consonants are typically **s**, **gh**, **h**, **y**, and **w**, which cannot occur syllable-finally anywhere in the language. Note that the nominative plural for the eliding stems has a geminate form **-ppe**, and stress shifts to the penultimate syllable.

3.1.1.2 Gradating athematic stems

Gradating athematic stems feature gradation the accusative forms.

	SG	PL
NOM	**kàt**	**kàt-pe**
ACC	**kàgh-e**	**kàgh-ot**

Table 3.5: **kàt, kàghe** *flatbread*

	SG	PL
NOM	**hòk**	**hòk-pe**
ACC	**hòn-u**	**hòn-ot**

Table 3.6: **hòk, hònu** *campfire, hearth*

Note the peculiarity that for nasal-final stems, the accusative singular is **-u**, not **-e**. This is the only place in the language where the accusative singular ends in **u**.

3.1.2 A-stems

A-stems end in **a** in the nominative singular. The paradigm is depicted in Table 3.7. Note that stress shifts to the final syllable in the accusative forms.

	SG	PL
NOM	**-a**	**-u**
ACC	**-áa**	**-óot**

Table 3.7: A-stem declension

Interestingly, there are no gradating a-stems. In fact, there are no native a-stems whose stem-final consonant is a stop. All such words, like **apa** *faucet* and **ika** *squid*, are loans.

3.1.2.1 Nongradating a-stems

	SG	PL
NOM	**gòr-a**	**gòr-u**
ACC	**gor-àa**	**gor-òot**

Table 3.8: **gòra, goràa** *throat*

	SG	PL
NOM	**ap-a**	**ap-u**
ACC	**ap-áa**	**ap-óot**

Table 3.9: **apa, apáa** *faucet*

3.1.3 E-stems

E-stems end in **e** or **i** in the nominative singular, and there are gradating and nongradating paradigms. Gradation applies in the nominative forms. The paradigm for e-stems appears in Table 3.10.

	SG	PL
NOM	**-e/i**	**-u**
ACC	**-(i)ye**	**-(i)yot**
	-e	**-et**

Table 3.10: E-stem declension

One of the peculiarities of e-stems is that they have so-called *long* and *short* accusative forms. There doesn't seem to be a syntactic or semantic difference between them. Kàama speakers report that long forms are "more proper", and that short forms are "contractions". Both are found in both formal and informal settings, though long forms are used more often in formal contexts. Since the long forms are perceived as being more prescriptively correct, I'll be providing those in dictionary entries. In tables, the long forms appear first.

Note that an epenthetic **i** appears in the long accusative suffixes when they attach to stems that end in a consonant cluster or geminate.

3.1.3.1 Nongradating e-stems

	SG	PL
NOM	**oor-e**	**oor-u**
ACC	**oor-ye**	**oor-yot**
	oor-e	**oor-et**

Table 3.11: **oore, oorye** *face*

	SG	PL
NOM	**ham-i**	**ham-u**
ACC	**ham-ye**	**ham-yot**
	ham-e	**ham-et**

Table 3.12: **hami, hamye** *sword*

With e-stems that end in a consonant cluster or geminate, an epenthetic **i** appears in the long accusative forms.

	SG	PL
NOM	**rakp-e**	**rakp-u**
ACC	**rakp-iye**	**rakp-iyot**
	rakp-e	**rakp-et**

Table 3.13: **rakpe, rakpiye** *knife*

	SG	PL
NOM	**kocc-i**	**kocc-u**
ACC	**kocc-iye**	**kocc-iyot**
	kocc-e	**kocc-et**

Table 3.14: **kocci, kocciye** *ball*

3.1.3.2 Gradating e-stems

Gradating e-stems feature gradation in the nominative forms. Notably, even though the final consonant is intervocalic in the short accusative forms, it does not gradate. This is probably because the short forms developed much more recently, after the process of intervocalic lenition that led to the development of consonant gradation had already become nonproductive.

	SG	PL
NOM	**mày-e**	**mày-u**
ACC	**màc-ye**	**màc-yot**
	màc-e	**màc-et**

Table 3.15: **màye, màcye** *woman*

	SG	PL
NOM	**pagh-i**	**pagh-u**
ACC	**pak-ye**	**pak-yot**
	pak-e	**pak-et**

Table 3.16: **paghi, pakye** *drinking straw*

3.1.4 O-stems

O-stems end in **o** or **u** in the nominative singular, and have both gradating and nongradating paradigms. Gradation applies in the nominative. The general paradigm is provided in Table 3.17.

	SG	PL
NOM	**-o**	**-oa**
ACC	**-(uw)e**	**-(uw)et**

Table 3.17: O-stem declension

Notably, o-stems feature a **w** in the accusative suffixes, and this feeds a phonological process by which **pw kw hw** become **q**. When a stem ends in a conso-

nant cluster of geminate, an epenthetic **u** is inserted in the accusative forms.

3.1.4.1 Nongradating o-stems

	SG	PL
NOM	**ah-o**	**ah-oa**
ACC	**aq-e**	**aq-et**

Table 3.18: **aho, aqe** *horizon*

	SG	PL
NOM	**kpèr-u**	**kpèr-oa**
ACC	**kpèr-we**	**kpèr-wet**

Table 3.19: **kpèru, kpèrwe** *oak tree*

With o-stems that end in a consonant cluster or geminate, an epenthetic **u** appears in the accusative forms.

	SG	PL
NOM	**akl-o**	**akl-oa**
ACC	**akl-uwe**	**akl-uwet**

Table 3.20: **aklo, akluwe** *liver*

	SG	PL
NOM	**lepp-u**	**lepp-oa**
ACC	**lepp-uwe**	**lepp-uwet**

Table 3.21: **leppu, leppuwe** *loaf of bread*

3.1.4.2 Gradating o-stems

Gradating o-stems feature gradation in the nominative forms.

	SG	PL
NOM	**cim-o**	**cim-oa**
ACC	**ciq-e**	**ciq-et**

Table 3.22: **cimo, ciqe** *leek*

	SG	PL
NOM	**ragh-o**	**ragh-oa**
ACC	**rat-we**	**rat-wet**

Table 3.23: **ragho, ratwe** *dishcloth*

3.2 Pronominal morphology

Kàama marks person and number in its personal pronouns, showing distinctions between first, second, and third person, as well as singular and plural number. There is no clusivity distinction.

Traditionally, Kàama personal pronouns are described as having *emphatic*, *tonic*, and *atonic* forms. Note that, under the traditional analysis, the personal pronouns do not have nominative and accusative forms, and Kàama is thus often described as "split-accusative", with nouns showing a nominative-accusative alignment and pronouns displaying some kind of neutral or direct-inverse alignment. However, as I'll discuss in Section 5.2, there are reasons to doubt the traditional analysis, in favor of one where the traditional emphatic series are accented, non-cliticized nominative pronouns that typically only appear when focused, the tonic series are accusative pronouns (though they, somewhat unusually, function as A arguments in certain contexts), and the atonic series are procliticized nominative pronouns. However, throughout this grammar, I'll be calling each series by its traditional name, in line with the previous literature on Kàama. A paradigm of the personal pronouns is provided in Table 3.24.

	Emphatic (NOM)		Tonic (ACC)		Atonic (NOM)	
	SG	PL	SG	PL	SG	PL
1	**naye**	**saan**	**noo**	**sawe**	**na=**	**as=**
2	**kàye**	**kòon**	**kùwe**	**kòor**	**ku=̀**	**ko=̀**
3	**taa**	**gaan**	**tawe**	**gaat**	**ghe=**	**(gh)en=**
					ne=	**nen=**

Table 3.24: Pronouns

Emphatic and tonic pronouns appear as separate phonological words. The atonic pronouns must procliticize onto the following word, which is typically (but not always) the verb.

There are a few things to note here. First, the second person atonic pronouns **ku=** and **ko=** are associated with a floating low tone that associates with the accent in the following word. This converts acute accents into grave accents (1), and doesn't do anything to grave accents (2).

(1) a. **ku=̀** + **maknek** *eat.meal.*2SG → **ku màknek** *you are having a meal*

b. **ko=̀** + **maknur** *eat.meal.*2PL → **ko màknur** *y'all are having a meal*

(2) a. **ku=̀** + **rònek** *snore.*2SG → **ku rònek** *you are snoring*

b. **ko=̀** + **rònur** *snore.*2PL → **ko rònur** *y'all are snoring*

In (1), we have the verb **makan** *to have a meal*, which has an acute accent on the first syllable (not marked in the orthography). When **ku** or **ko** procliticize

to it, the acute accent becomes a grave. In contrast, in (2), we have the verb **ròn** *to snore*, which has a grave accent, and this grave remains when procliticized with **ku** or **ko**.

Second, the third person atonic pronouns have several allomorphs. The third person singular has two allomorphs **ghe** and **ne**. The **ghe** form is the default allomorph (3a), and **ne** appears if either of the surounding syllables contains /x h/ (3b).

(3) a. **iwe ghe kughoru**
iw -e ghe= ku- ghor -u
ax -ACC 3SG= 3SG- see -INV
She sees the ax.

b. **wànahe ne kughoru**
wànah -e ne= ku- ghor -u
wizard -ACC 3SG= 3SG- see -INV
She sees the wizard.

In (3a), the surrounding syllables are **we** and **ku**, neither of which contain /x h/, so we get the default allomorph **ghe**. In (3b), the preceding syllable is **he**, which contains /h/, so we get the allomorph **ne**.

The third person plural has three allomorphs: **ghen**, **nen**, and **en**. The distribution of **ghen** and **nen** exactly parallels the distribution of **ghe** and **ne**, with **ghen** as the default and **nen** as the form that appears when there's a /x h/ nearby.

(4) a. **iwe ghen kughoru**
iw -e ghen= ku- ghor -u
ax -ACC 3PL= 3SG- see -INV
They see the ax.

b. **wànahe nen kughoru**
wànah -e nen= ku- ghor -u
wizard -ACC 3PL= 3SG- see -INV
They see the wizard.

The **en** allomorph is traditionally called the *reduced* third person plural atonic pronoun. There aren't any syntactic or semantic distinctions between reduced **en** and full **ghen** or **nen**, and the distribution instead seems to be tied to rate of speech and register: full forms are more common in more careful speech and in more formal contexts, whereas the the reduced form is more common

in rapid speech and in more informal contexts.

(5) a. **iwe en kughoru**
iw -e en= ku- ghor -u
ax -ACC 3PL= 3SG- see -INV
They see the ax.

b. **wànahe en kughoru**
wànah -e en= ku- ghor -u
wizard -ACC 3PL= 3SG- see -INV
They see the wizard.

A final note is that the vowel-initial proclitics, **as** 1PL and **en** 3PL, often drop their vowel in rapid speech when preceded by another vowel. This is usually not written, except when trying to represent colloquiual spoken Kàama, in which case the orthographic vowel is replaced by an apostrophe:

(6) a. **roore ‘s alqe mato**
roore as= alq -e mato
yesterday 1PL= buy -1PL tea
We bought tea yesterday.

b. **roore ‘n alqan mato**
roore en= alq -an mato
yesterday 3PL= buy -3PL tea
They bought tea yesterday.

3.3 Case

This section provides an overview of the distribution of case marking in Kàama. For a more detailed examination of the syntax of case and its interaction with inverse marking, see Section 5.2.

3.3.1 Nominative

In this section, I detail the environments in which nominative case appears. It appears on S and A arguments (3.3.1.1), nonspecific objects (3.3.1.2), certain possessors (3.3.1.3), objects of the prepositions **lo**, **qe**, and **ome** (3.3.1.4), and predicate nominals (3.3.1.5).

3.3.1.1 S and A arguments

Nominative case prototypically appears on S and A arguments, and nominative in Kàama does exactly that. Consider the examples in (7):

(7) a. **màna kròn**
màna -Ø k- ròn
wizard -NOM 3SG- snore
The wizard is snoring.

b. **mànahe gopo kughoru**
mànah -e gop -o ku- ghor -u
wizard -ACC spy -NOM 3SG- see -INV
The spy sees the wizard.

In (7a), we have an intransitive verb **ròn** *snore*, and its single S argument **màna** *wizard*.NOM is marked nominative. In (7b), we have a transitive verb **ghor** *see*, and its A argument **gopo** *spy*.NOM is marked nominative.

3.3.1.2 Indefinite objects

Nominative also appears on nonspecific or indefinite objects, as demonstrated in (8).

(8) a. **na saa ceppe**
na= s- aa cep -pe
1SG= 1SG- eat mushroom NOM.PL
I'm eating mushrooms.

b. **miyo kpòtpoc sappe**
miy -o k- pòc -poc sa -ppe
child NOM 3SG- throw -RED rock -NOM.PL
The child is throwing rocks around.

This is related to the system of *differential object marking* found in Kàama—only specific objects get accusative-marked. I discuss this pattern more in Section 5.2.

Interestingly, there is one context where nominative appears on specific objects—it must appear on a specific theme of a double-object verbs *if the recipient is also specific*.

(9) **kaasare hok illu kiyu kocci**
kaasar -e hok ill -u k- i -u kocc -i
Kaasar -ACC NEG Illu -NOM 3SG- give -INV ball -NOM
Illu didn't gave Kaasar the ball.

Note that there's a reading available here where Illu didn't give Kaasar a specific ball, even though she may have given him some other balls. Of course, there's also a reading available where **kocci** *ball* is indefinite and negation scopes over it—*Illu didn't give Kaasar any ball*—but that is just a predicted case of the nonspecific object being maked nominative, and the specific object being marked accusative. Similarly, if the recipient is not specific, but the theme is, then the recipient gets nominative and the theme gets accusative:

(10) **kocciye hok illu kiyu nuk**
kocc -iye hok ill -u k- i -u nuk -Ø
ball -ACC NEG Illu -NOM 3SG- give -INV person -NOM
Illu didn't gave the ball to anyone.

Again, this is exactly the pattern we expect—the specific object gets accusative marking, and the nonspecific objects gets nominative marking.

3.3.1.3 Posessors

Nominative case also appears on possessors of certain inalienable nouns and relational nouns, like **oc** *eye*, **ama** *parent*, **qahán** *ground*, and **om** *home* (but not **kuhú** *house*). In this construction, the possessor appears after the possessum.

(11) **otpe màye**
ot -pe mày -e
eye -NOM.PL woman -NOM
The woman's eyes

(12) **amu sami**
am -u sam -i
parent -NOM.PL man -NOM
The man's parents

Pronominal possessors of this class of nouns are typically expressed with the atonic pronouns. Since the atonic pronouns are proclitics, they appear before the possessum:

(13) **as qahán**
as= **qahán**
1PL= ground
The Earth (lit. ground beneath our feet)

(14) **gh-om**
ghe= **om**
3SG= home
His home

However, if the possessor is focused, then the emphatic pronouns can appear. These follow the possessum:

(15) **qahán saan**
qahán saan
ground 1PL.EMPH
OUR Earth

(16) **om taa**
om taa
home 3SG.EMPH
HIS home

The set of nouns that allow nominative possessors include family terms, like **ama** *parent* and **kowa** *child*, bodyparts, like **oc** *eye* and **aklo** *liver*, and so-called *deictic locatives*, which are nouns that refer to locations relative to some deictic center, like **qahán** *ground beneath someone's feet* and **om** *someone's home*.

3.3.1.4 The prepositions lo, qe, and ome

Nominative is found on the objects of the prepositions **lo** *to, in, at, on*, **qe** *from, of* and **ome** *with, along*, as illustrated in (17-19).

(17) **lo kumu**
lo kum -u
on bed NOM
on the bed

(18) **qe wàna**
qe wàn -a
from wizard NOM
from the wizard

(19) **ome rakpe**
ome rakp -e
with knife NOM
with a knife

The prepositions **lo** and **qe** usually combine with atonic pronouns, which procliticize to the preposition, and are written with a hyphen:

(20) **kù-lo**
ku= lo
2SG= to
to you

(21) **as-lo**
as= lo
1PL= to
to us

(22) **na-qe**
na= qe
1SG= from
from me

(23) **en-qe**
en= qe
3PL= from
from them

Note that it is the *reduced* form of the third person plural, **en**, that appears in these contexts, and never a full form **ghen** or **nen**. The forms **as-lo** *to us* and **en-lo** *to them* are pronounced /ˈas:o/ and /ˈen:o/, respectively. In casual

writing you often see them written **asso** and **enno**, though this is prescriptively frowned upon. Emphatic pronouns can appear with prepositions when focused, and these appear following the prepositions:

(24) **lo kàye**
lo kàye
to 2SG.EMPH
to YOU

(25) **lo saan**
lo saan
to 1PL.EMPH
to US

(26) **qe naye**
qe naye
from 1SG.EMPH
from ME

(27) **qe gaan**
qe gaan
from 3PL.EMPH
from THEM

The preposition **ome** cannot appear with atonic pronouns, and must appear with an emphatic pronoun, even when there is no focus on the pronoun:

(28) **ome kòon**
ome kòon
with 2PL.EMPH
with y'all

(29) **ome taa**
ome taa
with 3SG.EMPH
with him

3.3.1.5 Predicate nominals

Predicate nominals are nominative.

(30) **as-we kinnu ome ogéppe, ye sawe as qahán kulqe**
as= **w** **-e** **kinnu** **ome** **ogé** **-ppe** **ye** **sawe** **as=** **qahán**
1PL= COP 1PL people.group with stomach -NOM.PL and 1PL.TN 1PL= land
kul **-q** **-e**
admire -3SG.O -1PL
We are a brave people, and love our country. (stest #140)

3.3.2 Accusative

In this section, I detail the environments in which accusative case appears. It appears on specific objects (Section 3.3.2.1), and the objects of most prepositions (Section 3.3.2.2).

3.3.2.1 Specific objects

Accusative appears on specific direct objects (31a) as well as indirect objects (31b).

(31) a. **heme coáhot ye irkuwet ghen ketwan**
heme coah -ot ye irk -uwet ghen= ket -w -an
all door ACC.PL and window ACC.PL 3PL= open -INV -3PL
They opened all the doors and windows. (stest #113)

b. **ghe kowwiye Kaasar nkuteku rakpe**
ghe= kow -w -iye Kaasar n- ku- tek -u rakpe
3SG= child -DIM ACC Kaasar PRET- 3SG- make -INV knife
Kaasar made a knife for his little boy. (adapted from stest #93)

3.3.2.2 Objects of prepositions

TODO

3.4 Prepositions

Kàama has two classes of prepositions—those that take nominative objects, and those that take accusative objects. The nominative class consists only of **lo** *to, at, in, on*, **qe** *from, of*, and **ome** *with, along*. The rest assign accusative.

3.5 Numerals

Kàama has a basic base-10 numeral system. The numbers from one to ten are provided in (3.25).

1	**ac**
2	**nege**
3	**sàm**
4	**pek**
5	**rùn**
6	**cèr**
7	**nèr**
8	**ròsu**
9	**pkèr**
10	**kaha**

Table 3.25: Numerals 1-10

When counting or enumerating things, the forms are slightly different—notably, they all have grave accent, 1 is **àk**, 2 is **nàk**, and 10 is **hàk**:

1	**àk**
2	**nàk**
3	**sàm**
4	**pàk**
5	**rùn**
6	**cèr**
7	**nèr**
8	**ròsu**
9	**pkèr**
10	**hàk**

Table 3.26: Counting numerals 1-10

3.6 Noun phrase syntax

TODO

Chapter 4

The verbal domain

The Kàama verb is characterized by a complex agreement system, direct-inverse marking, and impoverished tense and aspect marking. There are two agreement slots: central agreement, which appears after the verb stem, and peripheral agreement, which appears either on the left edge or the right edge of the verb. There only tense/aspect marking on the verb is the so-called *preterite*, marked with a nasal prefix **m-**, which has variously been analyzed as a past tense, a perfect, or a completive marker. There are two converb forms, which are traditionally called the *gerund* and the *conjunct*. Traditionally, the conjunct is split into the *conjunct* and the *changed conjunct*; however, the changed conjunct is just the regular conjunct with the addition of extraction marking (grave accent appearing on the accented syllable, and **w** prefixing to vowel-initial verbs). This extraction marking appears systematically when the argument indexed by peripheral agreement is *wh*-questioned, focus/topic-fronted, or relativized.

In Section 4.1, I discuss the morphology found on the verb. In Section 4.2, I discuss the syntax of the verb phrase.

4.1 Verbal morphology

In this section, I lay out how the Kàama verb is built up morphologically. In Section 4.1.1, I describe the morphology of central agreement; in Section 4.1.2, I describe the inverse; in Section 4.1.3, I describe peripheral agreement; in Section 4.1.4, I describe preterite marking; in Section 4.1.5, I discuss the gerund; in Section 4.1.6, I discuss the conjunct; and finally, in Section 4.1.7, I

discuss a kind of extraction marking that appears in certain syntactic contexts.

4.1.1 Central agreement

Central agreement immediately follows the verb stem. It marks agreement in person and number with specific objects, and it is also the locus of inverse marking. Table 4.1 lists the possible forms of central agreement.

	SG	PL
1	**-so**	**-sam**
2	**-a**, **-e**	**-ta**
3	**-ku**, **-q**	**-agh**, **-at**
INV	**-w**, **-u**	

Table 4.1: Central agreement

Central agreement for 2SG, 3SG, 3PL, and the inverse all have multiple allomorphs. Here's a description of the distribution of the allomorphs:

- For 2SG, **-e** appears at word boundaries (32), and **-a** appears elsewhere (33):[1]

(32) **saghore**
sa- ghor -e
1SG- see -2SG.O
(I) see (you).

(33) **ghoraa**
ghor -a -e
see -2SG.O 1PL
(We) see (you).

- For 3SG, **-q** appears when there's a following vowel (34), and **-ku** appears elsewhere (35):

(34) **ghorqe**
ghor -q -e
see -3SG.O -1PL
(We) see (it).

(35) **saghorku**
sa- ghor -ku
1SG- see -3SG.O
(I) see (it).

- For 3PL, **-agh** appears when there's a following vowel (36), and **-at** appears elsewhere (37):

[1] Note that **ae** > **aa** is a regular phonological process in Kàama.

(36) **ghoraghe**
ghor -agh -e
see -3PL.O -1PL
(We) see (them).

(37) **saghorat**
sa- ghor -at
1SG- see -3PL.O
(I) see (them).

- For the inverse, **-w** appears when there's a following vowel (38), and **-u** appears elsewhere (39):

(38) **ghorwe**
ghor -w -e
see -INV -1PL
(They/you) see (us).

(39) **saghoru**
sa- ghor -u
1SG- see -INV
(They/you) see (me).

4.1.2 The inverse

The inverse marker **-u** appears whenever the object outranks the subject on the following hierarchy:

(40) 1 > 2 > 3

It replaces central agreement. Additionally, in the inverse, peripheral agreement indexes the object instead of the subject. Here are some illustrations of how the inverse works:

- 1>2, 2>1

(41) **noo ku samàwe**
noo ku= sa- maw -e
1SG.TN 2SG= 1SG- hug -2SG.O
I hugged you.

(42) **noo ku samàwu**
noo ku= sa- maw -u
1SG.TN 2SG= 1SG- hug -INV
You hugged me.

- 1>3, 3>1

(43) **noo ghe samaku**
noo ku= sa- ma -ku
1SG.TN 3SG= 1SG- hug -3SG.O
I hugged her.

(44) **noo ghe samawu**
noo ku= sa- maw -u
1SG.TN 3SG= 1SG- hug -INV
She hugged me.

- 2>3, 3>2

(45) **kùwe ghe makuk**
kùwe ghe= ma -ku -k
2SG.TN 3SG= hug -3SG.O -2SG
You hugged him.

(46) **kùwe ghe mawuk**
kùwe ghe= maw -u -k
2SG.TN 3SG= hug -INV -2SG
You hugged me.

In (41), (43), and (45), the subject outranks the object, and the object is indexed by central agreement and the subject is indexed by peripheral agreement. However, in (42), (44), and (46), the object outranks the subject, and the inverse marker **-u** appears in the central agreement slot, and peripheral agreement indexes the *object*.

A peculiarity of Kàama is that in 3>3 contexts with a definite object, you always get the inverse pattern—inverse marker with peripheral object agreement. It's impossible to get the direct pattern, no matter if the subject is plural and the object is singular (47a), or even if the subject is more topical than the object (47b).

(47) a. **òghe n-amu nkoo**
ògh -e na= am -u n- k- a -u
curry -ACC 1SG= parent -NOM.PL PRET- 3SG- eat -INV
My parents ate the curry.

b. **kàasar-elu qitot pòcwan hina**
kàasar =elu qit -ot pòc -w -an hina
Kaasar =CT die -ACC.PL throw -INV -3PL now
And now Kaasar is rolling the dice.

In (47a), we have a plural animate subject **n-amu** *my parents* and a singular inanimate object **òghe** *curry*, yet we still get the inverse pattern. In (47b), we have the subject **kàasar** *Kaasar* appear sentence-initially, marked with the contrastive topic/topic shift marker **elu**, and yet we still find the inverse pattern.

Another perhaps unexpected context in which the inverse shows up is with unaccusative predicates, when the subject is specific, as in (48).

(48) a. **wàna kpeyyu**
wàna k- peyy -u
wizard 3SG- arrive -INV
The wizard has arrived.

b. **qìnu putwan**
qìn -u put -w -an
abacus -NOM.PL fall -INV -3PL
The calculator fell.

When the subject is nonspecific, then the inverse does not appear:

(49) a. **peye wàna**
peye wàna
arrive wizard
A wizard has arrived.

b. **put qìnu**
put qìn -u
fall abacus -NOM.PL
A calculator fell.

Further, note that the inverse does not show up with unergative predicates:

(50) a. **wàna kròn**
wàna k- ròn
wizard 3SG- snore
The wizard is snoring.

b. **màyu maknan**
mày -u makn -an
woman NOM.PL have.meal -3PL
The women are eating.

Perhaps surprisingly, this test shows us that **ròn** *snore* is actually unergative in Kàama.

The obligatoriness of the inverse in $3 > 3$ contexts and with unaccusatives, and the contrast between unaccusatives and unergatives, strongly suggest that the inverse is doing some else besides just marking that the object outranks the subject on the person hierarchy. I take up this question in more detail in Section 5.2, where I argue that the inverse shows up whenever central agreement and peripheral agreement would otherwise be indexing with the same argument.

4.1.3 Peripheral agreement

Peripheral agreement appears on the left or right edge of the verb, and it marks agreement with the most prominent argument on the person hierarchy. Table 4.2 lists the possible forms of peripheral agreement.

	SG	PL
1	**s(a)-**	**-e**
2	**-(e)k**	**-(u)r**
3	**k(u)-**	**-an**

Table 4.2: Peripheral agreement

Note that most of the markers are suffixes, with the exception of **s(a)-** 1SG and **k(u)-** 3SG, which are prefixes.

The peripheral agreement markers **s(a)-** 1SG, **-(e)k** 2SG, **k(u)-** 3SG, and **-(u)r** 2PL have *vocalic* (**sa-**, **-ek**, **ku-**, **-ur**) and *nonvocalic* (**s-**, **-k**, **k-**, **-r**) allomorphs.

For **s(a)-** 1SG, the vocalic allomorph **sa** is the default form. The nonvocalic allomorph only appears if there is a following **a**.

(51) **samà**
sa- mà
1SG- hug
(I) hug (someone)

(52) **soorok**
sa- orok
1SG- run.errands
(I) run errands

(53) **saloq**
s- aloq
1SG- buy
(I) buy (something)

In (51), we find the vocalic allomorph **sa-** prefixed to a consonant-initial stem **mà(w)** *hug*. Note that **sm** is a licit initial cluster in Kàama, as in **smàr** *butter*, so the **a** isn't appearing to break up a disallowed cluster. In (52), we find the vocalic allomorph **sa-** appearing before **o**. Note that here we have the regular phonological process that turns **ao** sequences into long **aa**. In (53), we have the nonvocalic allomorph **s-** appearing before **a**. We can tell it's the nonvocalic allomorph because elsewhere in Kàama a glide is inserted in **aa** sequences, as in **aka** *feces* + RED > **akayaka** *object of poor quality*. If we had the vocalic allomorph in (53), then we would predict that the surface form should be **sayaloq** instead of **saloq**.

For **k(u)-** *3sg*, in contrast, the nonvocalic allomorph **k-** is the default form. The vocalic allomorph **ku-** only appears to break up would-be inadmissable clusters.

(54) **kmakan**
k- makan
3SG- have.meal
(He) eats

(55) **kughor**
ku- ghor
3SG- see
(He) sees (something)

In (54) we have the default nonvocalic form showing up, since **km** is an admissable initial cluster. In (55), the vocalic form appears, since **kgh** is not an admissable cluster in Kàama.

The morphemes **-(e)k** 2SG and **-(u)r** 2PL behave alike—for both, the nonvocalic allomorphs **-k** and **-r** is the defaults. The vocalic allomorphs **-ek** and **-ur** only appear if there is no possible preceding vowel-final allomorph available. Since these two behave alike, I'll illustrate with **-k**.

(56) **gòorek**
gòor -ek
pet 2SG
(You) pet (something)

(57) **gòoraghek**
gòor -agh -ek
pet -3PL.O -2SG
(You) pet (them)

(58) **gòorkuk**
gòor -ku -k
pet -3SG.O -2SG
(You) pet (it)

In (56), the verb **gòor** *pet* does not have a vowel-final allomorph, so the vocalic allomorph **-ek** appears. In (57), the 3PL central agreement marker **-agh**/**-at** does not have any vowel-final allomorphs, so we get **-ek**. However, in (58), the 3SG central agreement marker **-ku**/**-q** *does* have a vowel final allomorph, so that particular allomorph appears, and we get nonvocalic **-k**. You cannot have the reverse combination of forms, **-q** + **-ek**—**gòorqek** does not exist.

A peculiarity of peripheral agreement is that it cannot agree with nonspecific subjects of unaccusative verbs. Since central agreement also cannot appear with nonspecific subjects of unaccusatives, no agreement appears on the verb in these cases:

(59) a. **peye wàna**
peye wàna
arrive wizard
A wizard has arrived.

b. **put qìnu**
put qìn -u
fall abacus -NOM.PL
A calculator fell.

Note that, in contrast, peripheral agreement *does* agree with nonspecific subjects of unergative verbs.

(60) a. **wàna ho kròn**
wàna ho k- ròn
wizard NEG 3SG- snore
Some wizard is not snoring.
OR: *No wizard is snoring.*

b. **màyu ho maknan**
mày -u ho makn -an
woman NEG NOM.PL have.meal -3PL
Some women are not eating.
OR: *No women are eating.*

Both the examples in (60) are scopally ambiguous: they can either have specific, $\exists \gg \neg$ readings, or they can have nonspecific, $\neg \gg \exists$ readings. In both cases, peripheral agreement indexes the subject.

4.1.4 The preterite

The preterite is marked by a nasal prefix **m-**, and generally roughly corresponds to a perfective past. The nasal prefix assimilates in place to the following consonant, as in (61-62):

(61) **mpòyan**
m- pòy -an
PRET- throw 3PL
(They) threw (something)

(62) **nròne**
n- ròn -e
PRET- snore -1PL
(We) snored

In (61), we get a labial prefix **m-** due to the following labial. In (62), we get a coronal prefix **n-** due to the following coronal.

If the nasal prefix precedes **m**, it dissimilates to **n-**, as in (63-64):

(63) **nmaknan**
n- makn -an
PRET- have.meal 3PL
(They) ate

(64) **nmàwe**
n- màw -e
PRET- hug -1PL
(We) hugged (someone)

In both cases, the verb root begins in **m**, which causes the nasal prefix to dissimilate.

If the nasal prefix precedes **n** or **l**, the result is a geminate **nn**, as in (65-66):

(65) **nnusan**
n- nus -an
PRET- smell 3PL
(They) smelled (something)

(66) **nnìpe**
n- lìp -e
PRET- lick -1PL
(We) licked (something)

In (65), the nasal prefix assimilates to the following coronal nasal **n**, resulting in a geminate **nn**. In (66), the nasal prefix first assimilates to the following lateral **l**, then the lateral assimilates in nasality, resulting in a geminate **nn**.

If the nasal prefix precedes a vowel, it's realized as **m-**, as in (67-68):

(67) **malqan**
m- alq -an
PRET- buy 3PL
(They) bought (something)

(68) **morke**
m- ork -e
PRET- run.errands -1PL
(We) ran errands

In both cases, since the verb root begins in a vowel, the nasal prefix is realized as **m-**. This is evidence that the underlying representation of the nasal prefix is as a labial nasal **m-**.

If the nasal prefix precedes **gh** or **h**, it's realized as **me-**, as in (69-70):

(69) **meghoran**
me- ghor -an
PRET- see 3PL
(They) saw (something)

(70) **mehale**
me- hal -e
PRET- drag -1PL
(We) dragged

In both cases, the vowel **e** is inserted to break up the unacceptable initial clusters **mgh** and **mh**.

The nasal prefix has nontrivial interactions with the peripheral agreement prefixes **sa-** 1SG and **k-** 3SG. It affixes inside **sa-** , and either appears as **m-** if preceding a vowel, or assimilates to the place of the following consonant, as in (71-72):

(71) **samaloq**
sa- m- aloq
1SG- PRET- buy
(I) bought (something)

(72) **sanghor**
sa- n- ghor
1SG- PRET- see
(I) saw (something)

In (71), we have **m** appearing since the following segment is a vowel. In (72), the nasal prefix appears as a velar nasal /ŋ/ (written **n**). Note that this is different from the form of the nasal prefix when peripheral agreement is not 1SG, as in (69).

In contrast, the nasal prefix always affixes *outside* of **k-** 3SG, where it's realized as /ŋ/ (written **n**), as in (73-74):

(73) **nkaloq**
n- k- aloq
PRET- 3SG- buy
(She) bought (something)

(74) **nkughor**
n- ku- ghor
PRET- 3SG- see
(She) saw (something)

4.1.5 The gerund

The gerund is a kind of converb that gets simultaneous readings—that is, the event denoted by the gerund must overlap with the event denoted by the main clause. Gerund clauses are kinds of adverbial clauses that generally appear at the end of the sentence.

The gerund is formed by prefixing the verb with **we-**. There is no peripheral agreement in a gerund, but there is central agreement (with specific objects). Preterite marking likewise does not appear on the gerund. An epenthetic **y** is inserted to break up hiatus, if necessary.

(75) **wemàso**
we- mà -so
VC- hug 1SG.O
While hugging (me)

(76) **weyorok**
wey- orok
VC- run.errands
While running errands

In colloquial speech, the initial **w** is often elided:

(77) **emàso**
e- mà -so
VC- hug 1SG.O
While hugging (me)

(78) **eyorok**
ey- orok
VC- run.errands
While running errands

4.1.6 The conjunct

The conjunct is a converbial verb form that gets a wider range of readings than the gerund—it can have temporal readings, which are a simultaneous reading and an anterior reading, and it can have a conditional reading, as the antecedent to a conditional. The conditional requires just the plain conjunct, whereas the temporal readings require what is traditionally called the *changed conjunct*, which I analyze as just the plain conjunct plus extraction marking (see Section 4.1.7).

The conjunct is formed by suffixing **-at** to the verb. Verb forms in the conjunct feature full central and peripheral agreement as well as preterite marking—thus, they inflect for all the same features as regular finite verbs. Previous work argues about whether the conjunct should be considered a nonfinite or deranked verb form; I do not wade into this issue here. Here are some examples of conjunct verbs:

(79) **sankseqat**
sa- n- kseq -at
1SG- PRET- sneeze -CJ
If (I) sneezed

(80) **gòorkukat**
gòor -ku -k -at
pet -3SG.O -2SG -CJ
If (you) pet (it)

In (79), we have a conjunct verb with peripheral agreement and preterite marking, and in (80), we have a conjunct verb with both central and peripheral agreement.

If the verb ends in a vowel, an epenthetic consonant is inserted by the regular hiatus resolution rules.

(81) **ròneyat**
ròn -e -y -at
snore -1PL -EPEN -CJ
If (we) snore

(82) **kowat**
k- o -w -at
3SG hold -EPEN -CJ
If (she) takes (something)

In (81), the verb **ròne** *(we) snore* ends in an **e**, so an epenthetic **y** is inserted when suffixing the conjunct marker. In (82), the verb root **o** *hold, take* ends in an **o**, so an epenthetic **w** is inserted when suffixing the conjunct marker.

The changed conjunct, which appears in temporal adjuncts, features the addition of grave accent on the accented syllable, as well as a **w-** prefix on vowel-initial verbs (in Section 4.1.7 I discuss this kind of marking in more detail). If the verb already has a grave accent, and begins with a consonant, then the conjunct and the changed conjunct are identical.

(83) **wàlqanat**
w- àlq -an -at
EX- buy.EX -3PL -CJ
While (they) buy (something)

(84) **gòorkukat**
gòor -ku -k -at
pet.EX -3SG.O -2SG -CJ
While (you) pet (it)

In (83), we have the verb **aloq** *buy*. Since it is vowel-initial, and has an acute accent, **w-** is prefixed and the accent changes to a grave in the conjunct. However, in (84), since the verb **gòor** *pet* begins with a consonant, **w** does not appear, and since the root already has a grave accent, it stays the same in the changed conjunct. Thus, this form is identical in the conjunct and the

changed conjunct—compare (84) to (80).

When the changed conjunct appears without the preterite, as in the previous examples, it receives a simultaneous interpretation, as indicated by the *while* in the English translations. However, when the changed conjunct appears *with* the preterite, it receives an anterior interpretation.

(85) **màlqanat**
m- àlq -an -at
PRET- buy.EX -3PL -CJ
After (they) buy (something)

(86) **ngòorkukat**
n- gòor -ku -k -at
PRET- pet.EX -3SG.O -2SG -CJ
After (you) pet (it)

Note the addition of the preterite prefix, and the translations with *after*.

4.1.7 Extraction marking and *wh* agreement

Kàama features a kind of *extraction marking* that prototypically appears when the most prominent argument—the one agreed with by peripheral agreement, which is traditionally called the *pivot*—is extracted. Notably, however, it also appears when high adjuncts, like temporal adjuncts, are extracted. I submit that this is what is happening in the changed conjunct—it gets a temporal reading because a covert temporal adjunct is begin extracted to form a kind of temporal relative clause (i.e. *the time that…*). In this way, we can assimilate the change conjunct to the regular conjunct plus extraction marking. Extraction marking appears in typical A′ extraction contexts—*wh* questions, relativization, focus/topic fronting.

Extraction marking is marked by changing the accent to a grave, and prefixing **w-** to vowel-initial verbs.

(87) a. **tane nukpe wòoruqo?**
tane nuk -pe w- òoru -q -o
what.ACC person -NOM.PL EX- hear.EX -3SG.O -WH
Which one are the people hearing?

b. **tàne ku ketèppe qe cìwa pèyyan?**
tàne ku= kete -ppe qe cìwa pèyy -an
when 2SG= guest NOM.PL from city arrive.EX -3PL
When will your guests from the city arrive? (stest #73)

In (87a), the pivot is the object **tane** *what*, which is *wh*-extracted, so we get extraction marking on the verb. Since **ooru** *hear* begins with a vowel, we prefix **w-**. In (87b), we are *wh*-extracting a temporal adjunct **tàne** *when*, so

we get extraction marking on the verb, which is just realized as grave accent, since **peye** *arrive* is consonant-initial.

The careful reader may have noticed something funny about the agreement on the verb **wòoruqo** in (87a). Normally, in a 3>3 main clause, you get inverse marking and peripheral agreement indexing the object. Thus, you might expect **kuwòoru** 3SG.*hear*.INV. However, instead you have the form **wòoruqo**, where there is no inverse, there is central agreement indexing the object (**-q** 3SG.O), and there is a morpheme **-o**, which I have glossed WH. What's going on here?

Kàama features *wh* agreement—peripheral agreement, when it agrees with a *wh* item, shows up as the form **-o**. Since peripheral agreement agrees with the object in a 3>3 clause, and the object **tane** *what* is a *wh* item, we find peripheral agreement surfacing as **-o**. But why do we have central agreement, instead of the inverse? I discuss this more in Section 5.2, but there is a robust generalization in Kàama that central agreement shows up if and only if peripheral agreement and central agreement would be indexing the φ features (person and number features) of the same argument—a kind of haplology effect. In this case, peripheral agreement is not indexing the φ features of **tane**; instead, it's appearing in an impoverished form **-o**. Thus, central agreement is free to agree with the object in this case, as there is no motivation for haplology.

4.2 Verb phrase syntax

TODO

4.2.1 Word order in the verb phrase

TODO

4.2.2 Converb syntax

TODO

4.2.2.1 Gerund syntax

Gerund clauses are (S)VO. Most often, there isn't an overt subject, and the understood subject is identical to the main clause subject, though an overt subject can appear preverbally.

(88) a. **wehal tomághan**
we- hal tomághan
VC- pull cart
Pulling a cart

b. **sami wecaak kàtpe**
sami we- caak kàt -pe
man VC- cook flatbread -NOM.PL
With the man making flatbreads

In (88a), we find a gerund clause without an overt subject, and in (88b), we have one with an overt subject **sami** *man*.

To illustrate the subject-only restriction, consider the example in (89).

(89) **peyirte kowappe meghorwan wehal tomághan**
peyirt -e kowa -ppe me- ghor -w -an we- hal tomághan
horse -ACC child -NOM.PL PRET- see -INV -3PL VC- pull cart
The children saw the horse while pulling a cart.

Here, as suggested by the English translation, the only available interpretation is an implausible one in which the children are pulling a cart, and not the horse. The plausible interpretation, where the children saw the horse which was pulling a cart, is unavailable for this sentence.

In order to make the plausible interpretation available, you can put an overt pronoun in the gerund clause, as illustrated in (90).

(90) **peyirte kowappe meghorwan ghe wehal tomághan**
peyirt -e kowa -ppe me- ghor -w -an ghe= we- hal
horse -ACC child -NOM.PL PRET- see -INV -3PL 3SG= VC- pull
tomághan
cart
The children saw the horse while it was pulling a cart.

Here, since we have a singular pronoun **ghe** 3SG in the gerund clause, it can only corefer with **peyirte** *horse* and not with **kowappe** *children*.[2] Though it's more natural to drop the subject when the gerund clause subject corefers with the main clause subject, it is possible to use an overt pronoun, especially when it's focused:

[2]In principle, **ghe** could also refer to a third discourse-salient entity.

(91) **peyirte kowappe meghorwan gaan wehal tomághan**

peyirt -e kowa -ppe me- ghor -w -an gaan we- hal
horse -ACC child -NOM.PL PRET- see -INV -3PL 3PL.EMPH VC- pull

tomághan
cart

The children saw the horse while THEY were pulling a cart.

Here, the emphatic pronoun **gaan** 3PL.EMPH appears in the gerund clause, and corefers with the main clause subject **kowappe** *children*.

So far, all the objects in the gerund clause have been nonspecific. It is possible to have specific objects, though they do not get accusative marked, and they do not move to a preverbal position. They are, however, still indexed by central agreement on the verb.

(92) **peyir kròn hine wehalku tomághan**

peyir k- ròn hine we- hal -ku tomághan
horse 3SG- snore neigh VC- pull -3SG.O cart

The horse neighed while pulling the cart.

In (92), we have a specific object **tomághan** *the cart*, which remains postverbal, is not accusative-marked, but is indexed by central agreement on the verb.

4.2.2.2 Conjunct syntax

TODO

Chapter 5

Clausal syntax

5.1 Word order

Word order in Kàama is somewhat free, but it is constrained by syntactic, semantic, and discourse factors. Generally, the most default orders are SVO with nonspecific objects and OSV with specific objects.

5.2 Differential object marking and the inverse

In this section, I discuss in detail the syntax of differential object marking, and its interactions with the direct-inverse system. Recall that accusative marking only shows up on specific objects:

(93) a. **miyoa gòoran pispis**
miy -oa gòor -an pis -pis -Ø
child -NOM.PL pet -3PL cat -RED -NOM
The children are petting a cat.

b. **pispise miyoa kugòoru**
pis -pis -e miy -oa ku- gòor -u
cat -RED -ACC child -NOM.PL 3SG- pet -INV
The children are petting the cat.

In (93a), we have an indefinite object **pispis** *a cat*, so it shows up in the nominative. In (93b), we have a definite object **pispise** *the cat*, so it shows up in the accusative.

However, there are additional differences between (93a) and (93b). There's a word order difference: (93a) is SVO, while (93b) is OSV. There's an agreement different: the verb agrees with the subject **miyoa** *the children* in (93a), but it agrees with the object **pispise** *the cat* in (93b). Finally, (93b), but not (93a), features the inverse marker **-u**. So clearly there's more going on here than a mere case-marking difference.

Next, consider the following example:

(94) a. **noo ku saskùke**
noo ku= sa- skuk -e
1SG.TN 2SG= 1SG- wait.for -2SG.O
I have been waiting for you. (stest #47)

b. **noo ku saskùku**
noo ku= sa- skuk -u
1SG.TN 2SG= 1SG- wait.for -INV
You have been waiting for me.

Recall that the inverse appears when the object outranks the subject. Thus, in (94a), where we have a $1>2$ configuration, we do not have the inverse, but in (94b), where we have a $2>1$ configuration, we do.

However, there's something else interesting here: in both (94a) and (94b), the pronouns are in the same forms, and in the same positions. The first person pronoun **noo** is in its tonic form, and the second person pronoun **ku** is in its atonic form. The first person pronoun appears first, and the second person pronoun appears procliticized to the verb. Yet they are have different syntactic and thematic roles in both examples.

Traditionally, the pronouns have been described as showing *direct-inverse* alignment. The higher ranking pronoun appears in the tonic form, and the lower ranking pronoun appears in the atonic form (or the emphatic form, if it's focused). Peripheral agreement will always agree with the higher pronoun, and inverse marking appears if the object outranks the subject.

In this section, I'll provide an analysis of the syntax of agreement and case-marking that derives both these patterns. I argue that central agreement is φ agreement on *v* that is relativized to specific DPs, and peripheral agreement is φ agreement on T that is a case-sensitive composite probe [π – PART – SPKR, #]. I show that specific objects move to Spec,*v*P, above the subject, triggered by an EPP feature on *v*, and the highest ranking argument is agreed-with by T and moves to Spec,TP to satisfy an EPP feature on T. When both arguments have the same rank ($3>3$), the highest argument (the object) is agreed-with

by T and raises to Spec,TP. Accusative case is assigned within TP after all these movements, and it is assigned to the *highest* nominal inside TP—this means that accusative case in Kàama is actually *dependent ergative*. Finally, I argue that the inverse is actually impoverishment of central agreement, as a kind of haplology effect when both central and peripheral agreement agree with the same nominal.

In Section (5.2.1), I provide some syntactic and semantic data to argue that DOM objects raise above the subject. In Section (5.2.2), I show how the proposed distribution of probes, along with the impoverishment account of the inverse, captures the direct-inverse nature of Kàama. Finally, in Section (5.2.3), I argue that accusative case is assigned in the TP domain, crucially *after* movement to Spec,TP. This allows for a reanalysis of the pronoun system, and argue that Kàama does not have a split alignment—pronouns and nouns have the same cases (nominative and accusative). The atonic and emphatic pronouns are the nominative pronouns, and the tonic pronouns are the accustive pronouns.

5.2.1 DOM and object raising

In this section, I put forth two arguments to show that specific objects c-command subjects at the clausal level—word order in neutral 3 > 3 sentences with specific objects is OSV (Section 5.2.1.1), specific objects take wide scope (Section 5.2.1.2), and specific obejcts can bind into subjects (Section 5.2.1.3).

5.2.1.1 Word order

TODO

5.2.1.2 Scope

TODO

5.2.1.3 Binding

TODO

5.2.2 Agreement and the inverse

In this section, I propose that central agreement is located on *v* and is relativized to specific DPs, and peripheral agreement is located on T and is a

composite probe searching for DPs that are have both a [π – PART – SPKR] feature structure and a [#] node. Additionally, I propose that inverse marking is the exponent of impoverished *v*. I then show how this system derives the morphosyntactic facts about the direct-inverse system.

5.2.2.1 The system

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5.2.2.2 Deriving the facts

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5.2.3 Upwards accusative

In this section, I argue that accusative case in Kàama is an *upwards* dependent case in the TP domain, assigned after movement to Spec,TP. Section 5.2.3.1 provides an argument from raising to show that T (peripheral agreement) is actually a case-sensitive probe that can only see nominative DPs, which indicates that apparent agreement with accusative DPs must have taken place before the assignment of accusative case. Section 5.2.3.2 demonstrates that this insight allows for a unification of the pronominal system with nominal case marking—pronouns have nominative and accusative case forms, just like nouns, but the direct-inverse morphosyntax obscures this.

5.2.3.1 Raising

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5.2.3.2 Reanalyzing the pronouns

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