

Khoekhoegowab, DPs, and coordination¹

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I INTRODUCTION

I want to spend today presenting a set of puzzles related to DPs in Khoekhoe.

- I don't really have full solutions to any of them.
- I hope you'll agree that these puzzles are all interrelated and interesting!
- Later in the seminar you'll be looking at Person-Gender-Number markers in Central Khoisan in a general way; I think my overall goal today is to show you how complex and varied the use of these markers are.

As a motivating example, I want to show you an example of DP coordination in Khoekhoe:

(1) khoe -b tsi |gôa -b tsi -kha
person -3MS AND child -3MS AND -3MD
“the man and the boy”

- Both DPs bear their own PGN marker — a suffix on the noun that encodes φ -features.
- Both DPs are followed by the coordinator *tsi*; cf. Japanese *-mo*.
- The really surprising bit: There's a third PGN marker!
- It seems to track the combined φ -features of the two conjuncts.

This third PGN marker is what I'm interested in understanding. In particular, I want to understand:

1. Why is it obligatory?
2. How does it get its features?
3. What does it mean?

My hope is that the answers to these three things will wind up being related, but as of yet I don't know how.

- You might object to question 3: surely this is just some kind of formal feature agreement that doesn't mean anything?

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- You'd be wrong: In at least some cases, this extra PGN seems to contribute to the meaning of the sentence.
- One place to see this is with a different use of the *tsi* coordinator: It can sometimes be a sort of additive particle.

- (2) a. Dandago -b tsi -n ge go †na.
 D. -3MS AND -3CP DECL PAST dance
 “Dandago also danced (in addition to some other people).”
- b. Dandago -b tsi -kha ge go †na.
 D. -3MS AND -3MD DECL PAST dance
 “Dandago also danced (in addition to some other masculine entity).”

- Like the Japanese *-mo* particle, the post-nominal *tsi* allows an additive use, where it means “this DP in addition to some others”.
- In this use, it still gets an extra PGN marker.
- This extra PGN marker is capable of restricting the additive meaning!

In the sections that follow, I'll discuss the syntax and semantics of PGN marking in Khoekhoe from a number of angles, all aimed at trying to answer the three questions above.

2 BACKGROUND: KHOEKHOE CLAUSE STRUCTURE

But first, a brief orientation to the examples you'll be seeing.

Khoekhoe clauses are typically verb final, with an initial position (prefield) normally occupied by the subject:

- (3) Dandagob ge ‖ari tarasa †khanisa go mā.
 D. DECL yesterday woman book PAST give
 “Dandago gave the book to the woman yesterday.”

The right edge of the prefield is marked by a cluster of 2nd position clitics. These clitics are:

- *ge* — matrix declaratives
- *kom* — matrix declaratives with “emphasis” (?)
- *kha* — matrix surprise questions

Anything can be placed in the prefield, up to and including the verb:

- (4) a. †khanisa =b ge Dandagoba ‖ari tarasa go mā?
 b. mā -b ge go Dandagoba ‖ari tarasa †khanisa?

2.1 Tense marking

Khoekhoe packages tense, aspect, and polarity information into enclitic particles. These particles come in two classes:

1. *post-verbal* particles are always final in the verbal complex.
2. *pre-verbal* particles typically occur immediately before the verb, but a) may optionally occur earlier in the prefield, and b) in some syntactic contexts must occur after the verb.

An example of a post-verbal particle is the negative non-future *tama*:

- (5) Dandagob ge †na tama.
D. DECL dance NEG.NF
“Dandago didn’t dance.”

An example of a pre-verbal particle is the recent-past *go*:

- (6) a. Dandagob ge (go) mâi-e (go) †û.
D. DECL (PAST) porridge (PAST) eat
“Dandago ate porridge.”
- b. †û go =b ge mâi-e
eat PAST 3SM DECL porridge
“He ate porridge.”
- c. †û go mâi-e Dandagob ge
eat PAST porridge D. DECL
“As for eating porridge, Dandago did it.”
- d. Dandagob ge mâi-e †û go!
D. DECL porridge eat PAST
“Dandago DID eat porridge!”

3 PGN SUFFIXES

All (argument) nouns are obligatorily followed by a PGN suffix.

- (7) a. khoe -s ge go hâ.
person 3sf IND PST arrive
“The woman came.”

b. *khoe ge go ha

- Animate nouns take the gender of their referent, e.g. *Namas* ‘female Nama’, *Namakhom* ‘two male Namas’.
- Inanimate nouns are assigned an arbitrary gender, e.g. *†khanis* ‘book’.

Table 1: Khoekhoe PGN markers

	1			2			3		
	sg	dl	pl	sg	dl	pl	sg	dl	pl
mas.	ta	khom	ge	ts	kho	go	b/i	kha	gu
fem.	ta	m	se	s	ro	so	s	ra	di
com.		m	da		ro	du	-i	re	n

Some things of note:

- The 3MS marker shows contextual allomorphy — it is *-b* after a vowel and *-i* after a consonant. (So *xamm -i*, ‘male lion’, but *khoe -b* ‘male person’.)
- The ‘common’ gender (sometimes called ‘neuter’) is used primarily for groups of mixed gender... but see below.
- Many of the markers undergo fusion with the *-a* ‘object marker’², e.g. *-i + -a = -e*.
- There are no common-gender 1s and 2s markers.
- There are fully-productive 1st & 2nd person markers as well.

- (8) a. Nama -ta ge go ha
 Nama = 1S IND PST arrive
 “I, Nama, have arrived.”
- b. ||gau!na-ao -so ge go ha
 teacher -2FP IND PST arrive
 “You two female teachers have arrived.”

3.1 Subject clitics

In addition to occurring on nouns, the PGN markers occur as subject clitics: Whenever there is no overt subject in the left periphery of the sentence, a PGN marker appears there.

- (9) a. Nesi =b ge ra †na.
 now -3MS DECL IMPV dance
 “Now he is dancing.”
- b. †khani -sa =di ge tara -de go khomai.
 book -3FS.O =3FP.O DECL woman -3FP PAST read
 “As for the book, the women were reading it.”

This is, I believe, subject agreement.

²The object marker is, maybe, a kind of case marker. I’ll talk about it more if I have time, but otherwise see Kusmer & Devlin (2018) for more!

3.2 Definiteness

In some ways, N+PGN complexes behave like definites in English. For example, they seem to force uniqueness.

- (10) #|goa -s ge ra âe.
 child -3FS IND PROG laugh
Intended: “A girl is laughing.”
Context: There are multiple girls in the room and one is laughing.
Speaker comment: It’s ok if you’re pointing at the girl.

They can also be anaphoric:

- (11) #Ari -b ge ||om hâ tsi -b ge ari -ba go !khoe
 dog 3sm IND sleep PERF and 3sm dog 3sm.O PST run
Intended: “A dog was sleeping and a dog was running.”
Speaker comment: “How can the dog do both?”
- (12) |gôab tsi |gôas tsi -n ge go |khi. |gôa -b ge ra âe.
 boy AND girl AND -3CS IND PST come child -3MS IND PROG laugh
 “A boy and girl came. The boy was laughing.”

So how does one express indefiniteness? With the common gender! Nouns which are ordinarily masculine or feminine can be used in the common to indicate non-specificity.

- (13) Khoe -i ge ra †nâ.
 person -3CS DECL IMPV dance
 “Someone is dancing.”
- (14) Dandagob ge †khani-e go khomi.
 D. DECL book -3CS PAST read
 “Dandago read some book.”
- (15) a. Dandago -b ge xu -sa go ||ama.
 D. -3MS DECL thing -3FS.O PST buy
 “Dandago bought the thing.”
- b. Dandago -b ge xu -e go ||ama.
 D. -3MS DECL thing -3CS.O PST buy
 “Dandago bought something.”
- (16) a. Dandago -b ge †gui †khani -te khomi tama
 D. -3MS DECL many book -3FP.O read PST.NEG
 “Dandago didn’t read the many books (e.g. that we were assigned).”
- b. Dandago -b ge †gui †khani -na khomi tama
 D. -3MS DECL many book -3CP.O read PST.NEG
 “Dandago didn’t read many books (he’s not well-read).”

It might be tempting to say that the ‘common gender’ marker is actually just an indefinite article. But they can still control agreement:

- (17) a. ||ari =s ge tara -sa go -ro khomai
 yesterday -3FS DECL woman -3FS.O PAST IMPV read
 “Yesterday the woman was reading.”
 b. ||ari =i ge tara -e go -ro khomai
 yesterday -3CS DECL woman -3CS.O PAST IMPV read
 “Yesterday some woman was reading.”
 c. *||ari =s ge tara-e goro khomai

- The common plural indicates a mixed-gender group for animate nouns, but indefiniteness for inanimates.
- Few nouns are lexically common; to the best of my knowledge, the only lexically common nouns are mass nouns (e.g. ||gan-e, ‘meat’; observation due to Wirsching 2017.)

In sum, I think we can say for certain that PGN markers are meaningful:

- At least the non-3rd ones contribute some kind of pronominal meaning to their DPs.
- The ‘gender’ features on the 3rd person ones contribute something related to definiteness.

4 SOME OTHER CONSTRUCTIONS INVOLVING PGNS

4.1 Noun-less PGNS

Given the right context, it’s possible to elide the noun, leaving only the pre-nominal material and the PGN.

- (18) a. Dandagob ge om -sa go mû. Kaira -sa.
 D. DECL house -3FS.O PST see old -3FS.O
 “Dandago saw the house. (It was) an old one.”
 b. †hoa -s ge ne hâ.
 blue -3FS DECL here COP
 “The blue (thing) is here.”

Takeaway: PGNS seem to create a sort of *e*-type meaning that can be modified.

4.2 PGN-less Nouns

When used as predicates, nouns are be used without their PGN.

- (19) Dandago -b ge a ||gau!na-ao
 D. -3MS DECL COP teacher
 “Dandago is a/the teacher.”

(19) is good either in the context where teaching is Dandago’s profession or where he is specifically the teacher of e.g. this class. I think that this means that bare nouns can be either definite or indefinite; this suggests that maybe neuter PGN-marking isn’t actually responsible for indefiniteness, but is rather reflective of it.

These bare nouns seem to allow nearly the full DP structure:

- (20) a. Dandago -b ge a ti kaxu ||gau!na-ao
 D. 3sm IND COP my tall teacher
 “Dandagob is my tall teacher.”
- b. Dandago -b ge a ne ao
 D. 3sm IND COP this man
 “Dandagob is this man.”

A similar construction is used for existential constructions:

- (21) Khoe go î -s ge
 person PST COP 3sf IND
 “It was the woman.”

Takeaway: The meaning of nouns *sans* PGN is predicative, perhaps?

4.3 *Post-nominal modifiers*

Most modifiers in Khoekhoe are pre-nominal. However, in some cases you can place them post-nominally; when you do, something interesting happens:

- (22) a. |apa †khani -sa
 red book -3FS.O
 “the red book”
- b. †khani -s |apa -sa
 book -3FS red -3FS.O
 “the book, the red one”

- The post-nominal modifier gets its own PGN.
- Recall that *|apasa* is perfectly grammatical on its own, with the meaning ‘the red one’ — so perhaps this is basically just an appositive DP?
- But: There is only one case marker for the whole constituent!

There is at least one obligatorily-post-nominal modifier, sorta: ‘every’ is expressed as ‘which N all’, with a doubled PGN.

- (23) ma †khani -s hôa -sa
 which book -3FS all -3FS.O
 ‘every book’

PGN-doubling also occurs with post-nominal relative clauses:

- (24) a. mû -ta go ao -ba
 see -1S PAST man -3MS.O
 “the man that I saw”
 b. ao -b mû -ta go -ba
 man -3MS -1S PAST -3SM.O
 “the man that I saw”

Relative clauses can be right-extraposed; in this case, the always bear their own PGN marker:

- (25) ao -b ge ra †na mû -ta go -ba
 man -3MS DECL IMPV dance see -1S PAST 3MS.O
 “The man is dancing, who I saw.”

This can sometimes lead to some slightly frightening constructions:

- (26) khoeb ge ra †na tsi -s ge khoesa ra ‖nae ‖ari -ta go
 man DECL IMPV dance AND -3FS DECL woman IMPV sing yesterday -1S PAST
 mû -re
 see -3CD
 “The man is dancing and the woman is singing, who I saw (them both) yesterday.”

Kyle Johnson (p.c.) suggests that this is related to English constructions like:

- (27) Every man danced and every woman sang who came in together.

But the analysis of those is far from clear. jk

4.4 So what?

Ok, so what does this laundry-list of PGN-bearing constructions actually tell us?

- It looks like gendered PGNs take properties (like nouns, adjectives) and give back entities.
- This accounts for why e.g. they don’t occur in predicative constructions; why they’re allowed to attach to either nouns or adjectives; and why they show up on extraposed relatives.
- So they’re maybe type $\langle\langle et \rangle e\rangle$, or something like it, i.e. a choice function.
- This maybe fits with Chierchia (2005), which suggests that all articles (Both definite and indefinite) have the meaning of choice functions.
- This makes quantification DPs (e.g. *ma khoes hoas* ‘every woman’) odd — this should have a denotation of type $\langle\langle e, t \rangle t\rangle$! But maybe the quantifier is scoping outside the PGN, contrary to apparent syntax?

I don’t have a detailed analysis yet, but I think the evidence pushes us towards a choice-functional denotation for PGNs. This will become relevant when we return to looking at coordination.

5 PRONOUNS

With all of this talk of φ -features, you're probably wondering what pronouns look like in Khoe-khoe.

Haacke (2013) identifies four 'articles' which are exclusively used to form the 'strong forms' of pronouns:³

1. *ti* – 1st person singular
2. *si* – 1st person plural
3. *sa* – 2nd person
4. *||i* – 3rd animate

These 'articles' combine productively with the PGN suffixes to yield the strong forms of pronouns.

- (28)
- a. *tita* — 1st person singular
 - b. *sida* — 1st person plural exclusive (= 1p + 1pn)
 - c. *sada* — 1st person plural inclusive (= 2 + 1pn)
 - d. *||ikha* — 3rd person masculine dual (discourse-old)

These strong forms are used in at least the following three contexts:

1. As subjects of clauses under some pragmatic condition (probably topicality?)
 2. As possessors whenever a possessive pronoun isn't available.
 3. In an appositive-like construction to clarify inclusive / exclusive readings; see (29).
- (29)
- a. *??Namada* — 'we Namas'
 - b. *Sida Namada* — 'we Namas (exclusive)'
 - c. *Sada Namada* — 'we Namas (inclusive)'

Some speakers seem to accept strong pronouns that combine the third person 'article' with a first person suffix, yielding a logophoric meaning:

- (30) Dandago -b ge ra mî ||i -khom nî !gû -sa
 D. -3MS DECL IMPV say 3S -1MD FUT go COMP
 "Dandago is saying that he (and another man) will go."

Some speakers don't accept this at all; others say that the 'logophor' is matrix-speaker oriented (i.e. that (30) means "Dandago is saying that he and I (a man) will go.")

Perhaps surprisingly, Haacke's "articles" can be used 'predicatively' in existential-like constructions.

³Haacke points out that, even though two of the articles are segmentally identical to the possessive pronouns, they are tonally distinct. However, the tones look right for *flip-flop*, a tonological process affecting compounded roots; i.e. the articles behave tonally as though they were the possessive pronouns compounded with a PGN suffix.

- (31) a. ||î go î -b ge
 3s PST COP 3sm IND
 “It was him.”
- b. Ti go î -ta ge
 1s PST COP 1s IND
 “It was me.”

Takeaway: The productive nature of pronoun formation is another case where PGN markers seem to carry their own meaning. I’m not quite sure how to understand the meaning of the “articles”, however.

6 COORDINATION

Recall: Coordination of DPs in Khoekhoegowab takes the form:

- (32) a. NP₁ -PGN tsi NP₂ -PGN tsi -PGN
 b. khoe -b tsi |gôa -b tsi -kha
 person -3MS AND child -3MS AND -3MD
 “the man and the boy”

This differs from coordination of other constituents, e.g. VPs:

- (33) Dandagob ge |hôana |namsa tsi arina a !khuisa
 D. DECL cats loves AND dogs COP hates
 “Dandago loves cats and hates dogs.”

This pattern (modulo the extra PGN) is not surprising: Many languages express DP coordination differently from other kinds, especially when the DP coordinator appears on all the DPs individually. The classic case is Japanese:

- (34) Taroo -ga Amerika -ni iki -i, Hanako -ga Furansu -ni it -ta
 T. -NOM America -DAT go AND H. -NOM France -DAT go -PST
 “Taro went to America and Hanako went to France.” Kuno (1978)
- (35) Taroo -mo Hanako -mo
 T. AND H. AND
 “(both) Taro and Hanako”

This is perhaps not surprising: Coordinating DPs is semantically very different from coordinating VPs:

- ‘loves cats and hates dogs’ is *intersective*: It denotes the set of entities that *both* love cats and hates dogs.
- ‘Bill and Mary’ is *non-intersective* — it doesn’t denote the set of things that are simultaneously Bill and Mary!
- Rather, DP coordination seems to need to do *sum-formation*: The set {Bill, Mary}.

The Japanese *-mo* particle has other uses, though:⁴ When used on a single noun, it also conveys an additive meaning:

- (36) Mary -mo wakaru
 Mary AND understand
 “Also Mary understands.” Mitrović & Sauerland (2016)

This usage is paralleled in Khoekhoe:

- (37) Dandagob tsi -n ge ra khomai
 D. AND -3CP DECL IMPV read
 “Also Dandago is reading.”

Another parallel: Under negation, both Japanese *-mo* and Khoekhoe *tsi* get an NPI reading. However, they seem to be slightly different meanings:

- (38) dono gakusei -mo wakarimas -en
 INDEF student AND understand -NEG
 “No student understands.”
- (39) Dandagob ge †khani -i tsi -na khomai tama
 D. DECL book -3CS AND -3CP.O read NEG.PST
 “D. didn’t even read a book.”

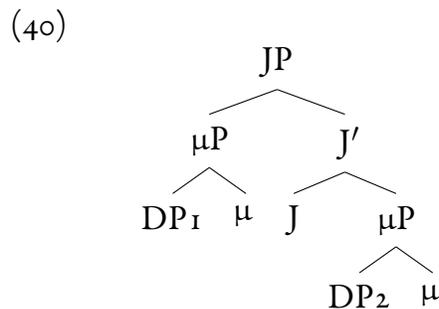
In the remainder of this class, we’ll consider two different approaches to DP coordination and think about their successes / failures with respect to Khoekhoe.

1. Mitrović & Sauerland (2016) aims specifically to capture the range of meanings the Japanese *mo* particle can have by positing that all coordination involves two separate operators.
2. Hirsch (2011) argues that all DP coordination is actually vP coordination.

Neither attempt really works for Khoekhoe, but I think both are interesting to consider.

6.1 *Mitrović & Sauerland*

I think one of the best attempts to capture the meaning of the Japanese *-mo* (and related particles) is Mitrović & Sauerland (2016), which argues that all DP coordination involves a split structure:



⁴Japanese is just the most commonly cited example, but lots of languages seem to have the same properties; see Iyer (2017) for examples from Tamil and an overview of this phenomenon.

- J is just the normal intersective coordination found in VPs, etc: It takes two $\langle\langle e, t \rangle t\rangle$ meanings and gives the intersection of them.
- μ is what the *-mo* particle spells out, and it amounts to a universal quantifier:
- $\llbracket \mu \rrbracket (R)(S) = R \subseteq S$
- In this definition, S is the predicate the *mo*-bearing DPs compose with.
- In order to make this meaning work, they first have to type-lift the DP into something of type $\langle e, t \rangle$ — so instead of the individual *Mary*, the singleton set $\{Mary\}$.

Their argument is, effectively, that most languages choose to spell out one or the other of J or μ , but not both.

- This analysis captures the one use of *mo* that Khoekhoegowab *tsi* doesn't share: As a universal quantifier.

(41) dono gakusei -mo wakaruru
 INDET student AND understand
 "Every student understands."

- This sentence winds up with a meaning like: 'The set of students is a subset of the set of understanders.'
- This works for simple coordination, too: 'The set containing John and Mary is a subset of the set of understanders.'

However: This analysis seems ill-suited to Khoekhoe for at least two reasons.

- Khoekhoe doesn't actually have the universal quantification meaning!

(42) |gôa -n tsi -n ge ra khomai
 child -3CP AND -3CP DECL IMPV read
 "Also the children are reading." (**Not:** "All the children are reading.")

- More relevantly to this presentation: This does nothing to explain why the extra PGN should appear.
- If normal PGNs are choice-functions from properties to individuals, then putting a PGN on the μ -phrase should reduce it to an individual — eliminating the quantification aspects of μ .
- Maybe that's desirable? But then where does the additive meaning come from?

6.2 Hirsch (2011)

Hirsch (2011) takes a very different tack towards the problem of DP coordination.

- In particular Hirsch argues that there is (mostly) no DP coordination.
- In this view, all DP coordination is, in fact, vP-coordination + ellipsis.

(43) John_I [&P [vP t_I saw every student] [and [vP t_I saw every professor]]]

One piece of evidence for this: some adverbs can independently modify the second conjunct:⁵

(44) Harvard invited Labov and, yesterday, Chomsky.

Hirsch's proposal primarily concerns quantificational DPs, so it is reasonable to ask what happens with QPs in Khoekhoe. The answers may surprise you!

- (45) a. Tita ge ma khoeb hoab tsi ma khoes hoasa go mû.
 I DECL which man all AND which woman all PAST see
 "I saw every man and every woman."
- b. Tita ge ma khoeb tsi khoes tsin hoana go mû.
 I DECL which man and woman and all PAST see
 "I saw every man and woman."

- In (45-a), the two conjuncts each have their own quantifier associated with them... and they get coordinated like VPs!
- In (45-b) the coordination takes place below the level of quantification, and works like other DP coordination we've seen.
- These findings are quite preliminary — it's entirely possible that there are subtle differences in meaning that I haven't detected yet.

These results seem, preliminarily, very good for Hirsch's analysis.

- Exactly in the case that the predicate cannot be understood as holding of sums of individuals (as in quantification over men and women), the *DP-tsi DP-tsi* construction is not available.
- The meaning of *DP-tsi DP-tsi* is such that it can be quantified over (as in (45-b)).

Hirsch does note that his proposal is not incompatible with there existing, in at least some languages, a mereological sum operator. This may be what is responsible for the meaning of (46):

(46) John and Mary met.

- Collective predicates like (46) cannot be explained via ellipsis; cf. **John met and Mary met*.

⁵Feel free to ask me about other evidence for Hirsch's proposal.

- Hirsch backs off his primary claim that there is no DP coordination in order to allow a separate sum-formation operator to get the meaning of (46) correct.
- Maybe Khoekhoe is just a language that actually spells this out separately!

7 A VERY TENTATIVE PROPOSAL

Let's think about what sort of meaning we should give to something like:

(47) Dandagob tsi Khoedages tsin
 D. AND K. AND
 “Dandago and Khoedage”

- We want the meaning of e.g. *Dandagob tsi* to be the same as the meaning of *khoe* — a bare property, $\langle e, t \rangle$.
- The meaning of *Dandagob tsi* should be something like: The set of mereological sums that have Dandago as a sub-part.

(48) $\llbracket \text{tsi} \rrbracket = \lambda x \lambda y. x \leq y$

- Like Mitrović & Sauerland (2016), we'll imagine that there is a silent set-intersection operator between the two conjuncts.
- This gives *Dandagob tsi Khoedages tsi* a meaning like, ‘the set of all sums that include both Dandago and Khoedage.’
- This (maybe) makes clear why we need another PGN marker: This isn't the right type to combine with a verb!
- A PGN, then, is a choice function from $\langle \langle e, t \rangle e \rangle$ that allows this whole thing to compose further.

We still want to pin down what PGNs actually *mean*. This is where I tell you some data I've been hiding this far: Underspecification is (sometimes) allowed.

(49) a. khoe -b tsi |gôa -b tsi -kha
 person -3MS AND child -3MS AND -3MD
 “the man and the boy”
 b. khoe -b tsi |gôa -b tsi -n
 person -3MS AND child -3MS AND -3CP
 “the man and the boy”

- In coordination, the common plural form seems to be always acceptable.
- Perhaps the 3rd common plural form is the bare choice function.
- All of the other forms involve added restrictions on the range of the choice function, e.g. only entities that are feminine, or only entities that are atomic.

One problem with this is what I've been calling the refrigerator problem:

- Under this analysis, $\llbracket Dandagob\ tsi\ Khoedage\ tsi \rrbracket$ is the set of mereological sums that include both Dandago and Khoedage.
- This includes an entity *Dandago + Khoedage + the fridge*
- I'm reasonably sure that this can't be the meaning.
- But I think it *can* be the meaning of *Dandagob tsin* — the additive use.
- What is responsible for eliminating this entity?

Another thing that I'm not clear about: How does this kind of meaning get us the definiteness implication of the masculine & feminine singular PGNS?

- Intuitively, this is a kind of scalar implicature: If you know the specific entity then you also know the gender, and so if you fail to specify the gender you must not know the specific entity.
- I'm at a loss for how to encode that formally.
- But perhaps it helps that masculine / feminine singular DPs are not, in fact, *always* definite:

(50) ma khoe -ba ra †na?
 which person -3MS.O IMPV dance
 “Which man is dancing?”

- Whatever is responsible for the definiteness is defeasible.

In sum: I think the distribution of PGNS is well predicted if we assume that they have a choice-functional meaning $\langle \langle e, t \rangle, e \rangle$. But I still don't fully know how to explain the details of their meaning.

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