Kuraŋɔ

Garret Kurteff

September 16, 2016

To-do

This section will be omitted in the final compile. It's so Garret knows what to work on.

Sections to write from notebook:

1. Lexically different types of intelligence.
2. case assignment
3. add *rha* as itself for a noun that means thought. Makes a lot more sense for your compounding ideas that you were meditating upon.

The -ti/opposite edge reduplication issue is pretty pressing. for the sake of continuity i prefer to use OER but the nana/nini/nunu thing might be too salient to use that. think of some historically motivated solution? the current one is kind of weak.

Old stuff to consolidate:

1. check interlins
   Maybe like print out a copy and make sure everything is up to date (physical proofreading ftw)(for the interlins only.)
2. move unfinished "philosophy" section to the introduction instead?
   finish it too lol

New stuff to write:

1. Think of a system of encoding grammatical mood. This is necessary in order to complete your own litmus test, a translation of the "Litany Against Fear." Moods that already have a gloss: Indicative(∅), Imperative(ɾɔ), Interrogative(ɾi); Moods that need a gloss: Conditional "would", Subjunctive "if", Potential "may"
2. Think of ways to incorporate zero-derivation that won't fuck with the use of your causative. Trigger: salience, close semantic proximity, etc. (god forbid something is COMPLETELY irregular)
3. Culture/sociolinguistics/dialectology section? (Talk about the progressive–descriptive vs conservative–prescriptive dialects.)
4. WH QUESTIONS!!! look at discussion with jenks. u need a new lexical entry for this.
5. Where are you going to put your morphosyntax section? (A: probably in with the morphology as you introduce concepts.)
6. section on adverbial constructions
7. Different morphological topics
   Like, prox/dist/near/far distinction (Should probably go in case section)
8. Inflectional morphology (how 2 organize?)
9. Derivational morphology (how 2 organize?)
   1 section on the dedicated class changers
   1 section on everything else?
10. word order section (under grammar)
11. a "fun facts" appendix or some shit?? maybe put in intro instead?
12. Suprasegmental stuff. (tone, stress, others)
13. Some phonology about vowel deletion in common grammatical forms (person markers, tense markers, etc) to form nasal consonant clusters? u need those nasals bb

14. eventually find some way to make numeracy not as lame.

Stuff to yoink from the wiki:

1. person marking/(Case too?) (put in DP section under Constituency in Grammar)
2. Mass (next to numeracy in morpho)
3. Greetings (the appendix?)
4. Enclitics (is this even relevant anymore? in the grammar section?)

Notes/Acknowledgements

Left blank for now.

Philosophy/Design Goals

Many conlangers try to tailor their languages to their languages' respective cultures (Dothraki), or create languages as thought experiments (Ithkuil). Because I am both an academically-trained linguist and an amateur conlanger, I did neither.

Contents

Chapter 1

Introduction

"To be honest, a large part of [whether or not I was working on Ithkuil] was dependent on whether or not I was in a relationship at the time." – John Quijada

Chapter 2

Syntax

2.1 Word order

Kurəŋɔ has a fixed SVO word order. The case assignment system is what makes the word order fixed (see Section 2.3).

2.1.1 Constituent order

2.1.2 Placement of adjuncts

2.2 Morphological type

2.3 Case system

In Kurəŋɔ, basic subject/object case assignment is based on word order. Arguments to left of the verb get ergative case, and arguments to the right of the verb get absolutive case. For ERG and ABS, there are no explicit case markers.

(2.1) Ni'inakarana. [niʔinakarana]

ni- *inakara* *-na*
2- bore -1
'You bore me.'

(2.2) Na'inakarani. [naʔinakarani]

na- *inakara* *-ni*
1- bore -2
'I bore you.'

This ordering principle also allows us to categorize Kurəŋɔ as a Fluid-S language, as arguments of intransitive verbs (S) pattern either with subjects of transitive verbs (S_A) or objects of transitive verbs (S_O) based on their position relative to the verb. Determining the way in which S patterns has to do with the semantics of the utterance: S_A (marked with ERG) has no entailment about the volition of the Agent in the action being performed, while S_O (marked with ABS) entails that the agent was volitional in the action being performed.

(2.3) Nakari. [nakəri]

na- *kari*
1- sleep
'I sleep.' (by my own volition.)

(2.4) Karina. [karina]

kari *-na*
sleep -1
'I sleep.' (no entailment about my volition.)

2.3.1 Auxillary cases

In addition to the basic cases assigned by syntactic position, there are additional cases assigned by explicitly marked D- or P-heads. Below is a list and examples:

Genitive

Genitive (posessive) case is assigned by a postponed determiner *-mi*.

Inessive

make a gloss for this

Elative

Illative

Adessive

Ablative

Allative

Chapter 3

Phonetics

Kuɾaŋɔ, being an academically-minded language, has an unnatural, engineered phonology tailored for its orthographic system[1]. However, there is some allophony, not to sell the phonetic system as entirely robotic.

3.1 Consonants

In short, there are three kinds of contrasts in Kuɾaŋɔ: voicing, place, and manner. Permutably, there are three places of articulation, four manners of articulation, and two voicing methods. This allows for the existence of 24 phonemes, but, due to typological rarity, voiceless nasals and approximants have been omitted. There is also a glottal stop /ʔ/ because glottal stops are awesome.

Manner: [+nasal], [-cont, -son], [+cont, -son], [+cont, +son]

Place: [+labial], [+coronal], [-coronal]

Voice: [+voice], [-voice]

Figure 3.1: Possible values for permutable categories in Kuɾaŋɔ consonants

The below consonant chart may help indicate my point. Items in parentheses are used only in allmorphy, items joined with tildes are in free variation.

Table 3.1: Consonant chart for Kuɾaŋɔ

	Labial	Alveolar	Velar	Glottal
Nasal	m	n	ŋ	
Stop	p b	t d	k g	ʔ
Fricative	ɸ β	s z	x ɣ	
Sonorant	ʊ (w)	ɾ~ɹ~r	ɯ̟ (j[2])	

For information on allophony, see chapter 4.

[1] For more on the orthography, please refer to chapter 7.

[2] Yes, I know /j/ is palatal, fuck you

3.2 Vowels

Kuɾaŋɔ's vowel system is also "engineered" based off permutable contrasts, with height and laterality being contrastive. Roundness is non-contrastive, but front[3] vowels are [-round] and back vowels are [+round]. Vowels also contrast in length.

Height: [+high], [-high]

Laterality: [+back], [-back]

Figure 3.2: Possible values for permutable categories in Kuɾaŋɔ vowels

Also, a vowel trapezium:

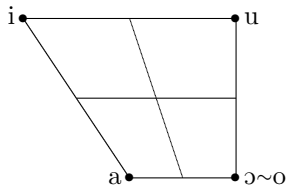


Figure 3.3: Vowel trapezium for Kuɾaŋɔ

There isn't much else to say about vowels, except that /ɔ/ is often phonetically lower than it appears in standard IPA, making it sound closer to [ɒ]. L1 bias may cause some Kuɾaŋɔ vowels to phonetically shift: for me (a Californian), /ɔ/ is closer to [o], /u/ is closer to [ɨ], and /a/ is centralized.

[3]Technically, non-back vowels as /a/ is [-front, -back].

Chapter 4

Phonology

4.1 Allophony

Because Kuɾaŋɔ's phonetic inventory is based around the idea of permutation, there is very little allophony. Most allophony in the language is the result of ameliorating coarticulatory strain.

4.1.1 Approximant formation

Intervocalic glottal stops undergo approximant formation into four possible allomorphs. The more "progressive" dialect changes from /ʔ/ to [w] and [j], while the "conservative" dialect changes from /ʔ/ to [ʊ] and [ɯ̞]. The conditioning environment for both set of changes is vowel laterality.

$$/ʔ/ \longrightarrow \left\{ \begin{matrix} [j] \\ [ɯ̞] \end{matrix} \right\} / \text{ V[-back]}\_\_\text{V}$$
$$/ʔ/ \longrightarrow \left\{ \begin{matrix} [w] \\ [ʊ] \end{matrix} \right\} / \text{ V[+back]}\_\_\text{V}$$

Figure 4.1: Phonological rules for formation of glides from glottal stops.

In the sentence *o'ati arimo* [ʔɔwatiʔaɾimɔ][1], the second (intervocalic) glottal stop in /ʔɔʔati/ becomes [w](or [ʊ]). The glottal stop at the beginning of *ari* also changes, but only because a second rule will apply to form a consonant cluster(see below). It is important to note that glottal stops at word boundaries that would not go on to be affected by the cluster formation rule do NOT become approximants (example: *miro armio* /miɾɔʔaɾimɔ/: [miɾɔʔaɾimɔ]; *[miɾwaɾimɔ]).

4.1.2 Cluster formation

When preceeded by stops and followed by sonorants, interconsonantal vowels are deleted. The deletion of this vowel forms a consonant cluster (marked with a tie bar) between the stop and the approximant.

This rule is in feeding order with the approximant formation rule, with the approximant formation rule applying first.

$$/\text{V}/ \longrightarrow \varnothing \text{ / C[-cont]}\_\_\text{C[+cont, +son]}$$

Figure 4.2: Phonological rules for consonant cluster formation via vowel deletion.

This rule leaves our sentence *o'ati arimo* from above with the final phonetic form as [owatjarimo]

I have chose to call this rule "Cluster formation" instead of "Deletion of post-stop, pre-approximant vowels" because the primary purpose of the rule is to form consonant cluster that are easier to phonate than sequences with glottal stops in them.

[1]This is not exactly a correct pronunciation. See the following section on affricates.

4.2 Suprasegmental features (Prosody)

4.2.1 Rhythm

4.2.2 Tone

4.2.3 Stress

4.2.4 Intonation

Chapter 5

Morphology

5.1 Reduplication

One of Kuɾaŋɔ's hallmarks is its reduplicative system. It has multiple reduplicative processes.

5.1.1 Intensification

Semantically, this reduplicative process results in an intensification of the meaning of the morpheme. This more or less restricts where reduplication can or can not occur—it is common on intensifiable parts of speech like adjectives, and very rare on less-intensifiable parts of speech like verbs. The reduplicative template varies based on how many syllables[1] are in the stem.

One and two-syllable stems

One and two-syllable stems are copied and reduplicated entirely[2].

Original Form	Reduplicated Form
ga -ti -xu si 'I like someone.'	ga -titi -xu si 'I love someone.'
ga -ŋa -ka si 'I am unhappy.'	ga -ŋa -kaka si 'I am miserable.'
ʔaɾi -gɔɔ ɾɔ 'Please leave.'	ʔaɾi -gɔɔ ɾɔɾɔ 'Go away!'
ni- ʔaŋa -mi si ɾi? 'What is your name?'	ni- ʔaŋa -mi si ɾiɾi? 'I really need to know your name.'

Table 5.1: One-syllable stem reduplication

[1] Syllable being one vowel and its onset, or one grapheme in the *kuraito* orthography.
[2] Forms in these tables ignore phonological rules and represent underlying forms.

Original Form	Reduplicated Form
gaku 'good'	gakugaku 'very good'
gaŋa 'bad'	gaŋagaŋa 'very bad'
ʔaɸa 'Yes.'	ʔaɸaʔaɸa 'Of course!'
ʔiʔi 'No.'	ʔiʔiʔiʔi 'Absolutely not!'
kaɾi -su 'sleepy'	kaɾikaɾi -su 'exhausted'

Table 5.2: Two-syllable stem reduplication

Three-syllable stems and up

Stems that are three syllables or over undergo opposite-edge reduplication of two syllables. These two syllables are selected right-to-left and then prefixed.

Original Form	Reduplicated Form
ʔinakaɾa -su 'boring'	kaɾaʔinakaɾa -su 'extremely boring'

Table 5.3: Three-syllable and up stem reduplication

5.1.2 Pluralization

Pluralization is cause by opposite-edge reduplication. One syllable from the beginning of the word is suffixed to denote a plural entity.

Original Form	Reduplicated Form
ʔɔʔati 'dog'	ʔɔʔatiʔɔ 'dogs'
miɾɔ 'cat'	miɾɔmi 'cats'
ɸaaβu 'home'	ɸaaβuɸa 'homes'

Table 5.4: Pluralization

Monosyllabic words are pluralized using the suffix *-ti* instead. This suffix probably arose from confusion regarding plural person-markers and plural pronouns both being *nana, nini* and *nunu*.

5.2 Valence-increasing morphology

5.2.1 Applicatives

Applicatives in Kuɾaŋɔ are marked using a suffix on the introduced argument, -ʔuti.

(5.1) Nimotivagaana. [nimɔtiβagaːna]

ni- *∅-* *mɔti* *-βa* *-gaː* *-na* *-∅*
2- ERG- die -CAUS -FUT -1 -ABS
'You are going to kill me.'

(5.2) Nimotivagaana soodongu'uti. [nigu naku mɔtiβaga: sɔ:dɔŋu?uti]

ni- *∅-* *mɔti* *-βa* *-ga:* *-na* *-∅* *sɔ:dɔ* *-ŋu* *-?uti*
1- ERG- kill -CAUS -FUT -1 -ABS sword -GEN -APPL
'You are going to kill me with a sword.' (lit: 'You made me die with a sword.')

5.2.2 Causatives

Causatives in Kuɾaŋɔ are marked using the verbal suffix -βa.

(5.3) Nakumotigaa. [nakumɔtiga:]

na- *ku-* *mɔti* *-ga:*
1- NOM- die -FUT
'I am going to die.'

(5.4) Namotivagaana. [namɔtiβaga:na]

na- *∅-* *mɔti* *-βa* *-ga:* *-na* *-∅*
1 ERG- die -CAUS -FUT -1 -ABS
'I am going to kill myself.' (lit: 'I am going to make myself die.')

If an agentive argument is not introduced with the causative suffix -βa, the utterance is still grammatical, but it has a passivized connotation to it.

(5.5) Nakumotivagaa. [nakumɔtiβaga:]

na- *ku-* *mɔti* *-βa* *-ga:*
1- NOM- die -CAUS -FUT
'I am going to be killed' (lit: I am going to be made dead)

5.3 Valence-decreasing morphology

5.4 Direction-encoding morphology

5.5 Evidentiality-encoding morphology

5.5.1 Discussion of knowledge

Knowledge is a very important concept for Kuɾaŋɔ speakers, and the topic has more depth than the English language provides.

ɣ*a* serves as the root noun for "general knowledge," but there are many semantically-related words that refer to different types of knowledge. These lexicalized words for different types of knowledge reflects what types of knowledge Kuɾaŋɔ speakers believe to be important.

1. ɣ*aŋakauɰa* is knowledge that is false or otherwise irrelevant to the current discourse.
2. ɣ*amuzu* is introspective knowledge, correlating somewhat to a "sense of self."
3. ɣ*asɔtɔrii* refers to social knowledge.
4. ɣ*apapi'a* refers to fact-based knowledge. It does not have to be applicable in any pragmatic context.
5. ɣ*anaɣaa* refers to knowledge in general, sort of like "world smarts." It is regarded as a high compliment and the most difficult type of knowledge to obtain.

5.6 Emotion expression

One of the main goals of Kuraŋɔ was to create a language in which expression of emotional states and cognitive processes was more flexible than English. For the most part, this was a goal inspired by Anna Wierzbicka's calls for use of a natural semantic metalanguage when discussing emotion, as languages tend to differ greatly in their emotion terminology. What Kuraŋɔ brings is a hopefully language-neutral system based on permutable morphemes.

This design goal is reflected in an Ithkuilian way through the use of an unnatural system of suffixal morphology in that it requires speakers to really think about what exactly they want to say. However, many common emotions have lexicalized compounds to serve as everyday adjectives.

5.6.1 The emotion marker *ga*

ga is an adjective which indicates a state of emotional being. By itself, it glosses to "emotional", but *gaa* glosses to "emotion.as.an.abstract.concept" through a productive vowel lengthening rule. *ga* has its own system of suffixation that allows many changes to its meaning.

Morphosyntax of *ga* constructions

The adjective *ga* has five slots upon which morphology can affix.

Root	Slot 1	Slot 2	Slot 3	Slot 4	Slot 5
ga	-NEG	-PRIM/-NEUT	-EMO	-TARG	-DUR

Table 5.5: Morphosyntax of *ga*

- "NEG" negates all following morphology.
- "PRIM/NEUT" are two derivational modifiers for the following emotion: PRIM makes an emotion "primal," while NEUT makes an emotion "neutered."
- "EMO" is a category for indicating explicit emotional states.
- "TARG" indicates the target of the emotion.
- "DUR" indicates the duration of the previous emotion.

When expressing a specific emotion (that is, not the concept of "emotion" in general), only EMO is mandatory. The other three slots can be omitted without affecting grammaticality, but may be included for distinguishing between more precise differences between emotions.

5.6.2 NEG, PRIM, and NEUT: derivational suffixes

NEG

The NEG slot can only be occupied by one suffix, *-ŋa*. *-ŋa* negates the emotional construction that follows it.

(5.6) Ganga si. ['ga.ŋa.si]

ga	*-ŋa*	*si*
emotional	-NEG	COP

'Things are not going well.'

(5.7) Gangatixupa si. [ga.'ŋa.ti.xu.pa.si]

ga	*-ŋa*	*-ti*	*-xu*	*-pa*	*si*
emotional	-NEG	-EMO:AFFECTION	-TARG:ANIM	-DUR:SHORT	COP

'I am angry at someone.'

Figure 5.1: Examples of *ganga* constructions

PRIM

The PRIM suffix, *-pɔ*, makes an emotion "primal." This is important for making distinctions between emotions like love and lust, happiness and pleasure, anger and rage, etc.

(5.8) Gapowa si. [ga.'pɔ.ʋa.si]

ga	*-pɔ*	*-ʋa*	*si*
emotional	-PRIM	-EMO:CONFIDENCE	COP

'I'm feeling courageous.'

(5.9) Gapotitifu si. [ga.'pɔ.ti.ti.fu si]

ga	*-pɔ*	*-titi*	*-ɸu*	*si*
emotional	-PRIM	-EMO:STRONG.AFFECTION	-TARG:NULL	COP

'I'm horny.'

Figure 5.2: Examples of *gapo* constructions

NEUT

The NEUT suffix, *-nɔʔi*, makes an emotion neutered. This can either reflect a decrease in intensity, or a lack of any intensity in the cases of apathy, ambivalence, etc. Pragmatically, *-nɔʔi* is combined with anger to denote passive-aggressiveness.

(5.10) Gano'i si. [ga.'nɔ.ji.si]

ga	*-nɔʔi*	*si*
emotional	-NEUT	COP

'I'm alright, I guess.' (read in voice of whiny teenager)

(5.11) Gangano'itixu si [ga.'ŋa.nɔ.ji.ti.xu.si]

ga	*-ŋa*	*-nɔʔi*	*-ti*	*-xu*	*si*
emotional	-NEG	-NEUT	-EMO:AFFECTION	-TARG:ANIM	COP

'It's OK. I'm fine.' (In reality, I am mad at you)

Figure 5.3: Examples of *gano'i* constructions

5.6.3 EMO, TARG, and DUR: inflectional suffixes

EMO

EMO suffixes indicate explicit emotional states. Their distinctions are based upon Paul Ekman's theories of basic emotions, but additional suffixes have been added to his proposed basic emotions:

- *-ka* indicates happiness or content.
- *-ti* indicates affection.
- *-vu* indicates confidence. It is commonly negated to express fear or fright (depending on duration).
- *-tɔ* indicates excitement. It is negated to express dissapointment.
- *-xa* indicates a sense of pride/accomplishment. It is negated to express guilt, shame, and regret, depending on duration and target. Changes in duration can mean immediate or longstanding satisfaction.

(5.12) Gaka si. ['ga.ka.si]

ga	*-ka*	*si*
emotional	-EMO:CONTENT	COP

'Things are going well.'

(5.13) Gangatitixu si! [ga.'ŋa.ti.ti.xu.si]

ga	*-ŋa*	*-titi*	*-xu*	*si*
emotional	-NEG	-EMO:STRONG.AFFECTION	-TARG:ANIM	COP

'I am repulsed (by someone)!'

(5.14) Gangawufuda si. [ga.'ŋa.ʋu.ɸu.da.si]

ga	*-ŋa*	*-ʋu*	*-ɸu*	*-da*	*si*
emotional	-NEG	-EMO:CONFIDENCE	-TARG:NULL	-DUR.LONG	COP

'I am anxious.'

(5.15) Gatopa si [ga.'tɔ.pa.si]

ga	*-tɔ*	*-pa*	*si*
emotional	-EMO:EXCITEMENT	-DUR:SHORT	COP

'I am surprised.'

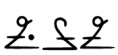
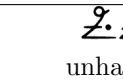
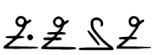
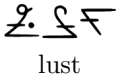
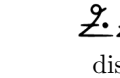
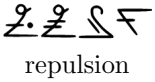
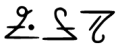
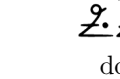
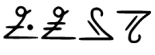
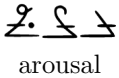
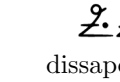
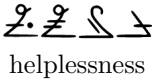
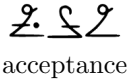
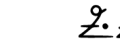
(5.16) Gaxamuda si [ga.'xa.mu.da.si]

ga	*-xa*	*-mu*	*-da*	*si*
emotional	-EMO:PRIDE	-TARG:REFL	-DUR:LONG	COP

'I am proud of myself.'

Figure 5.4: Examples of emotional constructions using different EMO suffixes

Table 5.6: Loose English equivalents of Kuʀaŋɔ emotion adjectives

	+	+PRIM	-	-PRIM
-ka	 happiness contentedness	 pleasure (not nec. sexual)	 unhappiness discontent sadness, anger(strong)	 pain displeasure
-ti	 affection (often romantic)	 lust wanting, craving	 disdain detest(stronger)	 repulsion disgust
-ʊu	 confidence	 courage	 doubt anxiety	 fear
-tɔ	 excitement	 arousal	 dissapointment	 helplessness
-xa	 pride	 acceptance self of belonging	 shame	 reclusiveness lack of belonging

TARG

The TARG suffixes indicate the target of the emotion. There are four possibilities for this morphosyntactic category:

- *-xu* represents an animate target. This can be a person or an animal (anything with consciousness).
- *-ɸu* represents no target. It is also the inanimate suffix for a lot of constructions, and it can serve that purpose here too (eg: mad at your washing machine), but an inanimate pronoun usually follows to provide context in an ambiguous environment.
- *-mu* is a reflexive target.
- *-ɾu* is a reciprocal target.

(5.17) Gakaxu si. [ga.'ka.xu.si]

ga	*-ka*	*-xu*	*si*
emotional	-EMO:CONTENT	-TARG:ANIM	COP

'I am content (with someone).'

(5.18) Gakafu si. [ga.'ka.ɸu.si]

ga	*-ka*	*-ɸu*	*si*
emotional	-EMO:CONTENT	-TARG:NULL	COP

'I am content.'

(5.19) Gakamu si. [ga.'ka.mu.si]

ga	*-ka*	*-mu*	*si*
emotional	-EMO:CONTENT	-TARG:REFL	COP

'I am content (with myself).'

(5.20) Gakaru si. [ga.'ka.ɾu.si]

ga	*-ka*	*-ɾu*	*si*
emotional	-EMO:CONTENT	-TARG:RECIP	COP

'I am am in a state of mutual content with another person.'

Figure 5.5: Examples of emotional constructions using different TARG suffixes

DUR

DUR suffixes are often omitted in common conversation, and used primarily to parse apart the subtle differences between discrete emotions.

- The long durative *-da* indicates that the emotion occurred for a long period of time, something like the distinction between an emotion and a mood.
- The short durative *-pa*, on the other hand, marks the emotion as a fleeting state.

(5.21) Gatirupa si. [ga.'ti.ɾu.pa.si]

ga	*-ti*	*-ɾu*	*-pa*	*si*
emotional	-EMO:AFFECTION	-TARG:RECIP	-DUR:SHORT	COP

'I am in love.' (fleeting)

(5.22) Gatiruda si. [ga.'ti.ɾu.da.si]

ga	*-ti*	*-ɾu*	*-da*	*si*
emotional	-EMO:AFFECTION	-TARG:RECIP	-DUR:LONG	COP

'I am in love.' (longstanding)

Figure 5.6: Examples of emotional constructions using different DUR suffixes

5.6.4 Reduplication

Like other morphological categories in Kuɾaŋɔ, EMO, DUR, TARG, PRIM, NEUT, and NEG can be reduplicated in order to modify intensity. It is interesting to note that reduplicating the PRIM suffix creates the lexicalized expression akin to the word "fuck" in English in terms of distribution and meaning. Etymologically, this comes from expressions like (5.9), which is the most common usage of *po*.

5.7 Numeracy

5.7.1 The cardinal root ɾɔ

Cardinal numbers in Kuɾaŋɔ are marked with the cardinal root ɾɔ. The vowel can be lengthened to form ɾɔɔ, "number" as an abstract concept. However, it more commonly appears with the numeracy suffixes, discussed below.

5.7.2 Numeracy suffixes

Kuɾaŋɔ's capacity to encode any number comes from the combination of ten morphemes that represent the numbers 0-9. These morphemes have underlying forms that obey syllable structure rules for Kuɾaŋɔ, but they are commonly discussed as though they only have consonants in their stems. This is because of an overarching vowel harmony rule based on whether or not the initial numeral suffix is odd or even (see below).

Table 5.7: Kuɾaŋɔ numeracy suffixes

Numeral	Suffix	-a glyph	-u glyph
1	-xaɾa		
2	-duzu		
3	-taɾa		
4	-kutu		
5	-saŋa		
6	-zusu		
7	-sata		
8	-ʔuʔu		
9	-naβa		
0	-zuɾu		

So, *roxara* would gloss to "one," but these suffixes can also attach to nouns. An example would be *o'atikutu*, or "four dogs."

Larger numbers and vowel harmony

A language should, naturally, have a way to discuss really large numbers. In Kuɾaŋɔ, this is as simple as attaching multiple suffixes to ɾɔ. However, there is a catch:

(5.23) roxarazarasata [ɾɔ.ˈxa.ɾa.za.ɾa.sa.ta]

ɾɔ	*-xaɾa*	*-zuɾu*	*-sata*
NUM	-one	-zero	-seven

'one hundred seven'

(5.24) *roxarazurusata [ɾɔ.ˈxa.ɾa.zu.ɾu.sa.ta]

ɾɔ	*-xaɾa*	*-zuɾu*	*-sata*
NUM	-one	-zero	-seven

'(Intended) one hundred seven'

As stated earlier, there is an overarching vowel harmony rule based on whether or not the initial numeral suffix is odd or even. Looking at the numeracy suffixes above, a noticeable pattern emerges, where odd numeral suffixes have /a/ as their vowels and even numeral suffixes (and zero) have /u/ as their vowels. The suffix that attaches closest to the root *ɾɔ* determines the vowel harmony for the rest of the numeral construction.

5.7.3 Ordinality

Ordinality in Kuraɲɔ is a lot more simple than English ordinality. There are no semantic classes of objects that take different ordinal morphology (take "tertiary" versus "third")—all take the same derivational suffix *-ta*. For example, *o'atitakutu* would translate to "the fourth dog" (compare with *o'atikutu* "four dogs" above).

Ordinality and calendar terms

The ordinal suffix is used on the roots "year," "day," "week," and "month" to express calendar terms.

- *di* is the root for "day." *ditaxaɾanaβa* would translate to "the nineteenth day," and *dixaɾanaβa* to "nineteen days."
- *ʔu* is the root for "week." *ʔutaʔuʔuzuɾu* would translate to "the eightieth week," and *ʔuʔuʔuzuɾu* to "eighty weeks."
- *mɔ* is the root for "month." *mɔtataɾa* would translate to "March (lit: the third month)," and *mɔtaɾa* to "three months."
- ɯi is the root for "year." *ɯitaduzuzuɾuxuɾusuɲu* would translate to "2015 (lit: the 2015th year)," and *ɯiduzuzuɾuxuɾusuɲu* to "2015 years."

5.7.4 Multiplicative adverbs

Cardinal number constructions can be derived into multiplicative adverbs "double, triple, quadruple" as they can in English, using an additional root that is mutually exclusive with the noun slot. This root is *dɔɾɔ*. An example would be *dɔɾɔsata*, which translates to "septuple."

5.7.5 Morphosyntax

Root	Slot 1	Slot 2	Slot 3-∞
ɾɔ dɔɾɔ any noun	-ti	Numeracy suffix (that determines vowel harmony)	Numeracy suffix (that undergoes vowel harmony)

Table 5.8: Morphosyntax of numeracy constructions

5.7.6 Other useful numeracy constructions

There are several other common constructions where numeracy suffixes come in handy.

- Last names: *ʔaŋataduzu* "last name (lit: second name)"
- Secondary emotions: *gatitixu si gaŋavuɸupataduzu si* "I love someone, but I am also scared (lit: I love someone; my second emotion is fear)"

Chapter 6

Example interlinearizations

6.1 The Bene Gesserit "Litany Against Fear"

6.2 Genesis 11:1-9, "The Tower of Babel"

Chapter 7

Orthography

HOW DO I TYPESET THIS????

7.1 Handwritten *kuraito*

7.2 Romanization of Kuɾaŋɔ

Since the formal *kuraito* script can be inconvenient at times to write (as can IPA), Kuɾaŋɔ is often written using the Roman alphabet, accomplishable on any standard English keyboard. This romanization standard is used in the dictionary (A).

Original IPA	Romanized equivalent
ɸ	f
β	v
ʋ	w
ɾ, ɹ	r
ŋ	ng
ɣ	rh
ɯ̟	j
ɔ	o

Table 7.1: Romanization standards for Kuɾaŋɔ

Appendix A

Dictionary

A

adara [ʔa.'da.ɾa] *verb* ◇ to order. Borrowed from English name "Adele."

afa ['ʔa.ɸa] *interjection* ◇ yes. Designed to be maximally phonetically distinct from *i'i*, "no."

a'i ['ʔa.ji] *noun, determiner* ◇ space, location. As a determiner functions similarly to English "where."

a'iramoo [a.'ji.ɾa.mɔː] *noun* ◇ outsider, alien, outgroup member (pejorative)

anga ['ʔa.ŋa] *noun* ◇ name

ari ['ʔa.ɾi] *verb* ◇ to go

B

bako ['ba.kɔ] *noun* ◇ body. Often compounds to form different parts of the body, e.g. *vafawaabako* "mouth."

bo'i [bji] *determiner* ◇ how, by

boraa [bɔ.'ɾaː] *inf. morpheme* ◇ progressive aspect marker. Historically served as a present tense marker but that is now null.

D

-da [da] *infl. morpheme* ◇ emotion marker for long duration

di [di] *noun* ◇ day. Borrowed from English "day."

doro ['dɔ.ɾɔ] *adverb* ◇ multiplicative adverb. Compare to English "-tuple" morph.

duru ['du.ɾu] *verb* ◇ to follow. Borrowed from English name "Dora."

duzu ['du.zu] *quantifier* ◇ two. Borrowed loosely from French *deux*, "two."

F

-fa [fa] *infl.morpheme* ◇ marks a target as proximal

faavu ['ɸaː.βu] *noun* ◇ home

fivu ['ɸi.βu] *noun* ◇ house

-fu [ɸu] *infl. morpheme, pronoun* ◇ marks an inanimate target. Also serves as the emotion marker for an inanimate target.

G

ga [ga] *adjective* ◇ emotional

-gaa [gaː] *infl. morpheme* ◇ future tense marker

gaaro ['gaː.ɾɔ] *verb* ◇ select

gakagangasiri ['ga.ka.'ga.ŋa.'si.ɾi] *interjection* ◇ lexicalized expression means "How are you?" Literally translates to "*Good emotion, bad emotion, is it?"

gaka ['ga.ka] *adjective* ◇ lexicalized expression

that means “good.” Literally means “good emotion.”

gakasi [ga.'ka.si] *interjection* ◇ lexicalized expression that means “Hello.” Literally translates to “*Emotion is good.”

ganga ['ga.ŋa] *adjective* ◇ lexicalized expression that means “bad.” Literally translates to “*negated emotion.”

gangasi [ga.'ŋa.si] *interjection* ◇ lexicalized expression that means “Hello.” Literally translates to “*Emotion is negated.”

go'i ['gɔ.ʔi] *verb* ◇ to desire, want

goo [gɔː] *preposition* ◇ ablative preposition; “from”

gokoo ['gɔ.kɔː] *preposition* ◇ illative preposition; “into, back from”

gooko ['gɔː.kɔ] *preposition* ◇ departative preposition; “leave (with intention of returning).”

I

i'a ['i.ja] *preposition* ◇ oblique preposition; “east of”

i'i ['ʔi.ji] *interjection* ◇ no. Designed to be maximally phonetically distinct from *afa*, “yes.”

inakara [ʔi.'ŋa.ka.ɾa] *verb* ◇ to bore. Borrowed from English surname “Inkelas.”

J

-ja [ɯa] *deriv. morpheme* ◇ serves as a person marker (example: “learn” to “learner”). Changes word class from verb to noun.

ji [ɯi] *noun* ◇ year. Borrowed loosely from English “year.”

jivi ['ɯi.βi] *verb* ◇ give. Borrowed loosely from English “give.”

K

-ka [ka] *deriv. morpheme* ◇ emotion marker for “happiness.” Changes word class from noun to adjective.

kanga ['ka.ŋa] *infl. morpheme* ◇ perfective marker. Combines with future and past tense markers to form past perfect and future perfect.

kari ['ka.ɾi] *verb* ◇ to sleep. Truncated form of Japanese name 紫 “Yukari.”

karipa [ka.'ɾi.pa] *verb, noun* ◇ to nap, a nap. Exocentric compound of *kari* “to sleep” and *pa*, the short emotion durative.

kii [kiː] *noun, determiner* ◇ time. As a determiner, functions similarly to English “when.”

kogoo ['kɔ.gɔː] *preposition* ◇ elative preposition; “from, out of”

koo [kɔː] *preposition* ◇ allative preposition; “to”

koogo ['kɔː.gɔ] *preposition* ◇ redepartitive preposition, “come with intention of leaving”

koogoo ['kɔː.gɔː] *preposition* ◇ preposition that means “to and from.” An echo construction based on prepositions *koo* “to” and *goo* “from.”

kopanga [kɔ.'pa.ŋa] *noun* ◇ friend, borrowed from French *copain*

ku'a [kwa] *noun* ◇ time

kura ['ku.ɾa] *noun* ◇ brain

kura ['ku.ɾa] *verb* ◇ to think

kura'ito [ku.'ɾa.ji.tɔ] *noun* ◇ writing

kuraja [ku.'ɾa.ʊa] *noun* ◇ person. Excocentric compound of “think” and person marker—literally “thinker.”

kurango [ku.'ɾa.ŋɔ] *noun* ◇ language

kutu ['ku.tu] *quantifier* ◇ four. Borrowed loosely from French *quatre*, “four.”

M

-mi [mi] *determiner* ◇ posessive pronoun marker. Borrowed from English “my.” Assigns genitive case.

miro ['mi.ɾɔ] *noun* ◇ cat. Borrowed from English name “Milo.”

-miiti'a ['miː.tja] *deriv. morpheme* ◇ sensation suffix for sense (as in, a sixth, holistic sense). Last vowel can be lengthened to mean “sensation.” Commonly affixed to the evidential clitic *kixada*.

mo [mɔ] *noun* ◇ month. Borrowed loosely from English “month.”

-mo [mɔ] *infl. morpheme* ◇ past tense marker

moti ['mɔ.ti] *verb* ◇ to die. Borrowed loosely from

French *mourir* “die.”

-mu [mu] *infl. morpheme* ◇ emotion marker for a reflexive target

-muzu ['mu.zu] *deriv. morpheme, pronoun* ◇ reflexive pronoun. Lowers valency of verb.

N

na [na] *determiner* ◇ first person marker

na’isaguu [noun] *na.'ji.sa.gu:* ◇ dog food (ketchup)

nana ['na.na] *determiner* ◇ first person pronoun. Reduplcation of *na*, the first person marker.

nava ['na.βa] *quantifier* ◇ nine. Borrowed loosely from French *neuf*, “nine.”

ni [ni] *determiner* ◇ second person marker

nini ['ni.ni] *determiner* ◇ second person pronoun. Reduplication of *ni*, the second person marker.

no’a ['nɔ.ja] *preposition* ◇ oblique preposition; “north of”

-no’i ['nɔ.ji] *deriv. morpheme* ◇ emotion marker for a neutered emotion

noriga [nØ.'ɾi.ga] *noun* ◇ Norway. Borrowing of Norwegian *Norge*.

nu [nu] *determiner* ◇ third person marker

-numungu [nu.'mu.ŋu] *deriv. morpheme* ◇ sensation suffix for smell. Last vowel can be lengthened to mean “smell.” Commonly affixed to the evidential clitic *kixada*. Etymologically derived from association of nasal consonants and smell.

nunu ['nu.nu] *determiner* ◇ third person pronoun. Reduplication of *nu*, the third person marker.

NG

nga [ŋa] *deriv. morpheme* ◇ negation morpheme

-nga’uva [ŋa.'ju.βa] *deriv. morpheme* ◇ changes word class from verb to noun

-ngo [ŋɔ] *deriv. morpheme* ◇ sensation suffix for sound, language. Last vowel can be lengthened to mean “sound.” Commonly affixed to the evidential clitic *kixada*.

O

o’ati [ʔɔ.'wa.ti] *noun* ◇ dog. Borrowed loosely from English name “Archie.”

ora ['ʔɔ.ɾa] *verb* ◇ to punch. Borrowing of Japanese onomatopoeia オラ.

P

-pa [pa] *infl. morpheme* ◇ emotion marker for short duration

pada ['pa.da] *noun* ◇ length. Exocentric compound of *pa* and *da*, the emotion duratives.

papi’a [pa.'pja] *noun* ◇ paper. Borrowing of English “paper.”

-po [pɔ] *deriv. morpheme* ◇ emotion marker for a “primal” emotion

R

ra’isaa [ɾa.'ji.saː] *adjective* ◇ superfluous

ri [ɾi] *particle* ◇ interrogative statement marker

-riiti ['ɾiː.ti] *deriv. morpheme* ◇ sensation suffix for sight. Last vowel can be lengthened to mean “sight.” Commonly affixed to the evidential clitic *kixada*. Borrowed from English “light.”

ro [ɾɔ] *particle* ◇ imperative statement marker

ro- [ɾɔ] *quantifier* ◇ numeracy marker. Serves as the beginnign morpheme for a cardinal number.

roodo ['ɾɔː.dɔ] *noun* ◇ road. Borrowed from English “road.”

-ru [ɾu] *infl. morpheme* ◇ emotion marker for a reciprocal target

-ruzu ['ɾu.zu] *deriv. morpheme* ◇ reciprocal morpheme. Lowers verb valency.

RH

rhamuzu [ɣa.'mu.zu] *noun* ◇ introspective knowledge. Lexicalization of *ɣa* morpheme and the reflexive *-muzu*.

rhana ['ɣa.na] *verb* ◇ to know. Used as a general expression.

rhangakaja [ɣa.'ŋa.ka.ɯa] *noun* ◇ a type of knowledge used specifically in instances where the knowledge is irrelevant to the discourse. Loose borrowing of Japanese name 羽川 "Hanekawa".

rhanarhaa [ɣa.'na.ɣaː] *noun* ◇ a type of worldly, difficult-to-obtain knowledge; a high compliment. Etymologically derived from reanalyzed reduplication of the *ɣa* cran-morph.

rhapapi'a [ɣa.'pa.pja] *noun* ◇ fact-based knowledge. Lexicalization of *ɣa* morpheme and *papi'a* "paper."

rhasotorii [ɣa.'sɔ.tɔ.ɾiː] *noun* ◇ social knowledge. Inspired by English "street smarts."

-rhu [-ɣu] *determiner* ◇ dative case marker. Used on indirect objects in ditransitive sentences.

S

sa'a ['sa.ja] *preposition* ◇ oblique preposition; "south of"

sanga ['sa.ŋa] *quantifier* ◇ five. Loosely borrowed from French *cinq*, "five."

saru ['sa.ɾu] *verb* ◇ to be able to do something. A modal similar to English "can."

sata ['sa.ta] *quantifier* ◇ seven. Loosely borrowed from French *sept*, "seven."

si [si] *verb* ◇ copula. Similar in meaning to English "to be."

soodo ['sɔɔ.dɔ] *noun* ◇ sword. Borrowed from English "sword."

-so [sɔ] *deriv. morpheme* ◇ changes word class from noun to adjective

sotorii [sɔ.'tɔ.ɾiː] *noun* ◇ street. Borrowing of English "street."

-su [su] *deriv. morpheme* ◇ changes word class from verb to adjective

susu ['su.su] *quantifier* ◇ six. Loosely borrowed from French *six*, "six."

sutaku [su.'ta.ku] *verb* ◇ to posess multiple earlobes. Loosely borrowed from English surname "Stockdale."

T

-ta [ta] *deriv. morpheme* ◇ ordinality marker

tara ['ta.ɾa] *quantifier* ◇ three. Loosely borrowed from French *trois*, "three."

-ti [ti] *deriv. morpheme* ◇ emotion marker for "affection." Changes word class from noun to adjective.

-to [tɔ] *deriv. morpheme* ◇ emotion marker for "excitement." Changes word class from noun to adjective.

-tuusi ['tuː.si] *deriv. morpheme* ◇ sensation suffix for touch. Last vowel can be lengthened to mean "touch." Commonly affixed to the evidential clitic *kixada*. Loosely borrowed from English "touch." Can be negated to mean "pain" (*ngatuusii*).

U

u [ʔu] *noun* ◇ week. Borrowed loosely from English "week."

uba'a [ʔu.'bja] *preposotion* ◇ oblique preposition; "over, above"

uda'a [ʔu.'dja] *preposition* ◇ oblique preposition; "under, below"

usu ['ʔu.su] *adverb* ◇ also

uti ['ʔu.ti] *deriv. morpheme* ◇ applicative morpheme. Increases verb valency. If attached to a noun, changes class to a verb.

u'u ['ʔu.wu] *quantifier* ◇ eight. Borrowed loosely from French *huit*, "eight."

V

-va [βa] *deriv. morpheme* ◇ causative morpheme. Increases verb valency.

-vafawa [βa.'ɸa.ʋa] *deriv. morpheme* ◇ sensation suffix for taste. Last vowel can be lengthened to mean "taste." Commonly affixed to the evidential clitic *kixada*. Etymotically derived from the associaton of labial consonants and taste.

voru ['βɔ.ɾu] *verb* ◇ please (as in "to please someone." Borrowed from the English name "Vore.")

W

wa [ʋa] *determiner* ◇ that, this (depending on attached morphology)

wa'a ['ʋa.ja] *preposition* ◇ oblique preposition; "west of"

wooka ['ʋɔː.ka] *deriv. morpheme, determiner* ◇ reason clitic. Marks a subordinate clause that gives a reason for another clause. As a determiner, functions similarly to English "why."

-wu [ʊu] *deriv. morpheme* ◇ emotion marker for "confidence." Changes word class from noun to adjective.

X

-xa [xa] *deriv. morpheme* ◇ emotion marker for "pride." Changes word class from noun to adjective.

xara ['xa.ɾa] *quantifier* ◇ one

xoranu [xɔ.'ɾa.nu] *verb* ◇ to sweat. Borrowed loosely from English surname "Holland."

-xu [xu] *infl. morpheme* ◇ marker for an animate target. Also serves as the emotion marker for an animate target.

Z

-za [za] *infl. morpheme* ◇ marks a target as distal

-zo [zɔ] *deriv. morpheme* ◇ changes word class from noun to adverb

-zu [zu] *deriv. morpheme* ◇ changes word class from verb to adverb

zuru ['zu.ɾu] *quantifier* ◇ zero. Borrowed loosely from French *zero*, "zero."

Appendix B

Kuɾaŋɔ Phrasebook

Appendix C

Typesetting Kuɾaŋɔ

Kuɾaŋɔ is available for use as a set of .ttf fonts, compatable with most word processors. Because Kuɾaŋɔ's orthography is a syllabary (see chapter 7), the current way it is typed is using a set of Japanese fonts (not simply one, as Kuɾaŋɔ has more glyphs than standard Japanese.)

The fonts were created using `http://www.paintfont.com/` and Adobe Photoshop CS6. I plan to create a more better-designed font using a vector program like Adobe Illustrator in the future if I have more time/skill.

C.1 Mapping onto Japanese font

Because Kuɾaŋɔ and Japanese are very different languages, the mapping of Kuɾaŋɔ onto a Japanese font is not 1:1. For example, all Japanese glyphs with a nucleus of /e/ are ignored, as Kuɾaŋɔ has no /e/ phoneme. However, additional phonemes like /ŋ, ɣ, β/, etc, needed to be added into a Japanese font which does not natively include them.

The way this was handled was through the use of two font types: "Normal" and "Irregular."

The "Normal" font includes any onset that is natively found in Japanese, with the exception of /ɸ/, which was substituted for Japanese /h/[1] (but still typed using ¡h¿). The normal font includes the onsets /ʔ, k, g, s, z, t, d, n, ɸ, p, b, m, ɾ/ and the nuclei /a, i, u, ɔ/ (/ɔ/ is typed using ¡o¿).

The "Irregular" font includes any onset *not* natively found in Japanese. This includes the onsets /x, ɣ, ŋ, ʋ, β, ɯɻ/. Below is a table of how these fonts were mapped onto Japanese:

Table C.1: Onset mapping from Japanese to Kuɾaŋɔ. Any form not included in the table is not included in the fonts.

Japanese Orthography	∅	か/が	さ/ざ	た/だ	な	は/ば/ば	ま	ら
Japanese Onset	∅	k/g	s/z	t/d	n	h/p/b	m	r
Kuɾaŋɔ "Normal"	ʔ	k/g	s/z	t/d	n	ɸ/p/b	m	ɾ
Kuɾaŋɔ "Irregular"	ʔ	x/ɣ	s/z	t/d	ŋ	ɸ/ʋ/β	ʋ	ɾ

Because of this system, typing Kuɾaŋɔ should feel as intuitive as typing Japanese on a Roman keyboard, with the exception of a little unavoidable rote memorization for the "Irregular" onsets.

C.1.1 Additional contrasts

Kuɾaŋɔ's writing system also has methods for indicating borrowed words as well as indicating vowel length (see C). Borrowed words are typed using Japanese *katakana* instead of *hiragana*. Long vowels are not as elegant: they require additional fonts.

[1] An allophone of Japanese /h/ is /ɸ/.

Ultimately, this results in four Japanese fonts to one complete Kurаŋɔ font: short vowels/normal onsets; short vowels/irregular onsets; long vowels/normal onsets; and long vowels/irregular onsets. I know, its not pretty. Hopefully I can find a better solution in the future, but this one will have to do for now.

C.2 Installation/Usage

Since the Kurаŋɔ fonts are simple .ttf fonts, they are installed rather painlessly. Please see documentation for installing .ttf fonts on your operating system[2].

The fonts are available as a .zip on my Dropbox (the same one this very .pdf is hosted on). Here's a public URL: `https://www.dropbox.com/s/eb0dkole8n0jlbz/dl_fonts.zip?dl=0`

C.2.1 Usage in LaTeX

Currently, Kurаŋɔ fonts are incompatible with LaTeX. Since I love LaTeX more than life itself, I'd like to get this working in the future, but it's currently on hold, as the only feasible solution I have would make it difficult to re-implement once I redo the fonts.

[2]On Windows, you can right-click a .ttf and there is an "Install font" option. For OS X, "Font Book" (a preinstalled program) will do the job. If you're on GNU/Linux or some other UNIX OS, you know how to use your computer and reading this footnote is a waste of time.

Appendix D

Questions

D.1 Syntax-related questions for Professor Jenks

D.1.1 Trees

Let's draw trees for the following examples.

1. A simple intransitive sentence:

   (D.1) Nakari. [na.'ka.ɾi]

   na- *kari*
   1- sleep
   'I sleep.'

2. A simple intransitive sentence:

   (D.2) Karina. [ka.'ɾi.na]

   kari *-na*
   sleep -1
   'I sleep. (No entailment about my volition)'

3. A simple passivized intransitive:

   (D.3) Karirhu. [ka.'ɾi.ɣu]

   kaɾi *-ɣu*
   sleep -PASS
   'Sleeping happened.'

4. A simple transitive sentence:

   (D.4) Nivoruna. [ni.'βɔ.ɾu.na]

   ni- *βɔɾu* *-na*
   2- please -1
   'You please me.'

5. A simple passivized transitive sentence:

   (D.5) Vorurhuna. [βɔ.'ɾu.ɣu.na]

   βɔɾu *-ɣu* *-na*
   please -PASS -1
   'I am pleased.'

6. A “simple” ditransitive sentence:

   (D.6) Nufu’arina faavukoo. [nu.'ɸu.wa.ɾi.na ɸaː.'βu.kɔː]

nu-	*ɸu-*	*ʔari*	*-na*	*faːβu*	*-kɔː*
3-	INAN-	V:MOTION	-1	home	-DIR:PROX

   ‘It follows me home.’

7. Structure of adjectives:

   (D.7) Gaka si. ['ga.ka si]

ga	*-ka*	*si*
emotional	-EMO:CONTENT	COP

   ‘I am content.’

8. Structure of PPs:

   (D.8) Riitii o’atiwakoo ro! ['ɾiː.tiː ʔɔ.'wa.ti.ʋa.kɔː ɾɔ]

ɾiːtiː	*ʔɔʔati*	*-ʋa*	*-kɔː*	*ɾɔ*
look	dog	-that	-DIR:PROX	INTERR

   ‘Look at that dog!’

9. Structure of adverbs:

   (D.9) Fivu simo adarazu. ['ɸi.βu 'si.mɔ ʔa.'da.ɾa.zu]

ɸiβu	*si*	*-mɔ*	*ʔadaɾa*	*-zu*
house	COP	-PST	order	-DERIV:V.TO.ADV

   ‘Her house was orderly.’

10. Subordinate clauses:

    (D.10) Gatitixu si gangawufupataduzu si. [ga.'ti.ti.xu si ga.'ŋa.ʋu.ɸu.pa.ta.du.zu si]

ga	*-titi*	*-xu*	*si*	*ga*	*-ŋa*	*-ʋu*
EMO	-EMO:STRONG.AFFECTION	-TARG:ANIM	COP	EMO	-NEG	-EMO:CONFIDENCE

-ɸu	*-pa*	*-taduzu*	*si*
-TARG:NULL	-DUR:SHORT	-SUB	COP

    ‘I love someone, but I am also scared.’

    (D.11) Nakuramo miro oramotaduzu [na.'ku.ɾa.mɔ 'mi.ɾɔ ʔɔ.'ɾa.mɔ.ta.du.zu]

na-	*kuɾa*	*-mɔ*	*miɾɔ*	*ʔɔɾa*	*-mɔ*	*-taduzu*
1-	think	-PST	cat	punch	-PST	-SUB

    ‘I thought about the cat that I punched.’

11. Interaction of modals and tense:

    (D.12) Nakarikangamo. [na.'ka.ɾi.ka.ŋa.mɔ]

na-	*kari*	*-kaŋa*	*-mɔ*
1-	sleep	-PERF	-PST

    ‘I had slept.’

12. Polar question:

    (D.13) Na’arigaa faavugoo ri? [na.'ja.ɾi.gaː ɸaː.'βu.gɔː ɾi]

na- ʔaɾi -gaː ɸaːβu -gɔː ɾi
1- go -FUT house -DIR:DIST INTERR
'Are you going home?'

13. wh- questions:

(D.14) Mirowa numunguumo o'ati ri? [mi.'ɾɔ.ʊa nu.'mu.ŋuː.mɔ ʔɔ.'wa.ti ɾi]

miɾɔ -ʊa numuŋuː -mɔ ʔɔʔati ɾi
cat -that smell -PST dog INTERR
'Which cat smelled the dog?'

(D.15) Miro numunguumo o'atiwa ri? ['mi.ɾɔnu.'mu.ŋuː.mɔ ʔɔ.'wa.ti.ʊa ɾi]

miɾɔ numuŋuː -mɔ ʔɔʔati -ʊa ɾi
cat smell -PST dog -that INTERR
'The cat smelled which dog?'

14. Negation:

(D.16) Nakaringa. [na.'ka.ɾi.ŋa]

na- kari -ŋa
1- sleep -NEG
'I do not sleep.'

15. Causatives:

(D.17) Namotivagaanu. [na.'mɔ.ti.βa.gaː.nu]

na- mɔti -βa -gaa -nu
1- die -CAUS -FUT -3
'I will kill it.'

16. More modals:

(D.18) Nasaru karipa. [na.'sa.ɾu ka.'ɾi.pa]

na- saru karipa
1- be.able.to nap
'I can nap.'

17. A reflexive:

(D.19) Natigo'imuzu. [na.'ti.gji.mu.zu]

na- ti- goʔi -muzu
1- PL- desire -REFL
'We want each other.'

18. Another wh-question:

(D.20) Anganimi siri? [ʔa.'ŋa.ni.mi 'si.ɾi]

ʔaŋa -ni -mi si -ɾi
name -2 -POSS COP -INTERR
'What is your name?'

D.1.2 Other questions

1. a 'minimal pair' of a lang with do support and a lang without do support
2. do all languages syntactically differentiate polar/wh?