

# Anaphora Questionnaire Response - Wolof

## Consultant Khady Tamba -Version 1.3

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### PART 1 General information

**1.1 Language:** In this section you are asked to identify your language or dialect (the subject language) and the information we ask of you will help make this identification more precise. We will fill in the Ethnologue code if you do not know it.

1. Name of the language: Wolof
2. Ethnologue code (if you know it): WOL
3. Dialect and/or area: Urban Wolof
4. What is the information you are providing based on? We assume all our participants are relying on their own judgments, but if you answer (b) in addition to (a), please explain with an attached note.
  - (a) My own judgements ( YES)
  - (b) Judgements by one or more consultants ( )

**1.2 Identify yourself:** In order to make full use of the information you provide, some information about your linguistic background is necessary. If you wish, your name and contact information will be excluded from the public version of this database. However, if you are a fellow linguist we encourage you to make this information available; this will make it possible to properly acknowledge your role in creating this database, and will also (if you wish) allow other linguists interested in this language to contact you.

Please provide the following information about yourself (the person completing the survey).

1. Name: \_\_\_\_\_Khady Tamba\_\_\_\_\_
- 2a. Your address: 1712 Anna Dr apt 5, Lawrence, KS 66044
- 2b. E-mail address, if you have one: khadija@ku.edu
3. Do you want the database to reveal your name and contact information?  
(You still must fill out a consent form, however you answer this question.)
  - (  ) I am willing to be identified
  - (  ) I wish to remain anonymous
4. Your level of training in linguistics (circle accordingly).

- Post Ph. D.
- Ph.D or M.A. student
- Undergraduate linguistics
  - some courses
  - linguistics major
  - Training in related discipline
  - philology
  - language pedagogy
  - other (please specify)
- related discipline (please specify)
- no linguistic training

5. If you are a linguist, please indicate the extent of your exposure to the following subfields. Also specify the broad school (e.g., GB or LFG syntax) if appropriate. Your background might be relevant to your choice of terminology in morphological and syntactic descriptions, etc.

Scale: little or none / some / intimately familiar.

- (a) Syntax: **intimately familiar**.
- (b) Typological linguistics: **intimately familiar**
- (c) Formal semantics: **some**
- (d) Pragmatics or discourse analysis: **little or none**
- (e) Other relevant subfield: **Morphology, phonology**

6. Your language biography

- a. What language(s) did your parents speak at home? **Wolof**
- b. What language(s) do/did your parents speak natively? **Mother: Sereer; Father: Manding**
- c. What language (languages) did you receive school instruction in? **French**
- d. How old were you when you learned the subject language? **Learned it as a first language**
- e. Do you speak an identifiable subdialect of this language? What is it called? **Urban Wolof**
- f. Do you speak other dialects of the same language? Which ones?  
**NO (but can understand all the dialects)**

**IMPORTANT NOTE:** In order for us to use your questionnaire at all, we must have from you a signed copy of the consent form that we provide to you which insures (a) that you have had the opportunity to evaluate any risk or disadvantage to you in choosing to participate in this study,

and (b) that you have made an informed decision on whether or not you want your role in our project to be publically known. If you choose to remain an anonymous participant, all of the personal information your report to us will remain confidential.

## **PART 2 An inventory of reflexive and reciprocal strategies**

### **2.1 Coreference in a single clause**

**2.1.1** "Primary" reflexive strategy - Translate the following example to your language, and indicate the element (if any) that expresses the reflexive relationship. If the verb see is somehow unusual in your language, use a more typical transitive verb instead.

A1) John gis na boppam<sup>1</sup>  
John gis na bopp-am  
John see FIN head-3sg  
John saw himself.

**Comment :** Strategy A is used in A1) that is the noun bopp “head” along with a possessive pronoun (bopp-possessive or possessive-bopp).

**2.1.2** Is there another way, or are there other ways, to express coreference in A1 (that is, with the verb see held constant)?

**Comment:** No other strategy is used for the verb “see” as far as coreference is concerned.

**2.1.3 Other verb types** - Some languages use a special reflexive strategy with certain verbs, e.g., "commonly reflexive" verbs of grooming such as "wash", "shave", "bathe", "dress", etc.

A2a) John mooy sang boppam  
John mu a sang bopp-am  
John 3sg a wash head-3sg  
John washes himself

**Comment:** In A2 a) “John washes himself” can only be understood as having a habitual aspect. This translation I have given is awkward if John is an adult. This sentence is pragmatically acceptable if John is a child that has to be washed. The most natural to use coreference with the verb “wash” is through Strategy B described in A2a’) below:

A2a’) John sang-u na  
John sang-u na  
John wash-RFM PFV

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<sup>1</sup> Abbreviations: ASS: assistive; CAUS: causative; CL: noun class; COLL : collective; DR: durative; P: preposition; PERF: perfective; RFM : reflexive marker; RCM: reciprocal marker; 1sg : first person singular; 2sg : second person singular; 3sg : third person singular; 1pl : first person plural ; 2pl : second person plural; 3pl : third person plural

John washed

**Comment:** Strategy B (verb-RFM (-u)) is mainly used with verbs of “body care”.

- b) Mary dagg na (boppam)  
Mary dagg na (bopp-am)  
Mary cut FIN  
Mary cut herself. [accidentally]

**Comment:** A2b) the sentence can be produced without the anaphora; it is only in a situation where Mary wants to make salient that she is responsible (though accidentally) of the event.

- c) John rus na ci boppam  
John rus na PREP bopp-am  
John ashamed FIN head-3sg  
John is ashamed of himself.

**Comment:** The use of the preposition “ci” ( neutral preposition (glossed as “PREP”) used for “on”, “in”, “at” etc) is mandatory in the above example.

- d) John yàkk-al na boppam  
John yàkk-al na bopp-am  
John destroy-MAL PFV head-3SG.POSS  
John destroyed himself.

- e) ñun da ñoo bañ sunu bopp  
ñun d-a ñu a bañ sunu bopp  
1pl aux-foc 1PL FOC hate 1PL head  
We hate ourselves.

**Comment:** Strategy A follows the paradigm X bopp “possessive-*bopp*” (A2e) and A2f) below)) except for the third person singular where we have *bopp*-possessive(A1, A2a-d) ).

- f) ñu ngi tag seen bopp  
ñu ngi tagg seen head  
3pl prog praise 2pl head  
They praise themselves

#### 2.1.4 Obliques and other argument types –

- A3a) John wax na ak Mary  
John wax na ak Mary  
John speak PFV with Mary  
John spoke to Mary.
- b) John wax na ci boppam  
John wax na ci bopp-am  
John speak PFV P head-3SG-POSS  
John spoke about himself. (subject/PP argument)
- c) John wax na ak Mary ci boppam  
John<sub>i</sub> wax na ak Mary<sub>j</sub> ci bopp-am<sub>i/\*j</sub>

- John speak PFV with Mary P head-3SG-POSS  
 John told Mary about himself. (same, with intervening NP)
- d) Bill wax na nu ci sunu bopp  
 Bill<sub>i</sub> wax na nu<sub>j</sub> ci sunu bopp \*<sub>i</sub><sub>j</sub>  
 Bill speak PFV 1PL Prep our head  
 Bill told us about ourselves. (object/argument)
- e) \*\* Mary jox na xale yi seen bopp  
 Mary jox na xale y-i seen bopp  
 Mary give PFV child cl-the their head  
 Mary gave the children themselves. (ind.object/object)
- f) Mary gis na téere ci ginaawam  
 Mary gis na téere ci ginaaw-am  
 Mary see PFV book P back-3SG-POSS  
 Mary saw a book behind her. (subject/locative)
- g) John jëndal na boppam téere  
 John jënd-al na bopp-am téere  
 John buy-BEN PFV head-3SG-POSS book  
 John bought the book for himself. (benefactive)

**Comment:** A3) sentences do not involve a new strategy

- A4a) Etta bëgg na boppam  
 Etta bëgg na bopp-am  
 Etta like PFV head-3SG-POSS  
 Etta likes herself.
- b) Etta tiital na boppam  
 Etta tiit-al na bopp-am  
 Etta like-CAUS PFV head-3SG-POSS  
 Etta scares herself.
- c)\*? Etta jaaxal na boppam  
 Etta jaax-al na bopp-am  
 Etta worry-CAUS PFV head-3SG-POSS  
 Etta worries herself.

**Comment:** “worry” is in italics because the apparent root of the verb jaaxal “cause to worry” does not occur by itself. In the intransitive the verb jaaxle “be worried” is used.

**2.1.5 Person and number** - Some languages use different strategies depending on person or number.

- A5a) gis na-a sama bopp  
 gis na-a sama bopp  
*pro* see PFV-1SG my head  
 I saw myself.

b) dagg nga sa bopp  
dagg nga sa bopp  
*pro* cut PFV.2SG your head

You cut yourself [accidentally].

**Comment:** Not necessarily accidental; however pragmatically it can be assumed that such an action is not normally performed voluntarily on oneself.

c) di na nu sangu  
di na nu sang-u  
IPFV FIN 1PL wash-REFL  
We will wash ourselves.

c') di na nu sang sunu bopp  
di na nu sang sunu bopp  
IPFV FIN 1PL wash our head  
We will wash ourselves.

**Comment:** "We will wash ourselves." can be translated in two different ways depending in the context. The most natural way would be with the reflexive suffix. The other sentence can be used by a child for instance not an adult.

d) da ngeen wara dimbali seen bopp  
da ngeen wara dimbali seen bopp  
Aux 2PL should help your head  
You must help yourselves.

**2.1.6 Strategies for other classmate environments** - If there are any additional reflexive strategies known to you (from grammars, or from your linguistic knowledge), list them now. Name each new strategy with a short name or label, and give one example.

(a) Is there any strategy which is only possible with some special aspectual class of a verb?

A6a) Peter knows himself.

b) Peter (habitually) criticizes himself.

c) Peter is likely to praise himself.

**Comment:** No new strategy

(b) Do quantificational constructions involve a separate strategy?

A7a) bépp xale bu toog fii xool na boppam

b-épp xale b -u toog fii xool na bopp-am  
CL-every child CL-COMP sit here look PFV head-3SG.POSS  
Every boy that was sitting here, looked at himself.

**Comment:** It's awkward not to restrict the domain of the quantifier in the syntax.

b) jigéen yëpp wax na ñu John nu ñu men  
jigéen y -ëpp wax na ñu John nu ñu men

woman cl-all tell PFV 3PL John how 3PL look like  
All the women described John to themselves.

(Lit: All the women told John how they are/look like)

**Comment:** I cannot use an anaphora in this context.

c) jàngalekat yi, ku ci nekk nuyoo na ak Bob

jàng-ale-kat y-i, k-u ci nekk nuyoo na ak Bob  
teach-ANT-AG CL-the CL-REL P be greet FIN with Bob  
Every teacher introduced himself to Bob.

**Comment:** I don't have a good translation for this one.

d) yenn xale yi, seen bopp rekk la ñuy dimbali

y-enn xale yi, seen bopp rekk la ñu-y dimbali  
cl-one child cl-ther their head only FOC 3PL-HAB help  
Some children only help themselves.

**Comment:** For some reason, I have to change the structure of this sentence to translate this sentence, otherwise the sentence would not be good.

(c) If your language has a system of grammaticized honorifics, do some types of honorific allow a strategy that has not been listed yet?

**Comment:** No honorifics in the language

(d) The above were all tensed main clauses. Experiment with placing both coreferring arguments in various types of subordinate clauses, as your language allows.

A9a) Sol nee na Alice bëgg na boppam

Sol nee na Alice bëgg na bopp-am  
Sol say PFV Alice love PFV head-3SG.POSS  
Sol says that Alice loves herself.

b) Sol bëgg na Alice tagg boppam

Sol<sub>i</sub> bëgg na Alice<sub>j</sub> tagg boppam\*<sub>i/j</sub>  
Sol want PFV Alice praise head-3SG.POSS  
Sol wanted that Alice praise herself.

c) Sol yaakaar na ne Alice war na tagg boppam

Sol<sub>i</sub> yaakaar na ne Alice<sub>j</sub> war na tagg boppam\*<sub>i/j</sub>  
Sol think PFV COMP Alice should PFV praise head-3SG.POSS  
Sol thought Alice should praise herself.

**KS\*:** I notice this is the only one in this set that has an overt complementizer. Could you give me a very brief summary of the distribution of complementizers in Wolof, or a reference to work on this? I don't need this for the anaphora questionnaire, but there is some other work we are doing on clausal complementation that leads me to ask this question. I notice the use of the complementizer here but not for A9f – see comment on A14c/f.

**Comment [KN1]:** I don't know of a work dealing with this. I will try to look around.

d) Sol wax na Alice mu tagg boppam  
 Sol<sub>i</sub> wax na Alice<sub>j</sub> mu<sub>j</sub> tagg boppam\*<sub>i/j</sub>  
 Sol tell PFV Alice she praise head-3SG.POSS  
 Sol told Alice to praise herself.

e) Sol bëgg na tagg boppam  
 Sol<sub>i</sub> bëgg na tagg boppam<sub>i</sub>  
 Sol want PFV praise head-3SG.POSS  
 Sol wants to praise himself.

Should *na* be PFV here?

f) Sol bëgg na Alice tagg boppam  
 Sol<sub>i</sub> bëgg na Alice<sub>j</sub> tagg boppam\*<sub>i/j</sub>  
 Sol want PFV Alice praise head-3SG.POSS  
 Sol expects Alice to praise herself.

**Comment:** I have used the verb *yaakaar* “think”; it seems to convey the meaning of “expect”.

Should (f) have *yaakaar* instead of *bëgg*?

g) Sol dégg na Alice di tagg boppam  
 Sol dégg na Alice di tagg bopp-am  
 Sol hear PFV Alice IMPF praise head -3SG.POSS  
 Sol heard Alice praising herself.

## 2.2 Ordinary (potentially independent) pronouns

2.2.1 First, show that the pronouns can be independent by using them in a sentence where they do not have an antecedent. In the paradigms below, for example, the first sentence provides a context, and, for A10a,b the pronoun appears in the second sentence without an antecedent in that sentence, but referring to Abraham. The same test is made with first and second person pronouns in (A10c). If it is more convenient for you to construct your own sentences, feel free to do so.

A10a) wax naa ak Abraham démb. gis na Lela  
 wax na-a with Abraham démb. gis na Ø Lela  
 talk FIN -1sg Abraham yesterday. saw FIN Ø Lela  
 I spoke with Abraham yesterday. He saw Lela.  
 Comment : “Ø” refers to the silent morpheme which is a third person marker.

b) ana Abraham? gis naa ko ci néegam  
 ana Abraham? gis na-a ko ci néeg-am  
 where Abraham? see FIN-1sg 3sg P room-is  
 Where is Abraham? I saw him in his room.

c) gis na nu la. gis nga ma/ñu

gis na nu la.   gis nga ma/ñu  
 see FIN 1pl 2sg. saw 2sg 1sg/1pl  
 We saw you. Did you see me/us?

**2.2.2** If your language has more than one type of pronouns (e.g., null, clitic and non-clitic pronouns, strong, or stressable pronouns, etc.), list each type with examples.

**Indirect object not different from direct object**

John jox na ko ko  
 John give FIN 3sg 3sg  
 “John gave it to him” /John gave him it (literally)

Table 1 : Wolof subject and object pronouns

	<b>Strong pronouns</b>	<b>Weak Pronouns (subject)</b>	<b>Weak Pronouns (object)</b>
1sg	man	ma	ma
2sg	yaw	nga	la
3sg	moom	mu	ko
1pl	ñun	ñu	ñu
2pl	yeen	ngeen	leen
3pl	ñoom	ñu	leen

Table 2: Wolof possessive pronouns

	<b>pronouns</b>
1sg	sa ma
2sg	sa
3sg	-am
1pl	su ñu
2pl	seen
3pl	seen

KS\*: Just to confirm then, the final position of the possessive pronoun for 3ps is general even when the reflexive meaning is not what is intended, i.e., the POSS.pron-HEAD strategy shows completely regular possessive pronoun morphology (as opposed to English, which uses ACC for 3psm and 3ppl. KT: Exactly.

**2.2.3 Null arguments** - If your language allows the pronouns to drop for any of these grammatical functions (subject, object, prepositional object), but the range of pronominal interpretations is limited, please comment. (If agreement plays a role with respect to when a pronoun can be missing, please say so, even though your answer to this may overlap with your answer to 2.2.2.)

**Comment:** In Wolof only subject pronouns can be dropped. However depending on the verbs we can an antipassive-like situation where the object is missing and in such case, the verb occurs with some morphology as in A10e).

A10d) lekk na jën  
lekk na jën  
Ø eat FIN fish  
Ate fish. (meaning he/she ate fish)

e) Hal dóore na  
Hal dóor-e na  
Hal hit-OM FIN  
Hal hit (meaning Hal hit him/her/them/it/us/you/me)

**Comment:** The –e suffix is dealt as an antipassive marker in Creissels and Nougquier-Voisin (2008).

f) \* Hal wax na ak  
Hal wax na ak  
Hal talk FIN  
Hal talked to (meaning Hal talked to him/her/them/it/us/you/me)

#### 2.2.4 The use of otherwise independent pronouns for clausemate anaphora.

Even if your language has a special strategy for local anaphora, as English does (e.g., the use of pronoun-self), we still need to know whether or not a simple pronoun, a pronoun that could be used in contexts like those in (A10a-c), could also be used to form a reflexive reading.

A10g) Ali tagg na ko  
Ali tagg na ko  
Ali praise FIN 3sg  
Ali praised him.

**Comment:** No reflexive reading (Ali ≠ him)

h) Ali bëgg na ko  
Ali bëgg na ko  
Ali like FIN 3sg  
Ali likes him.

**Comment:** No reflexive reading (Ali ≠ him)

i) Ali gis na ko  
Ali gis na ko  
Ali see FIN 3sg  
Ali saw him

**Comment:** No reflexive reading (Ali ≠ him)

j) Ali wax naak moom  
Ali wax na ak moom  
Ali talk FIN with 3sg  
Ali talked to him

**Comment:** No reflexive reading (Ali ≠ him)

- k) Ali yonnée na ko tééré  
 Ali yonnée na ko tééré  
 Ali send FIN 3sg book  
 Ali sent a book to him.  
**Comment:** No reflexive reading (Ali ≠ him)
- l) Ali dimbali na ko  
 Ali dimbali na ko  
 Ali help na ko  
 Ali helped him  
**Comment:** No reflexive reading (Ali ≠ him)
- m) Ali bett na ko  
 Ali bett na ko  
 Ali surprise 3sg  
 Ali surprised him  
**Comment:** No reflexive reading (Ali ≠ him)
- n) Ali jëndal na ko tééré  
 Ali jënd-al na ko tééré  
 Ali buy-ben FIN 3sg book  
 Ali bought a book for him  
**Comment:** No reflexive reading (Ali ≠ him)
- o) Ali jàng na tééré ci moom  
 Ali jàng na tééré ci moom  
 Ali read FIN book about 3sg  
 Ali read a book about him  
**Comment:** No reflexive reading (Ali ≠ him)
- p) Ali gis na tééré ci wetam  
 Ali gis na tééré ci wet-am  
 Ali find FIN book near side-3sg  
 Ali found a book near him  
**Comment:** Ambiguous meaning (“him” can refer to Ali or to someone else)

## 2.3 Reciprocal Readings

**2.3.1** If you have already listed a reflexive strategy that can also have reciprocal meaning, provide an example here with a reciprocal translation.

NO

### 2.3.2 Strategies

To form reciprocal readings, different strategies are used depending on the verb involved.

- “-ante strategy” is used in most verbs. It is very productive.
- “-oo strategy” is used with verbs that pragmatically involve some form of exchange (e.g. “argue, “greet”etc.)

- A11a) jigéen ñi gisante na ñu  
 jigéen ñ-i gis-ante na ñu  
 woman cl-the saw-RCM FIN 3pl

The women see each other.

b) xale yi sangante na ñu  
xale y-i sang-ante na ñu  
child cl-the wash-RCM FIN 3pl  
The boys washed each other.

c) góór yi peñante na ñu  
góór y-i peñe-ante na ñu  
man cl-the comb-RCM FIN 3PL  
The men combed each other's hair.

d) (ñoom) xuloo na ñu  
(ñoom) xul-oo na ñu  
3pl argue FIN 3pl  
They argued with each other.

**Comment:** I don't know how to decompose the word xuloo. It seems that it has been lexicalized. (Other verbs that have a reciprocal reading with the *-oo* strategy : *juboo* "make peace"; *meroo* "get mad at each other"etc. )

e) xale yi weqante na ñu  
xale y-i weq-ante na ñu  
child cl-the kick-RCM FIN 3pl  
The children kicked each other.

f) (ñoom) bañante na ñu  
(ñoom) bañ-ante na ñu  
(3pl) hate-RCM FIN 3pl  
They hate each other.

**2.3.3 Oblique arguments** - Continue looking for new reciprocal strategies by translating sentences like those in (A12), which involve reciprocals embedded in prepositional phrases. If your language has prepositions and these examples do not translate as having reciprocals embedded in prepositional phrases, then please provide examples from your language that do.

A12a) góór ñi, nuyoole na ñu Bill ak ku ci nekk ci moom  
góór ñ-i, nuyoo-le na ñu Bill ak k-u ci nekk ci moom  
man cl-the greet -ASS PFV 3PL Bill with cl-COMP P exist/be P 3PL  
The men introduced Bill to each other.

**Comment:** ASS is used for "assistive"

b) xale yi waxtaan na ñu  
xale y-i wax-taan na ñu  
child cl-the speak-? PFV 3PL  
The children spoke to each other.

Comment: Not really sure what the suffix –aan means . I will do some research on it.

c) góor ñi, ku ci nekk dégg na ay wax ci moroom-am  
góor ñ-i, k-u ci nekk dégg na a-y wax ci moroom -am  
man cl-the cl-COMP P exist/be hear PFV a-cl talking P fellow- 3SG.POSS  
The men heard stories about each other.

d) xale yi, ku ci nekk teg na xaaalis ci kanamu moroom-am  
xale y-i, k-u ci nekk teg na xaaalis ci kanam-u moroom -am  
boy cl-the cl-COMP P exist/be put PFV money P front-GEN fellow 3SG.POSS  
The boys left money in front of each other.

**Comment :** None of the above (A12 a-d) ) involve reciprocals embedded in prepositional phrases. I guess this is due to the fact that a reciprocal reading is obtained through the use of a bound morpheme.

**KS:** Are A12a-d ambiguous between reflexive and reciprocal readings?

**2.3.4 Other persons and numbers, etc.** If another, so-far unknown strategy is used in some persons or numbers, or special aspectual classes etc., name it here.

A13a) gisante na nu  
gis -ante na nu  
see -RCM PFV 1PL  
We saw each other.

b) da ngeen wara dimbalante  
da ngeen wara dimbal-ante  
Aux 2PL should help- RCM  
You(pl.) must help each other.

c) di na nu sangu  
di na nu sang-u  
IMPF FIN 1PL wash-RFM  
We will wash ourselves.

d) da ñuy faral ñañante saa su nekk  
da ñu-y ñañ -ante saa s-u nekk  
Aux 3PL-HAB criticize – RCM time cl-COMP be/exist  
They always criticize each other.

e) xale yu bari wéqante na ñu  
xale y -u bari wéq -ante na ñu  
child CL-COMP be many kick- RCM PFV 3PL  
Many boys kicked each other.

**Comment:** No new strategy is found for A13a-e) examples.

**2.3.5 Other clause types, and other strategies:** Briefly consider various types of reciprocal embedded clauses; if a new coreference strategy can be used with some of them, name it here.

A14a) Sol nee na jàñq yi bëggante na ñu

Sol nee na jàñq y-i bëgg-ante na ñu

Sol say PFV girl cl-the love- RCM PFV 3PL

Sol says that the girls love each other.

b) Sol bëgg na jàñq yi taggante

Sol bëgg na jàñq y-i tagg-ante

Sol want PFV girl cl-the praise- RCM

Sol required that the girls praise each other.

c) Sol yaakaar na ne jàñq yi da ñu wara taggante

Sol yaakaar na ne jàñq y-i da ñu wara tagg-ante

Sol think PFV COMP girl cl-the Aux should praise- RCM

Sol thought the girls should praise each other.

d) Sol wax na jàñq yi ñu taggante

Sol wax na jàñq y-i ñu tagg-ante

Sol want PFV girl cl-the they praise- RCM

Sol asked the girls to praise each other.

e) jàñq yi bëgg na ñu taggante

jàñq y-i bëgg na ñu tagg-ante

girl cl-the want PFV 3PL praise- RCM

The girls want to praise each other.

f) Sol yaakaar na jàñq yi taggante

Sol yaakaar na jàñq y-i tagg-ante

Sol think PFV girl cl-the praise- RCM

Sol expects the girls to praise each other.

**Comment:** The COMP is missing by comparison with A14a because A14f is a control verb and is an infinitive (there is no perfective marker or subject marking in the lower clause). Am I right to add this?

g) Sol dégg na jàñq yi ñuy taggante

Sol dégg na jàñq y-i ñu-y tagg-ante

Sol hear PFV girl cl-the 3PL-PROG praise-RCM

Sol heard the girls praising each other.

## 2.4 Other types of local coreference

**2.4.1 Possessives, alienable and inalienable** - Please translate these sentences and provide the best gloss that you can. Is one of the strategies described above used?

A15a) Paul réeral na dàllam  
Paul réer-al na dàll-am  
Paul lose-caus shoes-3sg  
Paul lost his shoes.

b) Paul yëkëti na loxoom  
Paul yëkëti na loxo-am  
Paul raise FIN hand-3sg  
Paul raised his hand. (e.g., in class)

**Comment:** If Paul grabbed someone else's hand and raised it, this sentence be used to describe that situation.

c) Paul dagg na loxoom  
Paul dagg na loxo-am  
Paul cut FIN hand-3sg  
Paul cut his hand. (e.g., accidentally)

d) Paul seet na loxoom  
Paul seet na loxo-am  
Paul examine FIN hand-3sg  
Paul examined his hand.

e) Paul foq na concam  
Paul foq na conc-am  
Paul twist FIN elbow -3sg  
Paul twisted his elbow

## 2.4.2 Reflexives and reciprocals in nominals -

A16) wóolu bi Andrew wóolu bopp-am soof na Mary  
wóolu b-i Andrew wóolu bopp-am soof na Mary  
trust cl-the Andrew trust head-3sg annoy FIN Mary  
Andrew's self-confidence annoyed Mary

A17a) Andrew's destruction of himself impressed the teacher.

- b) Andrew's evaluation of himself was too critical.
- c) Their instructions to each other were not clear.
- d) Their evaluations of each other were too generous.

**Comment:** For A17a-d) there is no new strategy; the sentences will have to follow A16 pattern.  
Is it possible to have the RCM or the RFM on a deverbal nominal? Are there different classes of deverbal nominals that lead to different results?

2.4.4 It would be useful to us if you could provide a list of the different strategies so we are both clear as to which ones you distinguish. This you may revise on the basis of new ones you come across in filling out the form, if there are any.

#### **Coreference**

**Strategy A (bopp-possessive/possessive-bopp)**

**Strategy B (suffix –u attached to a verb)**

#### **Reciprocal**

**-ante strategy**

**-oo strategy**

For later sections, we will distinguish strong and weak pronouns as strategies, though these do not yield reflexive interpretations (except as objects to certain prepositions, if I remember correctly).

### **Part 3 General details about the strategies**

#### **3.1 Marking**

##### **3.1.1 Marking Strategies for coconstructed interpretations**

Ma) Marking on a coconstructed argument or adjunct. (E.g., English himself)

b) Marking on the verb or an auxiliary. (French clitic *se*, the Bantu reflexive marker)

c) Coconstruction is marked by dropping an argument. (as in English John washed)

d) Coconstruction is signaled by a specialized adjunct. (Such as *l'un l'autre* in (Y1)).

**Comment:** The POSS.prn-HEAD construction is of type (Ma) and that the other three strategies are of type (Mb).

#### **3.2 Productivity**

**3.2.1** How productive is this strategy, with respect to which verbs or predicates allow it? when you write up this section, indicate that the strategy in question is either extremely productive, fairly productive, or I am not sure.

Reflexives:

Strategy A (*bopp*-possessive/possessive-*bopp*) : extremely productive

Strategy B (suffix –*u* attached to a verb) : fairly productive (some change-of-state verbs )

Reciprocal:

-*oo* strategy : I am not sure (looks like a limited set of verbs go with it)

-*ante* strategy : very productive

Some verbs of body care:

sang-u “wash oneself”

létt-u: “braid oneself”

ñand-u: “blow one’s nose”

jàng-u: “wash one’s feet” (the root is meaningless without the suffix –*u*)

raxas-u: “wash one’s hand”

**3.2.2** Is the use of this strategy lexically restricted to certain verb classes, or is it unrestricted (applies across all verb classes)?

A strategy is "restricted to a specific class" if you are aware of some class of verbs which are the only ones, or nearly the only ones, that allow its use. If the strategy is restricted in its use, please describe, if you can, what you think the restriction is. Please give a few examples where it is possible to use it, and a few examples where it is not possible to use it. (e.g., "used only with

verbs of motion"). Use the following scale: (a) Has (almost) no exceptions, (b) Has few exceptions, (c) Is only a general tendency, (d) Can't tell.

Comment: There are so many verbs that use the *-u* strategy; it is generally used with change-of-state verbs.

robb bi xottiku na  
robb b-i xotti-ku na  
dress CL-the tear RFM PFV  
“the dress tore”

xale bi woqatu na  
xale b-i woq -atu na  
child CL-the scratch-RFM PFV  
“the child scratched himself”

**Comment:** Note that the suffix *-atu* is a variant of the RFM *-u*.

xale bi fuddu na  
xale bi fudd -u na  
child CL-the stretch- RFM PFV  
“the child stretched”

**Comment:** the verb “collide” will have to be used with the reciprocal marker *-ante*, but the rest of the verbs below are instances of the *-oo* strategy

xale yi nuyoo na ñu  
xale y-i nuyoo na ñu  
child CL-the greet PFV 3PL  
“the children greeted each other”

Faatu ak Awa lēngoo na ñu  
Faatu ak Awa lēng-oo na ñu  
Faatu and Awa embrace-RCM PFV 3PL  
“Faatu and Awa embraced each other”

Faatu ak Awa xuloo na ñu  
Faatu ak Awa xul-oo na ñu  
Faatu and Awa ?-RCM PFV 3PL  
“Faatu and Awa embraced each other”

**Comment:** *xuloo* “to have an argument” is like *nuyoo* “greet” in that without the reciprocal marker *-oo*, there is no meaning.

### 3.3 Context of Use

**3.3.1** How marked or natural is this strategy? For example, is this strategy typical of a particular social style or literary style, or does it sound old-fashioned? Is it considered formal or casual or is it used in any of these contexts? Is it the way people talk to each other in ‘normal’ contexts?

**Comment:** In all contexts. Which strategy are you referring to here?

**3.3.2** Is special intonation or emphasis necessary, and if so, where (e.g., is it on the morpheme that constitutes the marker for the strategy or is it a contour on the verb, or perhaps a special contour for the whole sentence).

**Comment:** I am not conscious of a special intonation even though intonation is highly important in Wolof.

**3.3.3** Is a particular discourse context (e.g., contradicting) necessary? For example, it is possible to get coconstrual of subject and object in English with an object pronoun in special circumstances, as in B1.

B1a) su Marsha soppee kenn rek,

If Marsha admires just one person, then I suspect that she admires just HER.

b) Marsha yaakaar na ne waaru ma wóolu kenn ku dul moom ci boppam

Marsha yaakaar na ne waar-u ma wóolu k-enn k-u d-ul moom ci bopp-am

Marsha think PFV COMP should-NEG 1SG trust cl-one cl-COMP AUX -NEG 3SG P head-3SG

Marsha thinks I should trust no one but herSELF.

**Comment:** B1a) could be possible in a special circumstance but not B1b).

So B1b should be starred for the non-literal meaning (I presume the ‘her head’ reading is ok, however bizarre)?

**3.3.4** Do you have any other comments on the use or meaning of this strategy, or on how it differs from other strategies you have identified?

## 3.4 Morphology

**3.4.1** Does the reflexive element, in its entirety, have a stateable lexical translation?

**Comment:** Yes for Strategy A (*bopp*-possessive/possessive-*bopp*) involves the body part *bopp* “head”.

gis na ñu seen bopp

gis na ñu seen bopp

see PFV 3PL our head

“They saw their heads” (ambiguous between a literal and reflexive reading)

**3.4.2** If the term used as a reflexive or reciprocal can be used for a non-reflexive/non-reciprocal meaning, is it an ordinary noun that can be possessed by other pronouns? Is it some form of prepositional phrase or adjective? Is there anything further to say about its meaning in such cases?

**Comment:** Yes (e.g. sama bopp “my head”; with this strategy “myself”).

Mary laal na boppu John

Mary laal na bopp-u John

Mary touch PFV head-GEN John  
“Mary touched John’s head”

**3.4.3** If the reflexive element has clear syntactic and part-of-speech sub-structure (e.g., head and modifiers, determiners, possessives) show it here.

**Comment:** The internal structure is that of a typical nominal with a pronominal possessor.

### 3.5 The agreement paradigm

**3.5.1** Give the morphological paradigm of each reflexive strategy.

sama bopp “my self”  
sa bopp “yourself”  
bopp-am “his/her/itsself”  
sunu bopp “ourselves”  
seen bopp “yourselves”  
suñu bopp “themselves”

### 3.5.2 For each morphological feature, what determines its value?

**Comment:** Agreement with the antecedent (no gender marking). The POSS.pronoun agrees with its antecedent and that *bopp* is uninflected for number or person (where masculine/feminine is generally not marked in Wolof). *Bopp* is not inflected for number in any context, and so there is nothing special about the absence of plural marking when it functions as a reflexive.

### 3.6 Interaction with verb morphology - Incompatibilities

#### 3.6.1 Tense, Mood, Aspect.

It is sometimes observed that coconstrual strategies are sensitive to the tense, mood or aspect of a clause, particularly if the aspect (whether an event is complete or not) has other syntactic effects. If there is any sign that coconstrual for some strategy is blocked or peculiar for a given tense (e.g., simple past, habitual, generic), mood (such as subjunctive, if your language marks it), or aspect, please comment and provide examples. Check with at least the verbs meaning see, praise, help, like, know, and wash.

B3a) Awa mooy sang boppam  
Awa mooy sang bopp-am  
Awa FOC wash head-3ps  
Awa (generally) washes herself

**Comment:** This sentence can be used in a context where you want to specify Awa for instance is old enough to wash herself; or when Awa is so sick that people doubt about her ability to wash by herself. Otherwise it’s awkward.

b) Awa sangu na  
Awa sang-u na  
Awa wash-REFL PFV  
Awa has washed/was washing herself.

- c) Awa war na sangu  
     Awa war na sang-u  
     Awa should PFV wash-RFM  
     Awa should wash herself.

**3.6.2 Grammatical Function (GF)-changing** - Consider GF-changing constructions or operations in your language that affect the argument structure of a verb, adding, promoting, or demoting arguments. For example, passive, antipassive, stative, benefactive, applicative, etc. Sometimes Grammatical-Function Changing ("GF-changing") morphemes, such as passive, inverse, middle, dative alternation, causative, applicative affixes or markers etc. are incompatible with a given coconstrual strategy. In other words, where the result of the GF-change has at least two arguments, check whether the GF-change is compatible with the current strategy. Manipulate the verbs meaning talk to, give, visit, and kill.

**Comment:** There is no passive, but there is a form of anti-passive with a null object. It is not possible to get a PP to correspond to the missing object the way in English we get a *by*-phrase corresponding to the missing subject.

**3.6.3** If you are aware of operations or morphemes that cannot co-occur with this strategy, then list them here, providing an example and a brief statement of what the incompatible morphemes or constructions are. So for example, if your language distinguishes accusative case from dative case, is one or the other case exclusively compatible or incompatible with a particular strategy?

**Comment:** No distinction between dative or accusative case.

**3.7 Uses that are not quite coreference**

Are there other uses of this strategy, in which it does not express coreference between two arguments or adjuncts (e.g., like locatives or directionals)? Many languages use reflexive morphology for purposes not obviously connected to reflexivization. If so, explain and provide a few examples.

**Comment:** The *-u* strategy is found with experiencer verbs. I am not sure we are dealing with the same suffix.

- Faatu waaru na
- Faatu waar-u na
- Faatu worry-RFM PFV
- “Faatu is worried”

- Faatu sàнку na
- Faatu sank            -u na
- Faatu cause damage -RFM PFV
- “Faaty caused damage to herself”

**3.7.1 Idiosyncratic or inherent.** Some languages have verbs that lexically require a reflexive which does not appear to correspond to an argument.

**Comment:** Inherent reflexive with some verbs; these have been lexicalized. By themselves, they are meaningless.

Musaa xaru na  
Musaa xar-u na  
Musaa ?-RFM PFV  
“Musaa committed suicide”

Baali nuuyu na Xadi  
Baali nuuy-u na Xadi  
Baali ? -RFM PFV Xadi  
“Baali greeted Xadi”

Baali jaaru na  
Baali jaar-u na  
Baali ? -RFM PFV  
“Baali warmed up next to some fire”

Xadi jàngu na  
Xadi jàng-u na  
Xadi ? -RFM PFV  
“Xadi washed her feet”

**Comment:** I cannot think of any verb that has an inherent or idiosyncratic reflexive meaning with the POSS.prn-HEAD strategy

**3.7.2 Emphatic or intensifier.** As in the English, The president himself answered the phone.

Your language may also have forms that require a local antecedent but seem to indicate a relationship with an antecedent that stresses how a particular participant related to an event. We see this with constructions in English like (B1c,d)

B1c) John ci boppam lekk na jën  
John ci bopp-am lekk na jën  
John P head -3sg eat PFV fish  
John himself ate fish / \*d)John ate fish himself.

**Comment:** The available equivalent is closer to B1c.

Please translate (B1c,d). Which of the readings below are permitted? (English adverbial reflexives permit readings (C) and (D), but other languages permit (A) and (D) with forms that seem more like English himself than English alone.)

- A) John alone did this - i.e., only John and no other individuals did this.
- B) John did this alone - John was unaccompanied when he did this.
- C) John himself did this - John appearing in person did this (no one did it for him)
- D) John himself did this - Even John did this (e.g. Although you would not have thought he would, John also ate the crispy jellyfish)

**Comment:** Readings C and D are possible

**3.7.3 Middle.** The argument structure of the verb is changed into a form that has an explicit patient, but no agent is present and an agent may or may not be implied. In English, this construction is not marked by any overt morphology, e.g., The tires on this car change easily. There does not appear to be any reflexive form used in English middles, but other languages use forms that are otherwise used to create reflexive readings. Greek uses passive morphology for middles, and as a reflexivization strategy.

**Comment:** Strategy B is used for some middles.

Musaa watu na  
 Musaa wat-u na  
 Musaa shave-RFM PFV  
 “Musaa shaved”

**Comment:** This a middle because with this sentence I cannot tell that Musaa shaved himself or that someone else did.

KS: In English, ‘John shaves’ could mean he is a habitually cleanshaven person, but that is not a middle usage. Is that what your example is like? KT: Definitely not.

**3.7.4 Distributive, sociative,** etc. Some strategies (reciprocal markers most frequently) can also be used to mean that some action was performed separately, or jointly, or repeatedly, etc. You should only report uses that do not involve coconstrual between two logical arguments.

**Comments:** I can only think of a strategy that involves the verbal suffix-andoo which relates to a collective reading as in the following.

- 1) xale yi lekk**andoo** na ñu ceeb b-i  
 xale y-i lekk-**andoo** na ñu ceeb b-i  
 child cl-the eat -together PFV 3PL rice cl-the  
 “The children ate the rice together”

**3.7.5 Deictic use** - If the current strategy involves a nominal form (e.g., English himself) Can this form be used when the antecedent is physically present or otherwise prominent, but has not been mentioned (such that X does not refer to Bill or Mary)? (Suggest a context if necessary).

- B5a) Bill did not see X
- b) Does Mary like X?
- c) X went to the bank yesterday.

**Comment:** No.

Can this form be used to refer to one of the participants in the conversation who is not otherwise mentioned in that sentence?

- B6a) Bill insulted X. (X = speaker, X = addressee)
- b) Many people do not like anchovies, but X likes them.  
 (X = speaker, X = addressee)

**Comment:** No.

Can the form in question be used in a sense like that of English generic one (which is not evenly acceptable for English speakers in non-subject environments). Or is there a meaning that means "arbitrary person". There are otherwise local anaphors in Hindi, for example, that can have the latter usage.

- B7a) I don't like the way he speaks to one.
- b) One cannot be too careful
- c) Bill insults one before one can say a word.

**Comment:** No.

**3.7.6 Focus.**

Please translate these question-answer pairs. (Numbers are out of sequence here for a reason)

B15) kan la beykat yi gis?  
 k-an la bey-kat y-i gis  
 CL-Q 3SG.FOC grow -AG CL-the see  
 Who did the farmers see?

moom la ñu gis  
 moom la ñu gis  
 3sg 3SG.FOC 3pl see  
 They saw him.

(For example, the children are playing hide and seek in the yard, four girls and one boy, John. The farmers entered the yard but they only saw John).

B16) The farmers didn't see Mary. They saw him.

**3.7.7 Other.** Are there other ways to use the strategy that do not express coreference (or reciprocal coreference) between two arguments?

**Comment:** No

**3.8 Proxy readings**

One interpretation that the choice of coreferent strategy is sometimes sensitive to is proxy interpretation. A proxy reading is one where the coreferent argument is understood as a representation of or a "stand in" for the reference of the antecedent. This is often the case with statues, for example, or authors (e.g., Grisham) and their work. Feel free to substitute your favorite national author for Grisham.

B8a) \*? Castro xool na boppam ca mbend ma  
 Castro xool na bopp-am c-a mbend m-a  
 Castro look PFV HEAD-3SG.POSS CL-the street cl-the  
 Castro looked himself in the street. (himself = statue of Castro)

**Comment:** I would never say this.

**KS:** I don't know what you mean by this.

b) Grisham wéyul boppam ci Swahili waaye wéy na boppam ci Wolof  
 Grisham wéy -ul bopp -am ci Swahili waaye wéy na bopp-am ci Wolof  
 Grisham sing-NEG head -3SG.POSS P Swahili but sing PFV head-3SG.POSS P Wolof

Grisham has not sung himself in Swahili, though he has read himself in Wolof. (himself = Grisham's writings)

**Comment:** I had to change the verb. Let me now if these do not work for what you are looking for. KS: Yes, that's fine.

The differences emerge in English for cases like those in (B9). Imagine that the wax museum is having a special event, which the wax statues of each celebrity will be washed and dressed by the celebrity they represent.

Comment: I have substituted "damage the wax" with "damage himself"

B9a)\* Castro sang na boppam                      nank , ndax du      yàqu  
Castro sang na bopp-am                      nank , ndax d-u      yàq-u  
Castro wash PFV head -3SG.POSS      slowly, so that AUX-NEG destroy-RFM  
Castro washed himself carefully, so as not to damage himself.

KS: This sentence is interesting, but it does not directly test what I was looking for because purposive clause verb uses the *-u* strategy, not the *bopp* strategy. That is why I prefer 'the wax' rather than 'himself', but would the sentence be ok if it stopped at *nank* with the reading that he washed his statue?

b) \* Castro sangu na                      nank, ndax du      yàqu  
Castro sang-u na                      nank ndax d-u      yàq-u  
Castro wash-RFM PFV slowly, so.that AUX-NEG destroy-RFM  
Castro washed carefully, so as not to damage himself.

c) wóykat bi peñewu na nànk , ndax du yàq karawam  
wóy-kat b-i peñe-wu na nànk , ndax d-u yàq karaw-am  
singer-AG CL-the comb-RFM PFV slowly, so AUX-NEG damage hair-3SG.POSS  
The *singer combed* herself *slowly*, so as not to damage *his hair*.

**Comment:** I cannot get the proxy reading here.

d) \* wóykat bi peñewu na nànk , ndax du yàq boppam  
wóy-kat b-i peñe-wu na      nànk , ndax d-u yàq bopp-am  
singer-AG CL-the comb-RFM PFV slowly, so AUX-NEG head-3SG.POSS  
The *singer combed* *slowly*, so as not to damage himself.

**Comment:** I cannot get the proxy reading here.

e) Castro gis na boppam                      ci séetu bi,      waaye lu      mu gis neexu ko  
Castro gis na bopp-am                      ci séetu b-i,      waaye l-u      mu gis neex-u ko  
Castro see PFV head-3SG.POSS in mirror CL-the, but      CL-COMP he see like-NEG 3SG.ACC  
Castro saw himself in the *mirror*, but he didn't like what he saw.

**Comment:** I had to change some words (in italics) to ease the translation.

Test for proxy readings in your language and see if there are instances where they are possible and others where they are not. Proxy readings do not require locality, so cases like B10a-c are also generally possible.

B10a) Grimshaw nee na Swahilim moo gën Wolofam  
 Grimshaw nee na Swahili -am moo gën Wolof-am  
 Grimshaw say PFV Swahili- 3SG.POSS FOC be better Wolof - 3SG.POSS  
 Grisham says he sounds better in Swahili than his Wolof. (where he = Grisham's writings)

KS: The sentence seems to say that Grisham says his Swahili sounds better than his Wolof, as if he is more proficient in one language than the other – if so, it is not the reading I want, which is one where Grisham thinks his writings sound better in Swahili than they do in Wolof. Please clarify.

b) \*? Castro yaakaar na ne moom rafet na  
 Castro yaakaar na ne moom rafet na  
 Castro think PFV COMP he handsome PFV  
 Castro thought that he looked handsome. (he = statue of Castro)  
 b') \* Castro yaakaar na ne mu rafet na  
 Castro yaakaar na ne mu rafet na  
 Castro think PFV COMP he handsome PFV  
 Castro thought that he looked handsome. (he = statue of Castro)

**Comment:** This is definitely bad with the weak subject pronoun

b'') \*? Castro yaakaar na ne rafet na  
 Castro yaakaar na ne rafet na  
 Castro think PFV COMP *pro* handsome PFV  
 Castro thought that he looked handsome. (he = statue of Castro)

Comment: This sentence is acceptable if it means either that Castro is beautiful or someone else is. Does this accurately reflect your comment?

Proxy readings are also possible for reciprocals in many languages. For (B11a), once again the antecedents are the authors and each other describes the works these authors have written, such that Mark Twain did not read Victor Hugo's novels in Swahili and Victor Hugo did not read Mark Twain's novels in Berber. For (B11b), imagine a show where there are actors masquerading as our two protagonists. The first each other refers to the person Marlene and Castro, but the second each other refers to the actors (or statues) representing them on the stage or in the show.

B11a) Mark Twain and Victor Hugo did not read each other in Berber.

**Comment:** I cannot think of a good equivalent of this sentence.

KS: How about if we have two songwriters singing each other's songs in some other language?

Comment: It would be weird to use the reciprocal suffix with the verb *sing*.

b) ? Marlene ak Castro gisantewu ñu Dakar, waaye gisante na ñu ci tele bi

Marlene ak Castro gis -ante-wu ñu Dakar, waaye gis -ante na ñu ci tele b-i

Marlene and Castro see-each-other-NEG 3PL Dakar but see -each-other PFV 3PL P tv CL-the  
'Marlene and Castro did not see each other in Dakar, but they did see each other on TV'

**Comment:** This is reading is really hard to get. You have to try hard to avoid Marlene and Castro being the ones that see themselves on TV physically. For example, as in a situation where each saw the other alone on some TV show in a circumstance where they are watching different shows.

### 3.9 Ellipsis

Consider the following examples, which all have an ellipsis of one sort or another. In (B12), there is missing structure that is parallel or identical to stated structure and it is interpreted as if it is there.

B12a) Sherman likes/praises himself more than Bill

b) Sherman likes/praises himself more than Bill does

**Comment:** Such an ellipsis is not allowed in this context; the VP has to be repeated like in the following:

B12c) lu Sherman di tagg boppam moo ëpp lu Bill di tagg boppam

I -u Sherman di tagg bopp-am moo ëpp I-u Bill di tagg bopp-am

CL-COMP Sherman IPFV praise head-3SG.POSS FOC be more IPFV CL- COMP Bill praise head-3SG.POSS

Sherman likes/praises himself more than Bill praises himself.

## PART 4 Exploration of syntactic domains

### 4.1 Clausemate coconstrual

#### 4.1.1 Verb class restrictions

**4.1.1.1 Canonical transitives** - Can this strategy be used with ordinary transitive verbs, such as the verb meaning "see"? Give some examples, including the following.

C1a) Awa gis na Faatu

Awa gis na Faatu

Awa see PFV Faatu

Awa saw Faatu

b) wéeq ngeen Faatu

wéeq ngeen Faatu

kick FIN-2pl Faatu

You(pl.) kicked Faatu

c) tagg na ñu Faatu

tagg na ñu Faatu

praise PFV 3pl Faatu

They praised Faatu

**4.1.1.2 Commonly reflexive predicates** - Can this strategy be used with verbs of grooming, inalienable-possession objects, etc?

C3a) Daba sangu na  
Daba sang-u na  
Daba wash-REFL FIN  
Daba washed X. (X = Daba)

b) Awa dagg na karawam  
Awa dagg na karaw-am  
Awa cut PFV hair -3sg  
Awa cut X's hair. (X = Awa).

c) jàñq ji dagg na  
jàñq j-i dagg na  
girl cl-the cut PFV  
The girl cut X [unintentionally] (X = the girl)

**Comment:** I assume (C3c) as be unintentional because for pragmatic reasons, it's hard for me to access the intentional reading. On the other hand if I wanted an intentional reading, I would add a reflexive pronoun as in (C3d).

d) jàñq ji dagg na boppam  
jàñq j-i dagg na bopp-am  
girl cl-the cut PFV head-3sg  
The girl cut X [intentionally/intentionally] (X = the girl)

**4.1.1.3 Psychological predicates.** Please provide examples for verbs like those below, even if nothing exact seems appropriate for the current strategy, marking them according to the level of their acceptability based on the scale given above.

C4a) Moor bañ naXadi  
Moor bañ na Xadi  
Moor hate PFV Xadi  
Moor hates Xadi

Moor ragal na Xadi  
Moor ragal na Xadi  
Moor fear PFV Xadi  
Moor fear Xadi

**Comment:** The verb *ragal* "fear" is completely weird in this construction unless we imagine a context where Moor always screams when he sees himself in the mirror.

b) Moor rus na Awa  
Moor rus na Awa  
Moor be.ashamed FIN Awa  
Moor is ashamed of Awa.

- c) Moor jaaxle na  
 Moor jaaxle na  
 Moor be worried PFV  
 Moor is worried (about X/about something else)

**Comment:** C4c) involves a verb that is certainly complex morphologically (to worry someone *jaax-al*; where *-al* is a causative morpheme, below); I leave it as such as I am not sure about the morphological decomposition. As shown in the translation, in this context it can have two interpretations.

- d) Moor bégal na Awa  
 Moor bég-al na Awa  
 Moor please-CAUS PFV Awa  
 Moor pleasesAwa.

- e) Moor tiital na Awa  
 Moor tiit-al na Awa  
 Moor fear-CAUS PFV Awa  
 Moor scares Awa.

**Comment:** I could not find good examples for “trouble”, “worry” (transitive) and “proud”, so I only used “please” and “fear”.

KS: Do all the verbs in (C4) form reflexives with POSS.prn-HEAD? Please provide the examples with whatever strategies work.

KT: The object of the verbs in (C4a,d,e) can be *bopp-am* “him/herself” but not for (C4b-c).

**4.1.1.4 Creation and destruction predicates.** Provide examples in addition to (C5) using verbs of creation (e.g., “sew”, “make”, “form”) or destruction (e.g., “kill”, “eliminate”, “make disappear”).

- C5a) jigéen ñi di na ñu xaru  
 jigéen ñ-i di na ñu xaru  
 woman cl-the PFV 3PL commit suicide  
 The women will commit suicide

**Comment:** the verb *xaru* “kill self” has been lexicalized; it ends with *-u* which is generally found with anticausative and reflexive verbs. I have not provided a morphological decomposition since *xar* by itself is meaningless.

The verb *xaru* “commit suicide” is the suppletive form of “kill self”.

- b) The houses built X (X = themselves)  
 Comment: impossible

- c) yééré bi xottiku na  
 yééré bi xotti-ku na  
 cloth c-the tear-RFM PFV  
 “the garment tore”

**4.1.1.5 Verbs of representation.** Reflexive versions of these verbs include instances where individuals act on their own behalf, rather than have someone act in their name or for them.

C6a) xale yi demal na ñu seen bopp  
xale y-i dem-al na ñu seen bopp  
child cl-the go-BEN PFV 2PL.POSS head  
The boys went for themselves.

**Comment:** Benefactive suffix must be added to the verb.

b) Awa waxal na boppam  
Awa wax-al na bopp-am  
Awa speal-BEN PFV head-3SG  
Awa spoke for herself.

**Comment:** Benefactive suffix must be added to the verb.

#### 4.1.2 Argument position pairings

**4.1.2.1 Subject-indirect object** - The preceding questions asked mostly about subject-object coreference. Can this strategy be used to express coreference between a subject and an indirect object? Choose verbs that have an indirect object in your language.

C7a) Mari yónne na xalis bi boppam  
Mari yónne na xalis b-i bopp-am  
Mari send PFV money cl-the head-3SG  
Mari sent the money to X (X = Mari)

b) Mari ubbil na bunt bi boppam  
Mari ubbi-al na bunt b-i bopp-am  
Mari open-BEN PFV door cl-the head-3sg  
Mari opened the door for Mari (X = Mari)

**Comment:** I have tried to use verbs that would not provide weird translation. Note that C7b) the verb is not inherently ditransitive; I have added a benefactive to change its valency.

C8 a) Mari yónne na boppam xalis bi  
Mari yónne na bopp-am xalis b-i  
Mari send PFV head-3sg money CL-the  
Mari sent X the money (X = Mari)

b) Mari ubbil na boppam bunt bi  
Mari ubbi-al na bopp-am bunt b-i  
Mari open-BEN PFV head-3SG door cl-the  
Mari opened X the door (X = Mari)

**Comment:** I prefer C8 constructions to C7 even though both are fine.

#### 4.1.2.2 Oblique arguments -

C9a) Awa wax na ak Mari  
Awa wax na ak Mari  
Awa talk PFV with Mari  
Awa talked to Mari.

b) Awa wax na Moor ci boppam  
Awa wax na Moor ci bopp-am  
Awa talk PFV Moor about head-3SG  
Awa told Moor about X (X = Awa)

**Comment:** This sentence is ambiguous; it could translate that Awa told Moor about himself (Moor coreferent with Moor).

KS: I conclude that POSS.prn-HEAD does not require a subject antecedent, yes? KT: Yes.

c) Awa jox na Faatu tééré  
Awa jox na Faatu tééré  
Awa give PFV Faatu tééré  
Awa gave Faatu a book.

#### 4.1.2.3 Subject-adjunct -

C10a) Mari gis na jaan ci ginaawam  
Mari gis na jaan ci ginaaw-am  
Mari see PFV snake P back- 3sg  
Mari saw a snake behind X (X = Mari)

b) Mari woon na ma ndax a-b gëstu bu ñu def ci moom  
Mari woon na ma ndax ab gëstu b-u ñu def ci moom  
Mari call PFV ISG because research cl-COMP do P 3SG  
Mari called me because of a research about X (X = Mari)

c) Faatu offended Mari because of X (X = Faatu)

**Comment:** No good translation for this sentence.

**4.1.2.4 Ditransitives and double complements-** For example, for (C11c), Bill gave Hal himself, which is admittedly pragmatically awkward, but imagine for (C11a) that Mary is showing Hal his image in the mirror - imagine Hal had never seen a mirror before.

C11a) Mari won na Awa boppam  
Mari won na Awa bopp-am  
Mari show PFV Awa head-3SG  
Mari showed Awa to X.

b) Mari won na boppam Awa  
Mari won na bopp-am Awa  
Mari show PFV head-3SG Awa  
Mari showed X to Awa.

- c) Bill gave Hal X.
- d) Bill gave X Hal.

**Comment:** no good translations available.

- e) Mari laaj na xale yi ci    seen bopp  
    Mari laaj na xale y-i ci    seen bopp  
    Mari ask PFV child cl-the P 2PL.POSS head  
    Mary asked the boys about themselves

- f) Mary showed/introduced/presented the boys to each other.

**Comment:** No good translation for this sentence.

#### 4.1.2.5 Two internal arguments or adjuncts -

- C12a) Bill talked about Hal to X.
- b) Mary talked about X to Hal.
- c) Mary talked to Hal about X
- d) Mary talked to X about Hal.

**Comment:** Translations with similar constructions not possible.

#### 4.1.2.6 Clausemate noncoarguments

Possessives - Give examples based on the following sentences, and/or by constructing analogous examples from reflexive sentences from the previous sections. For each of (C13) and (C14), X = Nick.

- C13a) Awa woo na yaayam  
       Awa woo na yaay-am  
       Awa call PFV mother-3sg  
       Awa telephoned X's mother.

- b) Awa peñewu na  
       Awa peñe-wu na  
       Awa comb-RFM PFV  
       Awa combed X's hair.

- c) Awa wax na ak njaatigeem  
       Awa wax na ak njaatige-am  
       Awa speak PFV with boss-3sg  
       Awa spoke to X's boss.

- d) Awa teg na téerem ci taabal ji  
       Awa teg na téere-am ci taabal j-i  
       Awa put PFV book P table cl-the  
       Awa put X's book on the table.

- e) buur bi jox na Awa raaya ci dëkkam

buur b-i jox na Awa raaya ci dëkk-am  
king cl-the give PFV Awa prize P village- 3sg  
The king gave Awa a prize in X's village.

f) xale yi sëlmu na ñu  
xale y-i sëlëm-u na ñu  
child cl-the wash-RFM PFV 3pl  
The children washed X's face.

**Comment:** the verb *sëlëm* “wash face” undergoes a phonological change, instead of *sëlëm*, we pronounce *sëlmu*. It is not morphologically related to the word for “face” which is *kanam*.

C14a) Awa, baayam sopp na ko  
Awa, baay-am sopp na ko  
Awa, father-3sg admire PFV 3sg.ACC  
Awa's father admires X.(lit; Awa, her father admires her)

**Comment:** The only way to translate this sentence accurately is to topicalize the argument Awa. KS\*: This seems to be a weak crossover configuration where there is no weak crossover effect. KT: I think so too.

b) Awa, coxoram yàqal na ko  
Awa, coxor-am yàq-al na ko  
Awa, wickedness-3sg destroy-MAL PFV 3sg.ACC  
Awa's wickedness destroyed X.

**Comment:** Same situation as in C14a) above. In the gloss MAL stands for “malefactive”; I have previously glossed the similar morpheme as “benefactive”; however in this context Awa is not benefitting from the action.

c) yaayu Awa jaay na ootom  
yaay-u Awa jaay na oto-am  
mother-GEN Awa sell PFV car-3SG.POSS  
Awa's mother sold X's car.

**Comment:** The only possible translation would involve focusing either Awa or Awa’s mother by moving it to the front of the sentence. The possessive can refer to either Awa or her mom even though the first reading is the one in which the mother sold the car. Another possible translation can be found in c’) below.

c’) Awa, yaayam jaay na ootom  
Awa yaay-am jaay na oto-am  
Awa mother-3SG.POSS sell PFV car-3SG.POSS  
Awa's mother sold X's car.

Again, same situation as in the previous example, the possessive marker might refer to both Awa or her mother. I think that only the context can help determine the appropriate reading.

Please provide translations and judgments for the following examples where the plural pronoun is coconstructed with the boys or the politicians.

X20a) xale yi gis na ñu seen foto bopp  
xale y-i gis na ñu seen foto bopp  
child cl-the see PFV 3PL their picture head  
The children saw pictures of themselves

b) Mari wax na ak xale yi ci seen foto ñoom  
Mari wax na ak xale yi ci seen foto ñoom  
Mari tell PFV with child P their picture them  
Mari told the boys about pictures of themselves/each other/them

c) buur yi fas yeene na ñu xeex  
buur y-i fas yeene na ñu xeex  
king cl-the tie intention PFV 3PL fight  
The kings planned attacks against each other.

**Comment:** No reciprocal suffix is required on the verb *xeex* “fight”, perhaps because it is inherently reciprocal in meaning.

**4.1.2.7 Demoted arguments** - Refer back to the range of grammatical function-changing operations (such as passive, antipassive, applicative, possessor ascension, dative alternation) that you considered for section 3.6 (if you did that). For each one, construct some representative non-reflexive examples. Then apply each coreference strategy to various pairs of arguments and report their grammaticality status.

C15a) Polly was praised by X

b) Polly was helped by X

**Comment:** no passive in the language

c) tuuti la Awa xam ci boppam  
tuuti la Awa xam ci bopp-am  
little FOC Awa know P self -3sg  
It is little that Awa knows about herself.

**Comment:** This is not a passive construction but a construction where “little” is focalized.

d) galaas gi seeyil na boppam  
galaas g-i seey-al na bopp-am  
ice cl-the melt-CAUS PFV head-3sg  
The ice melted itself

**Comment:** Interestingly the verb in this construction has to occur with the direct causative suffix *-al* as in the following.

e) Awa seeyil na galaas gi  
Awa seey-al na galaas g-i  
Awa melt-CAUS PFV ice cl-the  
Awa melted the ice

C50a) ? Awa lekkloo na boppam ñam bu bonn bi

Awa lekk-loo na bopp-am ñam b-u bonn b-i

Awa eat –CAUS PFV head-3SG.POSS food CL-COMP bad CL-the

Awa made herself eat the bad food

**Comment:** I don't know of another way of translating this. The translation I have provided seems awkward.

b) Awa tax na Isaa ñànn boppam

Awa tax na Isaa ñànn bopp-am

Awa cause PFV Isaa criticize head-3SG.POSS

Awa made Isaa criticize himself

**Comment:** Only Isaa is the possible antecedent.

c) Isaa<sub>i</sub> tax na xale yi sang ko<sub>i</sub> /\*boppam

Isaa tax na xale y-i sang ko /\*bopp-am

Isaa cause PFV xale CL-the wash 3SG/\* head-3SG.POSS

Isaa made the children wash him/himself (with coreference)

**Comment:** the use of this reflexive form is definitely impossible. Is the RFM is used as in the following, it could only relate to the children.

c') Isaa<sub>i</sub> tax na xale yi sangu

Isaa tax na xale y-i sang-u

Isaa cause PFV xale CL-the wash-RFM

Isaa made the children wash themselves.

d) tax naa xale yi sangu

tax na-a xale y-i sang-u

cause PFV-1SG child CL-the wash-RFM

Isaa made the children wash themselves

**Comment:** Context: the children did not want to shower, Isaa convinced them to do so. (also the children did not necessarily carry out the action of “washing”.)

**KS:** I am wondering if *sangu* means ‘get washed’ rather than to wash oneself. This is consistent with the anticausative usage of *-u*. This may not generally be the case (don't know), but it may be the case for the verb *sang*. By contrast, C50d' seems like the true reflexive reading. What do you think?

d') tax naa xale yi sang seen bopp

tax na-a xale y-i sang seen bopp

cause PFV-1SG child CL-the wash 3PL.POSS head

Isaa made the children wash themselves

**Comment:** the children wanted to be washed by their mom, for instance, but Isaa convinced them to wash themselves.

e) tax naa xale yi sang ma

tax na-a xale y-i sang ma

cause PFV-1SG child CL-the wash 1SG.POSS  
I made the children wash me.

f) tax na ñu jàngalekat bi wax ak ñoom/ waxtaan  
tax na ñu, jàngale-kat b-i wax ak ñoom<sub>i</sub> / wax-taan  
cause PFV teach –AG CL-the talk with 3SG/talk-COLL  
*They made the teacher talk to themselves/them.*

**Comment:** To have the reflexive meaning with the verb *wax* “talk”, the suffix *-aan* that has a collective or reciprocal meaning (at least two persons exchanging) must be used. The possessive pronoun cannot be used in this context.

#### 4.1.3 Properties of antecedents

**4.1.3.1 Pronouns, person and number** - Consider all possible person/number combinations for the subject of the following sentence. (Once again, start with a predicate that allows use of the current strategy, if the verb meaning “see” does not). If there is any variation in judgements, provide examples for the entire paradigm. Otherwise, provide a couple of representative examples. However, in some languages, a strategy that works for singulars does not work for plurals (Danish, for example, shows such asymmetries), and in other languages, a strategy that works for third person does not work for first and/or second person. It is intended here that X is the pronoun or anaphoric reflexive strategy that would be coconstructed with the subject to produce a grammatical result.

- C16a) I saw X.  
b) You saw X. (etc.)

Repeat with the following sentences, or other suitable examples from section 4.1.1.

C17a) sang naa sama bopp  
sang na-a sama bopp  
wash PFV-1SG 1SG head  
“I washed myself”

**Comment:** A child might say this, but not an adult unless there is context where someone doubts about the adult’s capacity to wash himself

- b) bañ naa sama bopp  
bañ na-a sama bopp  
hate PFV-1SG 1SG.POSS head  
I hate myself.
- c) wax naa Awa ci sama bopp  
wax na-a Awa ci sama bopp  
tell PFV-1SG Awa P 1SG.POSS head  
I told Awa about myself
- d) gis naa jaan ci sama wet

gis na-a jaan ci sama wet  
 see PFV-1SG snake P 1SG.POSS side  
 I saw a snake near X (I saw a snake at my side)  
 e) I am liked by X.

**Comment:** No passive possible.

f) I telephoned X's mother

**Comment:** Not possible

g) My father admires X.

**Comment:** Not possible when X= myself; only fine with X= him/herself

Please provide the bad first person example.

**4.1.3.2 Animacy or humanity-** If animacy plays a role in choice of strategy or if a strategy is restricted to human (or metaphorically human) entities, please give examples showing both success and failure of the strategy in a way that illustrates the difference.

C18a) l-u xewoon démb xewaat na tey  
 l-u xew-oon démb xew-aat na tey  
 CL-COMP happen-PST yesterday happen-IT PFV today  
 History repeats X

**Comment:** This is the only way I can translate the sentence above.

b)\*? jën wi dey lekk boppam  
 jën w-I d-ey lekk bopp-am  
 fish CL-the AUX-PROG eat head-3SG.POSS  
 This type of fish cannibalizes X

c) masin bi dey yàqu  
 masin b-i d-ey yàq-u  
 machine CL-the AUX-PROG destroy-RFM  
 This machine destroys X (e.g., after you use it)

**Comment:** Animacy does not play a role.

KS: Also try this with the *-ante* and *-oo* strategies if the sentences (or ones you devise) are available for verbs allowing plausible reciprocal readings, e.g., ‘the mechanical puppets dressed/collided (with) each other.’ There are cases where reflexives can be formed with the *bopp* strategy –see C15d.

**4.1.3.3 Pronoun types** - If your language has more than one class of subject pronouns (e.g., clitic and non-clitic), repeat the tests of the previous section for each type. Also repeat for null pronouns, if applicable.

a. gis naa sama bopp

see na-a sama bopp  
pro see PFV-1SG 1SG.POSS head  
“I saw myself”

b. gis nga sa bopp  
gis nga sa bopp  
pro see PFV -2SG 2SG.POSS head  
“you saw yourself”

c. gis na boppam  
gis na-Ø bopp-am  
pro see PFV-3SG head-3SG.POSS  
“s/he saw him/herself”

d. gis na nu sunu bopp  
gis na nu sunu bopp  
pro see PFV-3SG 3SG.POSS head  
We saw ourselves.

e. gis ngeen seen bopp  
gis ngeen seen bopp  
pro see PFV.2PL 2PL.POSS head  
You saw yourselves.

f. gis na ñu suñu bopp  
gis na ñu suñu bopp  
pro see PFV 3PL 3PL.POSS head  
“We saw ourselves”

**4.1.3.4 Quantifiers** - Provide judgements for the following sentences, where X is a pronoun corresponding to the subject successfully, or X is the anaphoric (reflexive) strategy that achieves a reflexive (coconstrued) reading.

**Comment:** In the following, I add a context, a relative clause in this case, specifying the domain of the quantifier “Every” for semantic reasons. In Wolof the domain of the quantifier has to be uttered in the syntax.

C19a) bépp jigéen bu nekk fii gis na boppam  
b-épp jigéen b-u nekk fii gis na bopp-am  
cl-every woman cl-COMP be here saw PFV head-3sg.POSS  
Every woman who is here saw X.

b) bépp xale bu nekk fii sang na boppam  
b-épp xale b-u nekk fii sang na bopp-am

CL-every child cl-COMP be here wash PFV head-3sg.POSS  
Every child who is here washed X.

c) bépp ndongo bu nekk fii bañ na boppam  
b-épp ndongo b-u nekk fii bañ na bopp-am  
CL-every student cl-COMP be here hate PFV head-3sg.POSS  
Every student who is here hates X.

d) bépp xale bu nekk fii gis na jaan ci wetam  
b-épp xale b-u nekk fii gis na jaan ci wet-am  
CL-every child cl-COMP be here see PFV snake P side-3SG.POSS  
Every child who is here saw a snake near himself/herself/him/her.

e) bépp xale bu nekk fii woo na yaayam  
b-épp xale b-u nekk fii woo na yaay-am  
CL-every child cl-COMP be here call PFV mother-3sg.POSS  
Every child who is here telephoned himself's mother/ (someone else's mother)

f) Every child's father admires X.

**Comment:** no good translation available for this one with the target construction.

Repeat, replacing the quantifier "Every N" with "No N", and if any quantified antecedents behave differently from these, please provide the same paradigm.

C19a) benn jigéen gisul boppam  
b-enn jigéen gis-ul bopp-am  
CL-one woman saw-NEG PFV head-3sg.POSS  
No woman saw X.

b) benn xale sangul boppam  
b-enn xale sang-ul bopp-am  
CL-one child wash-NEG PFV head-3sg.POSS  
No child washed him/herself

c) benn ndongo bañul boppam  
b-enn ndongo bañ-ul bopp-am  
CL-one student hate-NEG PFV head-3sg.POSS  
No student hates him/herself

d) benn xale gisul jaan ci wetam  
b-enn xale gis-ul jaan ci wet-am  
CL-every child see-NEG snake P side-3sg.POSS  
No child saw a snake near himself/herself/him/her.

e) benn xale woowul yaayam  
 b-enn xale woo-ul yaay-am  
 CL-every child call-NEG mother-3sg.POSS  
 No child telephoned himself's mother/ (someone else's mother)

f) Every child's father admires X.  
**Comment:** no good translation available for the target construction.

**4.1.3.5 Questioned antecedents** - As in (C19), X is coreferent with the wh-word in all of the following (if C20e is possible in your language).

- C20a) kan moo gis boppam?  
 k-an moo gis bopp-am  
 CL-Q FOC see head-3sg.POSS  
 Who saw him/herself?
- b) kan moo sang boppam?  
 k-an moo sang bopp-am  
 CL-Q FOC wash head-3sg.POSS  
 Who wash him/herself?
- c) kan moo gis jaan ci wetam?  
 k-an moo gis jaan ci wet-am  
 CL-Q FOC see snake P side-3sg.POSS  
 Who saw a snake near him/herself/ him/her?
- d) kan moo woo yaayam?  
 k-an moo woo yaay-am  
 CL-Q FOC see snake P side-3sg.POSS  
 Who telephoned his/her mother?
- e) kan la baayam sopp?  
 k-an la baay-am sopp?  
 CL-Q FOC baay-3sg.POSS admire  
 Whose father admires him/her?

**4.1.3.6 Reverse binding** - In the following examples, the full NP ('antecedent') appears in the lower (prototypically, object) position.

C21a) \* boppam gis na Awa  
 bopp-am gis na Awa  
 head-3sg.POSS see PFV Awa  
 X saw Fred.

b) \* sunu bopp gis na nu  
 sunu bopp gis na nu

1pl.POSS head see PFV us  
X saw us. (X=us)

c) \* boppam gis na jaan ci ginaaw-u Awa  
bopp-am gis na jaan ci ginaaw-u Awa  
head-3sg.POSS see PFV snake P back –GEN Awa  
X saw a snake behind Awa.

d) boppam yéem na Awa  
bopp-am yéem na Awa  
head-3sg.POSS impress PFV Awa  
X impressed Awa

e) \* Baaba wax na ak boppam ci Awa  
Baaba wax na ak bopp-am ci Awa  
Baaba speak PFV with head-3sg.POSS P Awa  
Baaba spoke to himself about Awa.

f) Baaba told himself about Awa  
Comment: same verb as in e) above.

g) X was praised by Fred.

h) X is liked by you. (X = you)

**Comment:** No passive in the language.

If the current strategy permits a possessive position to be coreferent with its antecedent, please indicate if an anaphor or a pronoun is possible in the position of X, which should correspond to George in all of these examples.

C22a)\* moom woo na yaayu George  
moom woo na yaayu George  
he call PFV mother-GEN George  
X telephoned George's mother.

Comment: George cannot be coreferent with the pronoun.

b)\* yaayam dafa bëgg soppi George  
yaay-am dafa bëgg soppi George  
mother-3SG.POSS AUX.FOC change George  
X's mother wanted to improve George.

Comment: George cannot be coreferent with the possessive.

c) \* yaayam jaaxal na George  
yaay-am jaaxal na George  
mother-3SG.POSS worry PFV George  
X's mother worried/impressed George.

**Comment:** George cannot be coreferent with the possessive.

d) Mary wax na yaayam ci George  
 Mary<sub>i</sub> wax na yaay-am<sub>i/\*j</sub> ci George<sub>j</sub>  
 Mary tell PFV mother-3SG.POSS about George  
 Mary told X's mother about George.

e) ab nataalu yaayam daanu na ci kaw George  
 a-b nataal-u yaay-am daan-u na ci kaw George  
 a-CL picture-GEN mother-3SG.POSS fall-RFM PFV on top George  
 A picture of X's mother fell on George.

**Comment:** I think coreference between George and the possessive is possible, however that sounds very marginal.

f)\*? ab nataalu yaayam neex na George  
 a-b nataal-u yaay-am neex na George  
 a-CL picture-GEN mother-3SG.POSS PFV George  
 A picture of X's mother pleased George.

In some languages, it is possible to scramble the positions of argument nominals so that objects can precede subjects, or perhaps the order of arguments in the VP is less fixed. In translating these cases we want you to preserve the linear order of X before its antecedent and providing a judgment accordingly, insofar as the unmarked word order of your language allows.

Please let us know, however, if word order in your language is fluid enough to scramble arguments in such a way that the linear order between X and its antecedent could change

**Comment:** Topicalization and Focalization involving fronting is very common in the language.

#### 4.1.4 Some matters of interpretation

**4.1.4.1 Distribution, reflexivity and reciprocity** - Select and translate a simple example illustrating the using a clausemate coreference strategy successfully, such as (C23).

C23) jigéen ñi dimbalante na ñu  
 jigéen ñ-i dimbali-ante na ñu  
 woman cl-the help -RCM PFV 3pl  
 The women help each other.

**Comment:** A reflexive construction would be awkward, for this reason I use a reciprocal instead. The interpretations in C24 a, c, e, f are fine but not the other ones.

**KS:** The group as a unit helps the group as a unit in (e), so that is a symmetric relation, not the typical asymmetric one found for reciprocals. Is it really unit to unit, or is it that 'general helping went on amongst the women'?

Which of the following meanings can this example have? Say which it can have and which it can't have. We will say that if the form in place of X permits at least (C24a) or (C24f) as a reading, then the form in question permits a reciprocal interpretation.

- C24a) Each woman helps all (or almost all) of the women, excluding herself.
- b) Each woman helps all of the women, including herself.

- c) Each woman helps at least some of the other women.
- d) Each woman helps herself.
- e) The women together as a group help the women together as a group.
- f) Each woman helps one of the women other than herself, such that all of the women are helped by one of the others.

Translate each of the following examples, which are compatible with collective action, and state their possible interpretations as above.

C25a) jigéen ñi tagg na ñu seen bopp  
 jigéen ñ-i tagg na ñu seen bopp  
 woman cl-the praise PFV 3pl head  
 The women praised X.

**Comment:** C24 b, c, d, e, f are possible.

**KS:** Is the reading for (f) possible if none of the women is a self-helper, or does that not matter?

b) jigéen ñi di na ñu jàppale seen bopp  
 jigéen ñi di na ñu jàppale seen bopp  
 woman cl-the Aux PFV 3pl support 3pl head  
 The women will support themselves.

**Comment:** C24 b, c, d, e, f are possible.

**KS:** Is the reading for (f) possible if none of the women is a self-helper, or does that not matter?

c) jigéen ñi nataal na ñu seen bopp  
 jigéen ñ-I nataal na ñu seen bopp  
 woman cl-the nataal PFV 3pl head  
 The women photographed X.

**Comment:** C24 b, c, d, e, f are possible.

**KS:** Is the reading for (f) possible if none of the women is a self-helper, or does that not matter?

d) jigéen ñi wor na ñu  
 jigéen ñ-i wor-ante na ñu  
 woman cl-the betray-RCM PFV 3pl  
 The women betrayed each other. (reflexive not possible.)

**Comment:** C24a, c, f are possible.

#### 4.1.4.2 Reciprocal readings

C26) -ante strategy  
 "meet" \*daj-ante No

**Comment:** another strategy is used for this verb ( suffix –e, daj-e “meet”)

"see" gis-ante ok  
 "fight" \*xeex-ante No  
 "speak" wax-ante ok

**Comment:** Only in a context like this:

waxante na ñu lu bon “They say bad things to/about each other”  
"hit" door-ante ok

b) Does the strategy allow the constructions where X is understood to be a reciprocal which has a plural antecedent consisting of John and Bill (i.e., it would be understood as "John and Bill saw each other"). Are both "see" and "meet" possible in (C27), or is only one sort of verb acceptable?

C27) John met/saw X with Bill (Meaning: "John and Bill met/saw each other.")

**Comment:** No.

c) Is there any difference in the range of interpretations permitted for (C28a) as opposed to (C28b), or any difference in reciprocal strategies that support these interpretations?

C28a) John and Mary praised X.

b) The women praised X.

**Comment:** No difference in the range of interpretations.

d) Can the strategy express reciprocity between a subject and an indirect object?

C29a) John and Mary spoke to X.

**Comment:** Not for this verb

b) John and Mary met with X.

**Comment:** Not for this verb

c) John and Mary gave this book to X.

**Comment:** Yes

e) Long-distance reciprocal readings - For any of the strategies that permit a reciprocal reading, can the following sentence be translated to mean "Bill thinks he likes Mary, and Mary thinks she likes Bill"?

C30a) Bill ak Mary yaakaar na ñu ne bëggante na ñu

Bill ak Mary yaakaar na ñu ne bëgg-ante na ñu

Bill and Mary think PFV 3PL COMP like-RCM PFV 3PL

Bill and Mary think that they like X.

b) Bill ak Mary yaakaar na ñu ne bëgg naa leen

Bill ak Mary yaakaar na ñu ne bëgg na-a leen

Bill and Mary think PFV 3PL COMP like PFV -1SG 3PL.ACC

Bill and Mary think that I like X

**Comment:** This example does not allow the reading that ‘Bill thinks I like Mary and that Mary thinks I like Bill.’

#### 4.1.4.3 Sociative readings

Please translate these sentences, more than one way, if possible. Please be sure to let us know if any of the reciprocal or reflexive strategies can be used to achieve these readings.

C31a) golo yi      ànd      na ñu dem

golo y-i ànd na ñu dem  
 monkey cl-the go.together PFV 3pl go

b) golo yi àndandoo na ñu dem  
 golo y-i ànd-andoo na ñu dem  
 monkey cl-the go-go.together -COLL PFV 3pl go

c) golo yi demandoo na ñu  
 golo y-i dem-andoo na ñu  
 monkey cl-the go-go.together-COLL PFV 3pl  
 “The monkeys left together”

**Comment:** Either of these strategies can be used. For the first one the verb *ànd* “go together” is used along with the verb dem “go”, for sentence b) the collective suffix-andoo is added. This suffix looks very complex and seems to incorporate the verb *ànd* “go together” and the reciprocal suffix *-oo* (*-oo* strategy mentioned in section 2). The fact that the verb *ànd* “go together” can be used in this context has to do with the fact that we are dealing with a motion verb (“come” would follow the same pattern). With the non-motion verbs, *ànd* “go together” cannot be in the sentence. In C31c) only the collective suffix attaches to the verb; this is the canonical way of translating this sentence.

There are still two morphemes in the morpheme breakdown and three in the gloss. If *go.together = COLL*, then it makes sense, in which case use one or the other, but it does not make sense if there are three glossed morphemes (unless *-oo* is treated as a morpheme attached to *-and-*. Please clarify.

b) golo yi lekkandoo na ñu jën  
 golo y-i lekk-andoo na ñu jën  
 monkey cl-the eat-COLL PFV 3PL fish  
 The monkeys ate fish together

**Comment:** For this sentence, I can only think of this construction.

#### 4.1.4.4 Antipassive readings

C32a) xaj bee day màtte  
 xaj b-ee da-y màtt-e  
 dog cl-that Aux-HAB bite-ANTIPASS  
 That dog bites people.

b) nguur gi day jàppe  
 nguur g-i da-y jàpp-e  
 government cl-the Aux-HAB arrest-ANTIPASS  
 The government arrests people.

- c) Awa day tagge  
 Awa da-y tagg-e  
 Awa Aux-HAB praise-ANTIPASS  
 Awa praises people

**Comment:** These are treated as antipassive (Creissels and Nougier (2008) ).

## 4.2 Cross-clausal binding

### 4.2.1 Coreference relations across typical tensed clausal complement

**4.2.1.1 Tensed complement, long distance relations, anaphor in situ** - Please provide translations for all of these sentences where X is Jack.

- D1a) Jatu nee na moom dafa muus  
 Jatu nee na moom dafa muus  
 Jatu say PFV 3sg Aux.Foc smart  
 Jatu<sub>i</sub> said that X<sub>i</sub> is smart.

**Comment:** In the case where the strong pronoun is not used (but pro), X could be coreferent to Jatu or someone else.

- b) Jatu xam na ne Musaa bëgg na ko  
 Jatu xam na ne Musaa bëgg na ko  
 Jatu know PFV COMP Musaa like PFV him  
 Jatu<sub>i</sub> knows that Musaa<sub>j</sub> likes X<sub>i/\*j</sub>.

- c) Jatu xam na ne Moor nee na dafa muus  
 Jatu xam na ne Moor nee na dafa muus  
 Jatu know PFV COMP Moor say PFV Aux.Foc smart  
 Jatu<sub>i</sub> knows that Moor<sub>j</sub> said that X<sub>i/j</sub> is smart.

- d) Jatu foog na ne Awa xam na ne Kumba bëgg na ko  
 Jatu foog na ne Awa xam na ne Kumba bëgg na ko  
 Jatu think PFV COMP Awa knows PFV COMP Kumba like PFV him/her  
 Jatu<sub>i</sub> thinks that Awa<sub>j</sub> knows that Kumba<sub>k</sub> likes X<sub>i/j/\*k</sub>.

- e) Jatu foog na ne Awa xam na ne moom bëgg na Ayda  
 Jatu foog na ne Awa xam na ne moom bëgg na Ayda  
 Jatu think PFV COMP Awa know PFV COMP s/he like PFV Ayda  
 Jatu<sub>i</sub> thinks that Awa<sub>j</sub> knows that X<sub>i/\*j</sub> likes Ayda .

- f) Awa wax na Jatu ne Kumba bëgg na ko  
 Awa wax na Jatu ne pro Kumba bëgg na ko  
 Awa tell PFV Jatu COMP pro Kumba love PFV him/her  
 Awa<sub>i</sub> told Jatu<sub>j</sub> that Kumba<sub>k</sub> loves X<sub>i/j/\*k</sub>.

- g) Awa wax na Jatu ne bëgg na Kumba  
 Awa wax na Jatu ne pro bëgg na Kumba

Awa tell PFV Jatu COMP pro love PFV Kumba  
Awa<sub>i</sub> told Jatu<sub>j</sub> that X<sub>i/\*j</sub> loves Kumba.

**Comment:** In some of these examples, a silent pronoun is used, if the pronoun is overt the judgements can be different.

KS: Is it the case that the strong pronoun *ko* must be coreferent with something outside its clause but it prefers (requires) that it's antecedent is in the sentence, while the null subject has no such tendency.

KT: This could be relevant.

KS: This would seem to warrant that strong pronouns and null subjects are long distance strategies that should be kept distinct.

Potential subjunctives (in some languages)

D2a) Jatu nangu na ne Mary bëgg na ko

Jatu<sub>i</sub> nangu na ne Mary<sub>j</sub> bëgg na ko<sub>i/\*j</sub>

Jatu admit PFV COMP Mary love PFV 3SG.ACC

Jatu admitted that Mary loved X.

b) Jatu njort na ne Mary bëgg na ko

Jatu<sub>i</sub> njort na ne Mary<sub>j</sub> bëgg na ko<sub>i/\*j</sub>

Jatu suspect PFV COMP Mary love PFV 3SG.ACC

Jatu suspected that Mary loved X.

Please also let us know if differences in gender, plurality or person make a difference for which strategy succeeds. For example, if you replace Jatu in all of the Jatu sentences with first person "I" or second person "you" does the pattern change in any way? If so, we will follow up about this in section 4.4, so set it aside for now.

nangu naa ne Mary bëgg na ma

nangu naa<sub>i</sub> ne Mary<sub>j</sub> bëgg na ma<sub>i/\*j</sub>

admit PFV -1SG COMP Mary love PFV 1SG.ACC

I admitted that Mary loved me.

b) njort naa ne Mary bëgg na ma

njort na-a<sub>i</sub> ne Mary<sub>j</sub> bëgg na ma<sub>i/\*j</sub>

suspect PFV COMP Mary love PFV 3SG.ACC

I suspected that Mary loved me.

Please also test adjuncts, such as those in (D3), where X = Jeff.

D3a) Jeff wax na ci Mary bu ko Ella laajee

Jeff wax na ci Mary b-u ko Ella laajee

Jeff tell PFV about Mary CL-COMP 3SG.ACC Ella ask

Jeff told about Mary when Ella asked *him*.

b) Jeff dellu na kërëm balaa muy sonn  
 Jeff<sub>i</sub> dellu na kër-am balaa mu<sub>i</sub>-y sonn  
*Jeff* return PFV home-3SG.POSS *he* *become?*-IPFV tired  
 Jeff returned home before X became tired.

c) balaa Mary<sub>j</sub> di ko<sub>i/\*j</sub> bind, Jeff<sub>i</sub> dellu na kërëm  
 balaa Mary di ko bind, Jeff dellu na kër-am  
 before Mary AUX.IMPF 3SG.ACC write Jeff dellu PFV home- 3SG.POSS  
 Before Mary wrote to X, Jeff returned home.

d) Jeff<sub>i</sub> dem na te Mary<sub>j</sub> gisu ko<sub>i/\*j</sub>  
 Jeff dem na te Mary gis-u ko  
 Jeff leave PFV without Mary see-NEG 3SG.ACC  
 Jeff left without Mary seeing X.

e) Mary bañ na Jeff te dajewul ak moom  
 Mary<sub>j</sub> bañ na Jeff<sub>i</sub> te daje-wul ak moom<sub>i/\*j</sub>  
 Mary hate PFV Jeff without meet-NEG with him(3SG.NOM)  
 Mary *hated* Jeff without meeting X.

#### 4.2.1.2 Climbing from tensed complements

**Comment:** Not relevant unless we consider focus.

#### 4.2.2 Long distance relations and the variety of clausal embedding types

Consider what a list of major clause embedding types in your language would include. In English, it would include, besides tensed complements like those in the last subsection, infinitives, bare infinitives, gerunds, subjunctives (a lexically restricted class) and small clauses, each of which are illustrated in brackets in (X12).

X12a) yaakaar naa dem  
 yaakaar na-a dem  
 hope PFV-1SG leave  
 I hope [to leave]

yaakaar naa Moor dem  
 yaakaar na-a Moor dem  
 hope PFV-1SG Moor leave  
 I hope [for Moor to leave]

I persuaded Moor [to leave]

**Comment:** No good translation available.

b) demloo na Moor  
 dem-loo na Moor  
 leave-CAUS PFV Moor

I made [Moor leave]

- c) gis naa [kuy dem]  
gis na-a k-u-y dem  
see FIN-1sg cl-COMP-PROG leave  
I saw [someone leaving]

**Comment:** In the presence of the noun class for “human being” –k, the noun *nit* “person” does not have to be used as this noun class only refers to the word “person/human”.

- d) bëgg naa mu wax nank  
bëgg na-a mu wax nank  
want PFV -1SG he speak softly  
I require [that he speak softly]

- e) dama yaakaar ne Moor dafa soof  
da-ma yaakaar ne Moor da-fa soof  
AUX-1SG think COMP Moor AUX-3SG unpleasant  
I consider [Moor unpleasant]

In this subsection, we want you to construct sentences along the lines of those presented for tensed clauses above adjusting for the different complement clause types allowed in your language (which may be radically fewer than those in English, or may involve types of complementation not found in English). Then test each clausal type for the success or failure of each coreference strategy.

- D4a) Edgar ñaan na Moor mu gëm ko  
Edgar ñaan na Moor mu gëm ko  
Edgar<sub>i</sub> ask PFV Moor<sub>j</sub> he<sub>\*i/j</sub> trust him<sub>i/\*j</sub>  
Edgar asked Moor to trust X.

- b) Edgar ñaan na Moor mu jox ko benn téere  
Edgar ñaan na Moor mu jox ko benn téere  
Edgar<sub>i</sub> ask PFV Moor<sub>j</sub> he<sub>\*i/j</sub> give him<sub>i/\*j</sub> one book  
Edgar asked Moor to give a book to X.

- c) Edgar ñaan na Moor mu wax ak moom  
Edgar ñaan na Moor mu wax ak moom  
Edgar<sub>i</sub> ask PFV Moor<sub>j</sub> he<sub>\*i/j</sub> talk with him<sub>i/\*j</sub>  
Edgar asked Moor to talk to X.

**Comment:** Note the presence of a strong pronoun in the Preposition phrase.

- d) Edgar ñaan na Moor mu wax ci moom  
Edgar ñaan na Moor mu wax ci moom

Edgar<sub>i</sub> ask PFV Moor<sub>j</sub> he<sub>i/\*j</sub> talk P him<sub>i/\*j</sub>  
Edgar asked Moor to talk about X.

**Comment:** Note the presence of a strong pronoun in the Preposition phrase.

e) Edgar yaakaaroon na Moor gëm ko

Edgar<sub>i</sub> yaakaar-oon na Moor<sub>j</sub> gëm ko<sub>i/\*j</sub>  
Edgar hope -PST PFV Moor trust him  
Edgar expected Moor to trust X.

f) Edgar santoon na Moor mu fay ko

Edgar<sub>i</sub> sant-oon na Moor<sub>j</sub> mu <sub>i/\*j</sub> fay ko<sub>i/\*j</sub>  
Edgar order -PST PFV Moor pay him  
Edgar ordered Moor to pay X.

g) Edgar santoon na Moor mu wax ne moom muus na

Edgar<sub>i</sub> sant-oon na Moor<sub>j</sub> mu <sub>i/\*j</sub> wax ne moom<sub>i/j</sub> muus na  
Edgar order -PST PFV Moor he say COMP he smart FIN  
Edgar ordered Moor to say that X was smart.

h) Edgar santoon na Moor mu wax ne Mary bëgg na ko

Edgar<sub>i</sub> sant-oon na Moor<sub>j</sub> mu <sub>i/\*j</sub> wax ne Mary<sub>k</sub> bëgg na ko<sub>i/j/\*k</sub>  
Edgar order -PST PFV Moor he say COMP Mary love PFV smart  
Edgar ordered Moor to say that Mary loved X.

If infinitives in your language permit lexical subjects, either by exceptional Casemarking, as in (D5), or by a more general strategy (in English tied to the complementizer for) as in (D6), please also provide examples of this type.

D5a) Edgar expects X to win.

b) Edgar expects Moor to defeat X.

D6a) Edgar hopes for X to win.

b) Edgar hopes for Moor to defeat X.

**Comment:** No exceptional case marking on lexical subjects, only pronoun subjects as shown above with the pronoun *mu* used instead of *moom*.

If the coreferent nominal can be a possessive, provide also examples like the following:

D7a) Edgar yaakaaroon na Moor gëm maggam

Edgar<sub>i</sub> yaakaar-oon na Moor<sub>j</sub> gëm magg-am<sub>i/j</sub>  
Edgar hope -PST PFV Moor trust brother-3sg.POSS  
Edgar expects Moor to trust X's brother.

b) Edgar hopes for Moor to trust X's brother.

**Comment:** Same translation as D7a).

- c) Edgar yaakaaroon na maggam gëm ko  
 Edgar<sub>i</sub> yaakaar-oon na magg<sub>j</sub>-am<sub>i</sub> gëm ko<sub>i</sub>  
 Edgar hope -PST PFV brother-3sg.POSS trust him  
 Edgar expects X's brother to trust him.

d) Edgar hopes for Moor to trust X's brother.

**Comment:** Same translation as D7a).

Now try all of these "Edgar" sentences with climbing, such that the X argument is raised into the matrix clause.

- D5c) Edgar X-expects to win.  
 d) Edgar X-expects Moor to defeat.  
 D6c) Edgar X-hopes for to win.  
 d) Edgar X-hopes for Moor to defeat.

**Comment:** clitic climbing not permitted in the language in this position.

If your language permits small clauses, such as English *John considers Mary intelligent*, where *intelligent* is thus predicated of *Mary*, then try the following tests, where X = Tom.

- D8a) Tom considers X intelligent.  
 b) Tom considers Mary fond of X.  
 c) Tom considers Mary angry at X.

**Comment:** Not permitted.

Note: If your language permits verb serialization, special issues may arise for some of the questions we have been raising.

KS: Does Wolof have serial verbs?

Comment: As far as I know, no.

#### 4.2.3 Backwards anaphora

If your language permits sentential subjects like those in D9, please indicate if coreference succeeds where X is a pronoun or anaphor coconstructed with Oliver. Your language may not have a verb like *implicate*, but if so, try a verb that seems close, if possible. If your language does not permit clauses to be subjects without head nouns, then try something like "the fact that X was late upset Oliver." English permits the independent pronouns strategy to be used for such cases, but not all speakers like every example.

- D9a)\*? lu mu yéexa ñëw moo metti Oliver  
 l -u mu yéex-a ñëw moo metti Oliver  
 cl-COMP he slow-IPFV come FOC upset Oliver  
 That *he* was late upset *Oliver*.

**Comment:** If the sentence structure is different for instance; if D9a) have something like "That Oliver was late upset X", the result would be different.

D9a') lu Oliver yéexa ñëw moo ko metti

l-u Oliver yéex-a ñëw moo ko metti  
 CL-COMP Oliver slow-IPFV come FOC him upset  
 That *Oliver* was late upset *him*.

b) ?\* lu mu yéexa ñëw mooy wone na Oliver moo tooñ  
 l -u mu yéex -a ñëw moo -y wone na Oliver moo tooñ  
 cl-COMP he slow- IPFV come FOC -IMPF suggest PFV Oliver FOC guilty  
 That *he* was late suggested that *Oliver* was guilty.

c) That X was late made Oliver look guilty.

**Comment:** Same translation as D9b.

d) )?\* lu mu yéexa ñëw moo duggal Oliver  
 l -u mu yéex -a ñëw moo dugg-al Oliver  
 cl-COMP he slow- IPFV come FOC enter-CAUS Oliver  
 That *he* was late implicated *Oliver*.

### Section 4.3 Principle C-type effects

In English it is not possible to interpret he=Malik or he=the boy in (E1), except in some exceptional discourse circumstances such as extra stress and/or focus (and then not for everybody). For all of these examples, give judgments that indicate whether or not it is possible in normal discourse circumstances for the pronoun to be either Malik or the boy.

E1a) He criticized Malik.

**Comment:** No coreference possible between *he* and *Malik*.

b) nee na Mariam xas na Malik  
*pro* nee na Mariam xas na Malik  
*pro* say PFV Mariam criticize PFV Malik  
 He said Mariam criticized Malik.

c) He criticized the boy.

**Comment:** No coreference possible between *he* and *the boy*.

d) nee na Mariam xas na xale bi  
*pro* nee na Mariam xas na xale b-i  
*pro* say PFV Mariam criticize PFV child CL-the  
 He said Mariam criticized the boy.

Just to confirm – can *pro* be coreferent with ‘the boy’?

E2a) yaayam xas na Malik

yaay- am<sub>i</sub> xas na Malik<sub>\*i</sub>  
mother- 3SG.POSS criticize PFV Malik  
His mother criticized Malik.

Just to confirm – can *-am* be coreferent with *Malik*?

b) yaayam nee na Mariam xas na Malik  
yaay-am<sub>i/j</sub> nee na Mariam<sub>i</sub> xas na Malik<sub>j</sub>  
mother-3SG.POSS say PFV Mariam criticize PFV Malik  
His mother said Mariam criticized Malik.

Just to confirm – can *-am* be coreferent with *Malik*?

c) His mother criticized the boy.

**Comment:** No coreference possible.

d) His mother said Mariam criticized the boy.

**Comment:** No coreference possible.

E3a) ?\*góor gu mu bëgg, xas na Malik  
góor g-u mu<sub>i</sub> bëgg, xas na Malik<sub>\*i</sub>  
man CL-COMP he like, criticize PFV Malik  
The man who *he* liked criticized *Malik*

b)? \*góor gu mu bëgg, xas na xale bi  
góor g-u mu<sub>i</sub> bëgg, xas na xale b-i<sub>\*i</sub>  
man CL-COMP he like, criticize PFV child the  
The man who *he* liked criticized *the boy*.

c) ?góor gu ko bëgg, xas na xale bi  
góor g-u ko<sub>j</sub> bëgg, xas na xale bi<sub>?j</sub>  
man CL-COMP 3SG.ACC like, criticize PFV child the  
The man who liked *him* criticized *the boy*.

Now consider whether or not, in place of the pronoun, the name Malik could work as the antecedent for either Malik or the boy could work as the antecedent for the boy in the following sentences, again, paying attention to whether special discourse circumstances must be appealed to make the sentence sound natural (e.g., in English, (E4a) would sound natural if preceded by “Everyone criticized Malik. Jack criticized Malik, Mary did, and even Malik criticized Malik”, but this is one example of what I mean by a special discourse circumstance).

E4a) Malik xas na boppam  
Malik xas na bopp-am  
Malik criticize PFV head-3SG.POSS  
Malik criticized Malik.

Comment: I cannot find a context where I can have Malik as the object.

- b) Malik nee na Mariam xas na ko  
Malik nee na Mariam xas na ko  
Malik say PFV Mariam criticize PFV 3SG.ACC  
Malik said Mariam criticized Malik.

Comment: same situation as in E4a)

- c) The boy criticized the boy.

**Comment:** No coreference possible.

- d) The boy said Mariam criticized the boy.

**Comment:** No coreference possible.

E5a) yaayu Malik xas na Malik  
yaay-u Malik xas na Malik  
mother-GEN Malik criticize PFV Malik  
Malik's mother criticized Malik.

- b) yaayu Malik nee na Mariam xas na Malik  
yaay-u Malik nee na Mariam xas na Malik  
mother-GEN Malik say COMP Mariam criticize PFV Malik  
Malik's mother said Mariam criticized Malik.

- c) ? yaayu xale bi xas na xale bi  
yaay-u xale b-i xas na xale b-i  
mother-GEN child CL-the criticize PFV child CL-the  
The boy's mother criticized the boy.

- d) yaayu xale bi nee na Mariam xas na xale bi  
yaayu xale b-i nee na Mariam xas na xale b-i  
The boy's mother said Mariam criticized the boy.

E6a) ? góor gu Malik bëgg, xas na Malik  
góor g-u Malik bëgg, xas na Malik  
man CL-COMP Malik like, criticize PFV Malik  
The man who Malik liked criticized Malik

- b) ? góor gu xale bi bëgg, xas na xale bi  
góor gu xale b-i bëgg, xas na xale b-i  
man CL-COMP child CL-the like, criticize PFV child CL-the  
The man who the boy liked criticized the boy.

- c) góor gu bëgg xale bi , xas na xale bi

góor gu bëgg xale b-i, xas na xale b-i  
man CL-COMP child CL-the like, criticize PFV child CL-the  
The man who the boy liked criticized the boy.

**Comment:** Ea-c weird out of the blue but fine when narrating a story for instance or showing surprise.

Now consider whether the boy = Malik for the following examples

E7a) The boy criticized Malik.

**Comment:** No coreference possible.

b) xale bi nee na Mariam xas na Malik  
xale b-i nee na Mariam xas na Malik  
child CL-the say PFV Mariam criticize Malik  
The boy said Mariam criticized Malik.

**Comment:** No coreference possible.

c) Malik criticized the boy.

**Comment:** No coreference possible.

d) Malik nee na Mariam xas na xale bi  
Malik nee na Mariam xas na xale b-i  
Malik say PFV Mariam criticize child CL-the  
Malik said Mariam criticized the boy.

**Comment:** No coreference possible.

E8a) yaayu xale bi xas na Maalik  
yaay-u xale b-i xas na Maalik  
mother-GEN child CL-the criticize PFV Maalik  
The boy's mother criticized Malik.

**Comment:** No coreference possible.

b) yaayu xale bi nee na Mariam xas na Maalik  
yaay-u xale b-i nee na Mariam xas na Maalik  
mother-GEN child CL-the say PFV Mariam criticize PFV Maalik  
The boy's mother said Mariam criticized Malik.

**Comment:** No coreference possible.

c) Malik's mother criticized the boy.

**Comment:** No coreference possible.

d) Malik's mother said Mariam criticized the boy.

**Comment:** No coreference possible.

E9a) góor gu xale bi bëgg, xas na Malik

góor gu     xale b-i     bëgg, xas na Malik  
man CL-COMP child CL-the like, criticize PFV Malik  
The man who the boy liked criticized Malik

**Comment:** No coreference possible.

b) góor gu Malik bëgg, xas na xale bi  
góor gu     Malik bëgg, xas na xale b-i  
man CL-COMP Malik like, criticize PFV child CL-the  
The man who Malik liked criticized the boy.

**Comment:** No coreference possible.

c) The man who liked Malik criticized the boy.

**Comment:** No coreference possible.

d) The man who liked the boy criticized Malik

**Comment:** No coreference possible.

#### 4.4 More on long distance anaphor strategies

In many other languages, such as English, there is no long distance anaphor, and the independent pronoun strategy is used. If your language uses a special pronoun for LDA, it may be that the special pronoun has other uses. In some languages a special pronoun of this type is particularly required when referring back to the reported speaker or believer (a logophoric antecedent), as in D10.

D10) John yaakaar na ne moom sonn na  
John yaakaar na ne moom sonn na  
John believe COMP PFV 3SG tired PFV  
John believes he is *tired*.

**Comment:** I substituted “guilty” with “tired”; I hope it does not change anything. Without the overt pronoun *moom*, John is not necessarily the tired person.

4.4.1 Position of the antecedent - Long-distance coreference is often constrained in ways that local coreference is not. If your language is like English, then the reflexive form does not work in the position of X where X=Isaa.

**Comment:** Independent pronoun strategy is used in the following.

KS\*: Please state explicitly (if true) that the POSS.prn-HEAD strategy cannot be used if its antecedent is not in the same clause and illustrate this with appropriate translations of D11b,c (i.e., with POSS.prn-HEAD in the position of X)

Comment: You are right. The antecedent has to be in the same clause for the possessive to be there.

D11a) Lamin wax na Isaa ne Biram bëggu ko  
Lamin wax na Isaa ne Biram bëgg-u ko  
Lamin tell PFV Isaa COMP Biram like-NEG him  
Lamin told Isaa that Biram does not like X.

b) Isaa wax na Lamin ne Biram bëggu ko  
 Isaa wax na Lamin ne Biram bëgg-u ko  
 Isaa tell PFV Lamin COMP Biram like-NEG him  
 Isaa told Lamin that Biram does not like X.

c) Isaa wax na Lamin ne moom bëggul Biram  
 Isaa wax na Lamin ne moom bëgg-ul Biram  
 Isaa tell PFV Lamin COMP s/he like-NEG Biram  
 Isaa told Lamin that X does not like Biram.

KS: This is a case that could be translated without the strong pronoun. Does the presence of the strong pronoun require that *Isaa* is the antecedent, or is it just the most likely one? If the strong pronoun is missing, what are the possibilities?

Comment: With the strong pronoun, Isaa is the more logical antecedent. without it, both Lamin and Biram can be antecedents.

d) Lamin wax na Isaa ne moom bëggul Biram  
 Lamin wax na Isaa ne moom bëgg-ul Biram  
 Lamin tell PFV Isaa COMP s/he love-NEG Biram  
 Lamin told Isaa that X does not like Biram.

e) Lamin xam na ne Isaa yaakaar na ne Biram bëggu ko  
 Lamin xam na ne Isaa yaakaar na ne Biram bëgg-u ko  
 Lamin know PFV COMP Isaa think PFV COMP Biram love- NEG him  
 Lamin knows that Isaa thinks that Biram does not like X.

**Comment:** Are both *Lamin* and *Isaa* possible antecedents for *ko*?

f) Isaa xam na ne Lamin yaakaar na ne Biram bëggu ko  
 Isaa xam na ne Lamin yaakaar na ne Biram bëgg-u ko  
 Isaa know PFV COMP Lamin think PFV COMP Biram love- NEG him  
 Isaa knows that Lamin thinks that Biram does not like X.

D12a) yaayu Isaa yaakaar na ne Biram bëggu ko  
 yaay -u Isaa yaakaar na ne Biram bëgg-u ko  
 mother GEN Isaa think PFV COMP Biram like- NEGher  
*Isaa's* mother thinks that Biram does not like *him*.

b) yaayu Isaa yaakaar na ne moom bëggul Biram  
 yaay -u Isaa yaakaar na ne moom bëgg-ul Biram  
 mother GEN Isaa think PFV COMP s/he like- NEG Biram  
*Isaa's* mother thinks that *he* does not like Biram.

c) Isaa yaakaar na ne Biram bëggu ko  
 Isaa yaakaar na ne Biram bëgg-u ko  
 Isaa think PFV COMP Biram like- NEG him/her  
*Isaa* thinks that Biram does not like *him*.

d) bataaxal Isaa bi wone na Biram bëggu ko  
 bataaxal Isaa b-i wone na Biram bëgg-u ko  
 letter Isaa CL-the show PFV Biram like-NEG 3SG.ACC  
 Isaa's letter showed that Biram does not like X.

**Comment:** No good translation possible because letters don't 'say'. I have tried with *wone* "show".

e) Isaa dégg na Awa bëggu ko  
 Isaa dégg na Awa beg-u ko  
 Isaa hear PFV Awa like-NEG him  
 Isaa heard that Awa did not like X.

D13a) Isaa nee na moom solal na boppam  
 Isaa nee na moom sol -al na bopp-am  
 Isaa say PFV s/he dress-CAUS PFV head-3sg.POSS  
 Isaa said that *s/he* had dressed *himself*.

b) Isaa nee na moom gaañ na boppam  
 Isaa nee na moom gaañ na bopp-am  
 Isaa say PFV s/he wound PFV head-3sg.POSS  
 Isaa said that *he* had wounded *himself*.

c) Isaa nee na jamu na  
 Isaa nee na jam-u na  
 Isaa say PER tattoo-RFM PFV  
 Isaa said that *he* had tattooed *himself*.

**Comment:** For D13c) this anticausative/reflexive form has to be used to convey the target meaning. Actually for D13a)-b) using a similar form would be possible (solu "get dressed"; gaañu "get wounded"). For all these forms, we are dealing with a middle form. In D13c) for instance, Isaa can be a patient or an agent even though that is culturally very unlikely.

Consider potential antecedents in other non-subject syntactic positions, as allowed by your language (e.g., in English, John related to Moor that Mary had slandered him where Moor = him).

#### 4.4.2 Antecedent properties

**4.4.2.1 Person** - Please replace Isaa in the Isaa paradigm of 4.4.1 with first and second person pronouns, and report the results. Even if most of the examples pattern exactly as third person cases do, please be careful to include sentences corresponding to (D13) in the Isaa paradigm.

D11a) Lamin wax na ma/la ne Biram bëggu ma  
 Lamin wax na ma/la ne Biram bëgg-u ma  
 Lamin tell PFV 1sg/ 2sg.ACC COMP Biram love-NEG me  
 Lamin told me/you that Biram does not like me.

- b) wax naa/nga Lamin ne Biram bëggu ma  
 wax na-a/nga Lamin ne Biram bëgg-u ma  
 tell PFV Lamin COMP Biram love-NEG me  
 I/you told Lamin that Biram does not like me.
- c) wax naa/nga Lamin ne man/yaw bëgguma/ bëgguloo Biram  
 wax na-a/nga Lamin ne man/yaw bëgg-u-ma/ bëgg-ul-oo Biram  
 tell PFV-1SG/2SG Lamin COMP I/you love-NEG-1sg/love-NEG-2sg Biram  
 I/you told Lamin that do not like Biram.

KS: If there is no overt pronoun, is the result different for either of these cases?

**Comment:** in the subordinate clause, the overt pronouns can be dropped.

- d) Lamin wax na ma/la ne man bëgguma/ bëgguloo Biram  
 Lamin wax na ma/la ne man bëgg-u-ma/ bëgg-ul-oo Biram  
 Lamin tell PFV 1sg/ 2sg.ACC COMP I/you love-NEG-1SG/ love-NEG-2sg Biram  
 Lamin told me/you that I/you do not like Biram.
- e) Lamin xam na ne ma/la yaakaar na ne Biram bëggu ma/la  
 Lamin xam na ne ma/la yaakaar na ne Biram bëgg-u ma/la  
 Lamin know PFV COMP 1sg/ 2sg.ACC think PFV COMP Biram love- NEG me/you  
 Lamin knows that I/you think that Biram does not like me/you.
- f) xam na-a/nga ne Lamin yaakaar na ne Biram bëggu ma/la  
 xam na-a/nga ne Lamin yaakaar na ne Biram bëgg-u ma/la  
 know PFV -1sg/2sg COMP Lamin think PFV COMP Biram love- NEG me/you  
 I/You know that Lamin thinks that Biram does not like me/you.

D12a) sama/sa yaay yaakaar na ne Biram bëggu ma/la  
 sama/sa yaay yaakaar na ne Biram bëgg-u ma/la  
 1sg/2sg.POSS mother think PFV COMP Biram like- NEG me/you  
 My/Your mother thinks that Biram does not like X.

b) sama/sa yaayu yaakaar na ne man/yaw bëgguma/bëgguloo Biram  
 sama/sa yaay yaakaar na ne man/yaw bëgg-u-ma/ bëgg-ul-oo Biram  
 1sg/2sg.POSS mother think PFV COMP I/you love-NEG-1SG/ love-NEG-2sg Biram  
 My/Your mother thinks that I/you do not like Biram.

c) yaakaar naa/nga ne Biram bëggu ma/la  
 yaakaar na-a/nga ne Biram bëgg-u ma/la  
 Isaa think PFV -1sg/2sg COMP Biram like- NEG me/you  
 I/You think that Biram does not like X.

d) Isaa's letter said that Biram does not like X.

Comment: No good translation possible

e) dégg naa/nga        Awa bëggu ma/la  
 dégg naa/nga        Awa beg-u me/la  
 hear PFV -1sg/2sg    Awa like-NEG me/la  
 I/You heard that Awa did not like me/you.

f) Isaa was told that Mary did not like X. (if your language permits passive)

D13a) nee naa/nga (man/yaw) solal na sama/sa bopp  
 nee na-a/nga (man/yaw) sol -al na sama/sa bopp  
 say PFV -1sg/2sg (I/you) dress-CAUS PFV 1sg/2sg.POSS head  
 I/You said that I/you had dressed myself/yourself.

b) nee naa/nga (man/yaw) gaañ na sama/sa bopp  
 nee na-a/nga (man/yaw) gaañ na sama/sa bopp  
 say PFV -1sg/2sg (I/You) wound PFV 1sg/2sg.POSS head  
 I/you said that I/you had wounded myself/yourself.

c) nee naa/nga jamu naa/nga  
 nee naa/nga jam-u naa/nga  
 say PFV -1sg/2sg tatoo-RFM PFV -1sg/2sg  
 I/You said that I/you had tattooed myself/yourself.

**4.4.2.2 Quantified antecedents** - Review the examples in the Jatu, Issa and Edgar paradigms, replacing these names with "every child" and "no child" or "many children".

D11a) benn xale waxul Isaa ne Biram bëggu ko  
 b-enn xale wax-ul Isaa ne Biram bëgg-u ko  
 cl-one child tell-NEG Isaa COMP Biram love-NEG him  
*No child* told Isaa that Biram does not like *him*.

b) benn xale waxul Lamin ne Biram bëggu ko  
 b-enn xale wax-ul Lamin ne Biram bëgg-u ko  
 cl-one child tell-NEG Lamin COMP Biram love-NEG him  
*No child* told Lamin that Biram does not like *him*.

c) benn xale waxul Lamin ne moom bëggul Biram  
 b-enn xale wax-ul Lamin ne moom bëgg-ul Biram  
 cl-one child tell-NEG Lamin COMP s/he love-NEG Biram  
*No child* told Lamin that *he* does not like Biram.

d) Lamin waxul benn xale ne moom bëggul Biram  
 Lamin wax-ul b-enn xale ne moom bëgg-ul Biram  
 Lamin tell-NEG cl-one child COMP s/he love-NEG Biram  
 Lamin told *no child* that *s/he* does not like Biram.

e) Lamin xam na ne benn xale yaakaarul na ne Biram bëggu ko

Lamin xam na ne b-enn xale yaakaar-ul na ne Biram bëgg-u ko  
 Lamin know PFV COMP cl-one child think-NEG PFV COMP Biram love-NEG him  
 Lamin knows that *no child* thinks that Biram does not like *him/her*.

f) benn xale xamul ne Lamin yaakaar na ne Biram bëgg-u ko  
 b-enn xale xam-ul ne Lamin yaakaar na ne Biram bëgg-u ko  
 cl-one child know -NEG COMP Lamin think PFV COMP Biram love- NEG him  
*No child* knows that Lamin thinks that Biram does not like *him/her*.

D12a)? benn yaayu xale yaakaarul ne Biram bëgg-u ko  
 b-enn yaay -u xale yaakaar-ul ne Biram bëgg-u ko  
 cl-one mother-GEN child think-NEG COMP Biram like- NEG her  
*No child's* mother thinks that Biram does not like *him*.

**Comment:** Only fine with very special context and right intonation. For example, in case there was some misunderstanding, for instance there are many mothers...emphasis is put on *benn*.

b) ? benn yaayu xale yaakaarul ne (moom) bëggul Biram  
 b-enn yaay -u xale yaakaar-ul ne (moom) bëgg- ul Biram  
 cl-one mother-GEN child think-NEG COMP (s/he) like- NEG Biram  
 No child's mother thinks that X does not like Biram.

**Comment:** Only fine with very special context and right intonation. It's hard to find the context now, I guess when telling a story.

c) benn xale yaakaarul ne Biram bëgg-u ko  
 b-enn xale yaakaar-ul ne Biram bëgg-u ko  
 cl-one child think PFV COMP Biram like- NEG him/her  
*No child* thinks that Biram does not like *him*.

d) Isaa's letter said that Biram does not like X.  
 Comment: No good translation possible

e) benn xale déggul ne Awa bëgg-u ko  
 b-enn xale dégg-ul ne Awa bëgg-u ko  
 cl-one child hear-NEG COMP Awa like-NEG him  
*No one* heard that Awa did not like X.

D13a) benn xale neewul (moom) solal na boppam  
 b-enn xale nee-wul (moom) sol -al na bopp-am  
 cl-one child say-NEG s/he dress-CAUS PFV head-3sg.POSS  
*No child* said that *s/he* had dressed *herself/himself*.

b) benn xale neewul moom gaañ na boppam  
 b-enn xale nee-wul moom gaañ na bopp-am  
 cl-one child say-NEG s/he wound PFV head-3sg.POSS  
*No child* said that *s/he* had wounded *herself/himself*.

c) benn xale neewul ne jamu na  
 b-enn xale nee-wul ne jam-u na  
 cl-one child say -NEG COMP tatoo-RFM PFV  
*No child said that s/he had tattooed herself/himself.*

**Comment:** As shown earlier, if I use “every N” the structure of the sentences will have to change. Also remember that the “No N” phrase in Wolof triggers negation on the verb in the same clause. For “many N”, there will be just a difference in agreement; no new strategy is found.

**4.4.2.3 Split antecedents** - Sometimes coreference is permitted when the antecedents for the anaphor or pronoun are separate arguments. Please provide examples that correspond to those in the Ozzie (male) and Harriet (female) paradigm. In all cases, X = Ozzie and Harriet (together). For example, in English, (D14d) would be "Ozzie told Harriet that Moor dislikes them," where them would be Ozzie and Harriet.

D14a) ?\* Ozzie wax na ak Harriet ci ñoom ñaar  
 Ozzie wax na ak Harriet ci ñoom ñaar  
 Ozzie talk PFV with Harriet P them two  
 Ozzie talked about Harriet to themselves.

b)\* Ozzie wax na ak boppam Harriet  
 Ozzie wax na ak bopp-am Harriet  
 Ozzie tell PFV with head-3SG.POSS Harriet  
 Ozzie talked about themselves to Harriet.

**Comment:** No good translation

c) Ozzie wax na Harriet ne da ñoo wara dem  
 Ozzie wax na Harriet ne da ñoo wara dem  
 Ozzie tell PFV Harriet COMP Aux 3pl should go  
 Ozzie told Harriet that X should leave.

d) Ozzie wax na Harriet ne Bill bëggu leen  
 Ozzie wax na Harriet ne Bill bëgg-u leen  
 Ozzie tell PFV Harriet COMP Bill like-NEG 3PL.ACC  
 Ozzie told Harriet that Mike dislikes X.

e) Ozzie nee na Harriet yaakaar na ne Bill bëggu leen  
 Ozzie nee na Harriet yaakaar na ne Bill bëgg-u leen  
 Ozzie say PFV Harriet think PFV COMP Bill love-NEG 3PL.ACC  
 Ozzie said that Harriet thinks that Bill dislikes X.

**4.4.2.4 Discourse antecedents** - Sometimes, LDA strategies do not have to have antecedents in the same sentence if the discourse connections between sentences is strong. Please translate the

following scenarios using only the acceptable strategies that permit the corresponding English pronouns all to refer to Mark. Then give please tell us which strategies do not work, providing a translation and gloss, if it is significantly different from your acceptable translations of (D15) and (D16) (save time by setting aside cases where a given strategy could not ever work in the relevant grammatical position, e.g., English himself can never be the subject of a tensed sentence). Suppose that in the following scenarios we are being told what was going on in Mark's mind.

D15) Mark ragal na ne doomam am na lu ko nar-a dal.  
 Mark ragal na ne doom-am am na l-u ko nar -a dal.  
 Mark fear PFV COMP child-3sg.poss exist PFV cl-COMP 3SG.ACC may-IPFV happen.  
 Mark feared that his son was not safe.  
 ragal na ne du mëna aar mbokkam bu ko gënë jege.  
 pro ragal na ne d-u mën-a aar mbokk-am b-u ko gënë  
 jege.  
 pro fear PFV COMP aux-NEG can-IPFV protect relative-3SG.POSS cl-COMP 3SG.ACC more  
 close  
 He feared that he could not protect his closest relative.

lan la doomu ndijaayam yi nara wax ci moom?  
 l-an la doom-u ndijaay-am y-i nar-a wax ci moom?  
 cl-Q FOC child-GEN uncle- 3SG.POSS cl-the may-IPFV say P him  
 What would his cousins say about him?

**Comment:** In the first two sentences, clitic climbing occurs with ko “him”. The independent pronoun strategy works here; the pronoun could refer to either Mark or his son.

D16) Mark waaru na ci nataalam bu mu gis ci këyit gi  
 Mark waar-u na ci nataal-am b-u mu gis ci këyit g-i  
 Mark shock-RFM PFV P picture-3SG.POSS cl-COMP 3SG see P paper cl-the  
 Mark was shocked to see his picture in the paper.  
 soppeem yëpp di na ñu ko bàyyi. lu muy wax yaayam?  
 soppe-am y-ëpp di na ñu ko bàyyi. l-u mu-y wax yaay-am?  
 fan -3sg cl-all Aux PFV 3pl 3sg abandon cl-COMP 3sg-IPFV say mother- 3SG.POSS  
 All of his supporters would abandon him. How would he tell his mother?

**Comment:** Independent pronoun strategy.

The following scenario concerns what Morris is reporting to us about Mark, where all of the English pronouns are understood as referring to Mark, not to Morris. Please translate using any (or every) strategy for coreference with Mark that works (including the independent pronoun strategy). Then give please tell us which strategies do not work, providing a translation and gloss, if it is significantly different from your acceptable translations of (D17). If your language permits null subjects understood as pronouns, don't forget to consider that strategy.

D17) Morris nee na bës bi neexul ci Mark.

Morris nee na bës b-i neex-ul ci Mark.  
Morris say PFV day cl-the good-NEG P Mark  
Morris said it was a difficult day for Mark

benn, Morris wax na ko ne sàcc na ñu ootom  
benn, Morris wax na ko ne sàcc na ñu oto-am  
first Morris tell PFV 3SG.ACC COMP steal PFV 3PL car- 3SG.POSS  
First, Morris told him that his car had been stolen.

teg ci, mu mujee jël taksi bu muy dem liggéy.  
teg ci, mu mujee jël taksi b-u muy dem liggéy  
add P, 3sg be last take taxi cl-u 3SG-IMPF go work .  
Then he had to hire a taxi to take him to work.

Morris xalaat na ne war na mer.  
Morris xalaat na ne war na mer  
Morris think PFV COMP should be mad  
Morris thought he might be angry.

Now suppose that Mark has recently been in the news and he is the topic of our conversation. Speakers A and B use pronouns to refer to him. Please translate using the strategy or strategies in your language that permit coreference with Mark. Once again, please tell us which strategies do not work, providing a translation and gloss, if it is significantly different from your acceptable translations of (D18).

D18) A: xoolal! Mark ngi nii!  
xool-al! Mark ngi nii!  
look-IMPF !Mark PROG here  
Look, there's Mark!

B: rafet na!  
rafet na  
beautiful PFV  
He is so handsome.

A: wante bëggu ma nekk jabaram. jigéen yëpp koy topp!  
wante bëgg -u ma nekk jabar-am. jigéen y-ëpp ko-y topp!  
but want-NEG 1SG.ACC be wife-his woman cl-all him-IMPF follow  
I would not want to be his wife though. All the women are chasing him.

B: teg ci, da ma yaakar ne da fa bari tiitër  
teg ci, da ma yaakar ne moom da fa bari tiitër

teg ci, da ma yaakar ne moom da fa bari tiitër  
 add P, Aux 1sg think COMP he Aux 3sg much vanity  
 Also, I think he praises himself too much.

#### 4.4.3 Blocking Effects

**4.4.3.1 Features of intervening subjects** - The following examples test for an intervening subject that is mismatched for person, gender, or number. Construct more examples if you suspect that other feature combinations are relevant in your language. In each case in (D19), X = Larry, unless designated otherwise. If the only successful strategy permitted here is the independent pronoun strategy, then please indicate this.

D19a) Larry yaakaar na ne John faale na ko  
 Larry yaakaar na ne John faale na ko  
 Larry think PFV COMP John respect PFV him  
 Larry<sub>i</sub> thinks that John<sub>j</sub> respects him<sub>i/\*j</sub>.

b) Larry yaakaar na ne man faale na ko  
 Larry yaakaar na ne man faale na ko  
 Larry think PFV COMP I respect PFV him  
 Larry<sub>i</sub> thinks that I<sub>j</sub> respect him<sub>i/\*j</sub>.

c) Larry yaakaar na ne Mary faale na ko  
 Larry yaakaar na ne Mary faale na ko  
 Larry think PFV COMP Mary respect PFV him  
 Larry<sub>i</sub> thinks that Mary<sub>j</sub> respects him<sub>i/\*j</sub>.

d) Larry yaakaar na ne xale yi faale na ñu ko  
 Larry yaakaar na ne xale y -i faale na ñu ko  
 Larry think PFV COMP child cl-the respect PFV 3PL him  
 Larry<sub>i</sub> thinks that the boys<sub>j</sub> respect him<sub>i/\*j</sub>.

e) góor yi yaakaar na ñu ne xale yi faale na ñu leen  
 góor y -i yaakaar na ñu ne xale yi faale na ñu leen  
 men cl-the think PFV 3PL COMP child cl-the respect PFV 3PL them  
 The men<sub>i</sub> think that the boys<sub>j</sub> respect them<sub>i/\*j</sub>.

Same tests, with the intervening subject in an intermediate clause:

D20a) Larry yaakaar na ne Moor xam na ne Dave faale na ko  
 Larry yaakaar na ne Moor xam na ne Dave faale na ko  
 Larry think FIN COMP Moor<sub>j</sub> know PFV COMP Dave respect PFV him  
 Larry<sub>i</sub> thinks that Moor knows that Dave respects him<sub>i/j/\*k</sub>.

b) Larry yaakaar na ne man xam na ne Dave faale na ko  
 Larry yaakaar na ne man xam na ne Dave faale na ko

Larry think FIN COMP I know PFV COMP Dave respect PFV him  
 Larry<sub>i</sub> thinks that I know that Dave<sub>k</sub> respects him<sub>i/\*k</sub>.

c) Larry yaakaar na ne Mary xam na ne Dave faale na ko  
 Larry yaakaar na ne Mary xam na ne Dave faale na ko  
 Larry think FIN COMP Mary know PFV COMP Dave respect PFV him  
 Larry<sub>i</sub> thinks that Mary<sub>j</sub> knows that Dave<sub>k</sub> respects him/her<sub>i/j/\*k</sub>.

d) Larry yaakaar na ne xale yi xam na ñu ne Dave faale na ko  
 Larry yaakaar na ne xale y -i xam na ñu ne Dave faale na ko  
 Larry think FIN COMP child cl-the know PFV 3PL COMP Dave respect PFV him  
 Larry<sub>i</sub> thinks that the boys know that Dave<sub>k</sub> respects him<sub>i/\*k</sub>

e) góor ñi yaakaar na ne xale y i xam na ñu ne Dave faale na leen  
 góor ñi yaakaar na ne xale y-i xam na ñu ne Dave faale na leen  
 man cl-the think PFV COMP child cl-the know PFV 3PL COMP Dave respect PFV them  
 The men<sub>i</sub> think that the boys<sub>j</sub> know that Dave<sub>k</sub> respects them<sub>i</sub>.

**4.4.3.2 Positions of the intervener** - The following examples rely only on person mismatches (where X = Waali). If you also found number or gender mismatches above, give some examples. Once again, if all of these examples are only acceptable with the independent pronoun strategy, then just say so and provide translations.

D21a) Waali yaakaar na ne Bill wax na Harry ne Dave bëgg na ko  
 Waali yaakaar na ne Bill wax na Harry ne Dave bëgg na ko  
 Waali think PFV COMP Bill tell PFV Harry COMP Dave like PFV 3SG.ACC  
 Waali<sub>i</sub> thinks that Bill told Harry that Dave likes him<sub>i</sub>.

b) Waali yaakaar na ne Bill wax na ma ne Dave bëgg na ko  
 Waali yaakaar na ne Bill wax na ma ne Dave bëgg na ko  
 Waali think PFV COMP Bill tell PFV 1SG COMP Dave like PFV 3SG.ACC  
 Waali<sub>i</sub> thinks that Bill told me that Dave likes him<sub>i</sub>.

c) Waali wax na ma ne Dave bëgg na ko  
 Waali wax na ma ne Dave bëgg na ko  
 Waali tell FIN 1SG COMP Dave like PFV 3SG.ACC  
 Waali<sub>i</sub> told me that Dave likes him<sub>i</sub>.

d) Waali dégg na ne Dave jox na ma ab téere ci moom  
 Waali dégg na ne Dave jox na ma a-b téere ci moom  
 Waali hear PFV COMP Dave give 1SG a-CL book P 3SG.ACC  
 Waali<sub>i</sub> heard that Dave gave me a book about him<sub>i</sub>.

**Comment:** These are all possible with the independent pronoun strategy.

#### 4.4.4 Islands

Do syntactic islands affect the acceptability of the current strategy? For all the examples in this section, Ira = X.

D22a) Ira xam na ne Mary bëggu ko  
Ira xam na ne Mary bëgg -u ko  
Ira know PFV COMP Mary love-NEG him  
Ira<sub>i</sub> knows the fact that Mary hates him<sub>i</sub>.

b) Ira faale na góor gu ko bëgg  
Ira faale na góor g-u ko bëgg  
Ira respect PFV man CL-COMP him love  
Ira<sub>i</sub> respects the man who likes him<sub>i</sub>.

**Comment:** Note preverbal position of object pronoun.

c) Ira nee na góor gu ko bëgg da fa muus  
Ira nee na góor gu ko bëgg da fa muus  
Ira say PFV man cl-COMP him love Aux 3sg intelligent  
Ira<sub>i</sub> says that the man who likes him<sub>i</sub> is intelligent.

**Comment:** Note preverbal position of object pronoun.

d) Ira làcce na ndax Moor gis na ko  
Ira làcce na ndax Moor gis na ko  
Ira ask PFV whether Moor see PFV him  
Ira<sub>i</sub> asked whether Moor saw him<sub>i</sub>.

e) Ira làcce na kañ la ko Moor gis  
Ira làcce na kañ la ko Moor gis  
Ira ask PFV when FOC him Moor see  
Ira<sub>i</sub> asked when Moor saw him<sub>i</sub>.

**Comment:** Note clitic climbing

f) Ira yégu ne Musaa topp na ko  
Ira yég -ul ne Musaa topp na ko  
Ira realize-NEG COMP Musaa follow PFV him  
Ira<sub>i</sub> did not realize that Musaa followed him<sub>i</sub>.

g) Ira nee na Mary da fa rafet te da fa wara séy ak moom  
Ira say COMP Mary Aux 3sg pretty and Aux 3sg should marry with him  
Ira<sub>i</sub> said that Mary was pretty and that she would marry him<sub>i</sub>.

**Comment:** The independent pronoun is a strong pronoun.

#### 4.4.5 De se reading

Sometimes an interpretation of identity with an antecedent is tinged by a different meaning distinction. There is a famous ambiguity in D23 depending on whether or not the subject of believe is aware that he is referring to himself. The distinction is between two readings where his=Oedipus, that is, we are not interested, for these cases, in readings where his is not Oedipus. Now imagine that Oedipus thinks his step-mother (Step) is his biological mother - he just calls her "mother", because Step is the only mother he has ever known. Now let us suppose that Oedipus is the only one in town who is unaware who his biological mother (Bio) is, perhaps because Bio is a notorious person of whom polite people do not normally speak. People in town, in spite of what they know, generally refer to Step as Oedipus' mother, since no one wants to bring up the subject of Bio. Then Bio, long out of town, makes a surprise visit to the town to see Oedipus, whom she finds scowling in his front yard, angry at Step because she has punished him.. Bio spends some time with Oedipus, as others watch suspiciously, but Bio does not tell Oedipus who she is. Oedipus thinks Bio is nice. Then someone says D23a or D23b.

- D23a) Oedipus nee na yaayam                      baax na  
Oedipus nee na yaay-am                      baax na  
Oedipus say PFV mother-3SG.POSS nice PFV  
Oedipus says his mother is nice.
- b) Oedipus nee na yaayam                      soxor na  
Oedipus nee na yaay-am                      soxor na  
Oedipus say PFV mother-3SG.POSS mean PFV  
Oedipus says his mother is mean.

Comment D23a) sounds strange if it refers to Bio; I don't think I would say it; but I think I will accept it. D23b) is fine if Step is being referred to as the mother.

Now his in both examples is to be coconstrued with Oedipus, but his mother in (23a) refers to Bio, whom he does not know is his mother, while (D23b) refers to Step, who is the only one Oedipus thinks is his mother (though others know otherwise), and Oedipus is angry at her just now. In some languages, a different morphological form, a different pronoun for example, is used to distinguish the two readings. If your language is like English, then there is no morphological distinction between the pronouns in (D23a,b). Just say so and move on.

**Comment:** Like English

KS: Suppose that Oedipus has never seen his reflection and does not realize the image he sees of a person is his own. With that understanding, please translate:

- D25) yaakaar na ne ku mu gis, rafet na  
yaakaar na ne k-u mu gis, rafet na  
think PFV COMP CL-COMP see, handsome PFV  
He thinks he is handsome.

Does this example have the same translation when Oedipus is aware he is looking at his own reflection?

**Comment:** No.

**Reference**

Creissels, Denis and Nougier-Voisin, Sylvie. 2008. Valency-changing operations in Wolof and the notion of co-participation, in König, E. & V. Gast (eds.) *Reciprocal and Reflexives, Theoretical and typological explanations*. 289-305, Berlin: Mouton de Gruyter.

Additional references that can be checked:

Torrence, Harold. 2005. On the Distribution of Complementizers in Wolof. Unpublished dissertation manuscript. UCLA

This one deals with complementizers in Wolof; it is written in French. I have a hard copy available.

Sall, Adjaratou. 2005. *La subordination en wolof: Description syntaxique*, thèse de doctorat de 3<sup>ème</sup> cycle, Université de Dakar.