Anaphora in the African Languages - Questionnaire for language consultants

PART 2   An inventory of reflexive and reciprocal strategies

2.1   Coreference in a single clause

2.1.1   **Primary reflexive strategy**

A- Pronoun-*mɛ́fwó* strategy

A1ai) *Jean ɲǎmɛ̀ dɨ́g ɲɛ̀mɛ́fwó*
 Jean ɲɛ̀-ámɛ̀ dɨ́g ɲɛ̀-mɛ́fwó
 Jean SM-PST2 see PRN.3rd.sg-REFL
 "John saw himself."
Comment: With the verb 'to see' held constant in (A1), one can only have the unique reflexive reading as illustrate above.

2.1.2   Different reflexive strategy

B- Pronoun-*mɛ́* strategy

 A1aii)   *Jean ɲǎmɛ̀ dɨ́g ɲɛ̀mɛ́*
 Jean ɲɛ̀-ámɛ̀ dɨ́g ɲɛ̀-mɛ́
 Jean SM-PST2 see PRN.3rd.sg-REFL
 "John saw himself."
Comment: There is another slightly different possibility in to express (A1) with the verb 'see' held constant. This strategy consists of attaching the pronoun to the altered form of the REFL whereby the particle '*fwó*' is left out. It is worth mentioning that truncating the REFL does not affect in any way the meaning of the sentence.

2.1.3 In Makaa, some verbs of grooming such as 'wash' and 'shave' can either use the 'Pronoun-*mɛ́fwó*' or the 'Pronoun-*mɛ́*' strategiesto mark coreference or use a third strategy viz: 'Object-Null strategy'.

 ❖ Pronoun-*mɛ́fwó* strategy

 A2ai) *Jean ŋgɛ̀ gùsà ɲɛ̀mɛ́fwó*
 Jean ŋgɛ̀ gùsà ɲɛ̀-mɛ́fwó
 Jean PROG wash PRN.3rd.sg-REFL
 John washes himself OR John is washing himself

Comment: Sentence (A2ai) can have a double interpretation in Makaa. It can be understood as:
1) John washes himself or 2) John washes himself and he is alone (with no one around him).
Only the context permits to render the exact meaning.

❖ Pronoun-*mɛ́* strategy

A2aii) *Jean ŋgə̀ gùsà ɲə̀mɛ́*
        Jean ŋgə̀ gùsà ɲə̀-mɛ́
        Jean PROG wash PRN.3rd.sg-REFL
        John washes himself OR John is washing himself.

C- Object-Null strategy

  A2aiii) *Jean ŋgə̀ gùsà*
          Jean ŋgə̀ gùsà
          Jean PROG wash.REFL
          John washes himself OR John is bathing.

D- Body reflexive strategy (always with the noun ɲûl 'body')

  A2aiv) *Jean ŋgə̀ gùsà ɲûl*
          Jean ŋgə̀ gùsà ɲûl
          Jean PROG wash body.REFL
          John washes himself.
Comment: To avoid ambiguity of (A2ai), the speakers mostly use sentence (A2aiv) whereby ɲ**û**l semantically refers to Jean. For data entry: make sure any sentence references match IDs in the database once these sentences are entered. I connected this one.

    b) *Marie mə́ bə̂w*
       Marie mə́ bə̂w
       Marie PST1cut
       Mary has cut herself. [accidentally]

    c) *Jean ŋgə̀ gwə́g ʃwôn*
       Jean ŋgə̀ gwə́g ʃwôn
       Jean PROG hear shame
       John is ashamed of himself.

    d) *Jean mə́ gú ɲûl*
       Jean mə́ gú ɲûl
       Jean PST1 kill body.REFL
       John has destroyed himself.
KS: Does this mean committed suicide? Supposed what he destroyed was understood to be his political career or reputation – would you use *ɲə̀-mɛ́fwó*?
NI: No it does not mean committed suicide. *gú ɲûl* has to do with acts one commits and that affect his well being, his career...Yes, it can be replaced by *ɲə̀-mɛ́fwó*. To express the meaning commited suicide, the sentence has to be written as below. *ɲə̀-mɛ́fwó renders the sentence odd.*
    d$_i$) *Jean mə́ gwîljà ɲûl*

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Jean mɔ́ gwîl-jà ɲûl
Jean PST1 kill-RFM body.REFL
John has killed himself.

To express the meaning commited suicide, the sentence has to be written as in d_i. *ɲɔ̀-mɛ́fwó renders the sentence odd.*

e) *Sɔ́m fɨm sɔ́mɛ́fwó*
Sɔ̂-m[1] fɨm sɔ̂-mɛ́fwó
we-COP hate PRN.1st.pl-REFL
We hate ourselves.

f) *Bwɔ́ ŋgɔ̀ fààg bwɔ́mɛ́fwó*
Bwɔ́ ŋgɔ̀ fààg bwɔ́-mɛ́fwó
they PROG praise PRN.3rd.pl-REFL
They are praising themselves

2.1.4 Obliques and other argument types

E- Verb-jà strategy

A3ai)*Jean ɲămɔ̀ síjà ʃilú*
Jean ɲɔ̀-ámɔ̀ sà-jà ʃilú
Jean SM-PST2 do-RFM.CAUS hair
John got his hair styled OR John caused someone to style his hair.

Comment: In general, the morpheme –*al* suffixed to the root of a verb marks causative, see A3aii. However, in A3ai, the causative meaning is expressed by the inherent meaning of the verb phrase *síjà ʃilú* 'to cause someone style one's hair'.

aii) *Jean mɔ́ gwíljà*
Jean mɔ́ gû-al-jà
Jean PST1 die-CAUS-RFM
John has killed himself or caused himself to die

Comment: It can be noticed in A3ai and aii that the suffixation of the RFM *jà* to the verb triggers some changes such as the raising or shifting of the verb root vowel and/or the labio-velarization of the verb onset (see A3aii).

Not for database entry
Comment: KS: It is apparent that there is at least a lot of morphological overlap with *jà* where it contributes a reciprocal interpretation. In the latter case, it would normally be glossed RCM, but if it is indeed the same affix that is interpreted as either reciprocal or reflexive according to context (or something in between – for another time), then we may want it to have the same gloss everywhere. Until it is clear what is best, I will let it stand as RFM or RCM according to

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[1] For the purpose of this questionnaire, it is a difficult task to identify the role played by the morpheme -*m*- in Makaa grammar. It looks like the split form of PST1 *mɔ́*. However, in A2e it seems to express present tense. On the other hand, if the sentence is written*Sɔ́ mɔ́ fɨm sɔ́mɛ́fwó*, it will mean something like 'we started hating ourselves' some while ago. Further studies being therefore required to say what the function of this morpheme is, I will gloss it as 'xx' all through this questionnaire.

F- Noun (Object) + Possessive strategy
Comment: This is a pronominal strategy taking into consideration the fact that 'his' as in 'his car' is considered a possessive pronoun in English whereas in French it is a 'a possessive adjective'. It should be treated differently from other pronominal strategies in Makaa since it involves a different class of pronoun.

b) *Jean$_i$ ɲǎmà têɲ ʧig ʤé$_i$*
   Jean ɲɑ̀-ámà têɲ ʧig ʤj-ɛ́
   Jean SM-PST2 tell   c7.life c7-POSS.3rd.sg
   John spoke about his life. (subject/PP argument)

Comment: In A3b, the c7-POSS.3rd.sg*ʤé*is coreferent with Jean. The c7 agrees with the head noun and 3rd.sg with 'Jean'?. Both forms change depending on the head noun nominal class and the person of the subject (See 2.2.2.11

c) *Jean$_i$ ɲǎmà têɲ Marie$_i$ ʧig ʤé$_i$*
   Jean ɲɑ̀-ámà   têɲ Marie ʧig ʤj-ɛ́
   Jean SM-PST2 narrate Marie c7.life c7-Poss.3rd.sg
   John told Marie about himself. (same, with intervening NP)

Comment: In A3c, the c7-POSS.3rd.sg*ʤé*can be coreferent eitherwith Jean or with Marie. The sentence is ambiguous and can mean that 'John told Mary about himself' or that 'John narrated Mary's life story to a third party'. This construction needs to be in context for the ambiguity to be neutralized.

di) *Bill ɲǎmà têɲ sâ$_i$ ʧig ʤísú$_i$*
   Bill ɲɑ̀-ámà têɲ sâ ʧig ʤí-sú
   Bill SM-PST2 narrate PRN.1Pl.EXCL c7.life c7-POSS.1Pl.EXCL
   Bill told us about ourselves. (object/argument)

Comment: In A3di, the c7-POSS.1Pl.EXCL *ʤísú* is coreferent with *sâ* Bill excluded.

dii) *Bill$_i$ ɲǎmà têɲ ʃjé$_i$ ʧig í-ʃjé$_i$*
   Bill ɲɑ̀-ámà têɲ ʃjé ʧig í-ʃjé
   Bill SM-PST2 narrate PRN.1st.pl.INCL c7.life c7-POSS.1st.pl.INCL
   Bill told us about ourselves. (object/argument)

Comment: In A3dii, the c7-POSS.1st.pl.INCL *í-ʃjé* is coreferent with *ʃjé,* the inclusive reading can include Bill.

e) *Maria ɲămə̀ jə̀ bwân_i bwə́mɛ́fwó_i*

Maria ɲə̀-ámə̀ jə̀ bwân bwə̀-mɛ́fwó

Mary SM-PST2 give children PRN.3rd.pl-REFL

Mary gave the children to themselves. (ind.object/object)

KS: Is this example OK with *bwə̀-mɛ́*? NI: Yes it is.

Pronoun-*dí* strategy – A subcase of the independent pronoun strategy

Comment: Sentence A3f shows the use of a personal pronoun associated with the locative marker*dí*to obtain a prominent pronoun that is coconstrued with the subject of the sentence.In the sentence 'W*ə̆mə̀ díg Jean? Mbô, mə̀ ngə̀ kə̀ ɲə́dí ɲə́dí* 'Did you see Jean? I am going to his place',*ɲə́dí* refers to *Jean.* Yes in (f), ɲə́dí could refer to someone else in the discourse, e.g: *Jean ɲă̆mə̀ tʃì nə̀ Maria ɲă̆mə̀ díg kálàd ɲə́dí mpɨ́sə̀.*'John said that Marie saw a book behind him/her'*ɲə́dí* in the last sentence refers either to John or Marie depending on the speakers intention.

f) *Maria ɲă̆mə̀ díg kálàd ɲə́dí mpɨ́sə̀*

Maria ɲə̀-ámə̀ díg kálàd ɲə̀-dí mpɨ́sə̀

Mary SM-PST2 see book PRN.3rd.sg-LOC behind

Mary saw a book behind her (or behind s.o. else if mentioned earlier). (subject/locative)

Preposition *ʃúl* (for) + Pronoun – A subcase of the independent pronoun strategy.

Comment: *dɛ́* in *(gi)* refers solely to John. But in a discourse where someone else was mentioned as a potential benefactive, it could also refer to him. In this special example it is bound locally. (see 2.2.2.10 for complete paradigm).

gi) *Jean ɲă̆mə̀ kùsə̀ kálàd ʃúl dɛ́*

Jean ɲə̀-ámə̀ kùsə̀ kálàd ʃúl dɛ́

Jean SM-PST2 buy book for PRN.PREP.OBJ.3rd.sg.

John bought a book for himself. (benefactive)

gii) *Jean ɲă̆mə̀ kùsə̀ kálàd ʃúl ɲə̀mɛ́fwó*

Jean ɲə̀-ámə̀ kùsə̀ kálàd ʃúl ɲə̀-mɛ́fwó

Jean SM-PST2 buy book for PRN.3rd.sg-REFL

John bought a book for himself. (benefactive)

giii) *Jean ɲă̆mə̀ kùsə̀ kálàd ʃúl dɛ́ ɲə̀mɛ́*

Jean ɲə̀-ámə̀ kùsə̀ kálàd ʃúl dɛ́ ɲə̀-mɛ́

Jean SM-PST2 buy book for PRN.PREP.OBJ.3rd.sg PRN.3rd.sg-REFL

John bought a book for himself only. (benefactive)

h) *Jean ɲă̆mə̀ gwə́g mpìmbə̀ nə̀ nɛ́.*

Jean ɲə̀-ámə̀gwə́g mpìmbə̀ nə̀ nɛ́

Jean SM-PST2 hear angriness with PRN.3sg

John got angry with her/him.

A4a) *Etta mɔ́ ʧjɛ̀l ɲàmɛ́fwó*
　　　Etta mɔ́ ʧjɛ̀l ɲà-mɛ́fwó
　　　Etta COP like PRN.3rd.sg-REFL
　　　Etta likes herself.

biii) *Etta mɔ́ bìì ífwàs*
　　　Etta mɔ́ bìlí-fwàs
　　　Etta PST1 holdC8-fear
　　　Etta has scared herself.
For data entry, make sure the numbers for bi-iii refer to each other by ID in the database

2.1.5　Person and number
　　　Makaa does not use strategies different from those I have listed in the preceding sections, which depend on person and number.

　A5a) *Màámà̀ dɨ́g mɔ́mɛ́fwó*
　　　Mà-ámà̀ dɨ́g mà-mɛ́fwó
　　　PRN.1st.sg-PST2s ee PRN.1st.sg-REFL
　　　I saw myself.

　　b) *Wàámà̀ bêw*
　　　Wà-ámà̀ bêw
　　　PRN.2nd.sg-PST2 cut
　　　You cut yourself [accidentally].

　　c) *ʃwéé kà gùsà*

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> *ʃwâ-é kà gùsà*
> PRN.1st.Pl.dual-FUT1go bath
> We will go bathe ourselves.

   d) *Kwíndjágá bíméfwó*
> *Kwínd-já-gá bî-méfwó*
> Help.someone-RCM-IMP.2ⁿᵈ.pl PRN.2ⁿᵈ.pl-REFL
> Help each other!

COMMENT: In Makaa, there is a difference between the verbs *kwìd* 'to help'and *kwínd* 'to help someone'. In (A5d) *–já* is not the RFM but the RCM. As I earlier stated, depending on the inherent meaning of the verb, *-ja* can be either be RFM or RCM. In Makaa, *–gá* marks imperative plural only.

KS: If *–já* is reciprocal here, why is the translation reflexive? Could this example also mean 'Help each other!' if PRN-REFL were not present? Also, why is the tone on the marker high in this context? I want to be sure this is not the passive morpheme.

NI: I have corrected the gloss, you are right. Without the PRN-REFL, A5d is grammatical and has the same meaning as the verb kwíínd is inherently reciprocal. The tone of the marker is high in this context due to the addition of the imperative marker. The same tonal change is noted when the imperative marker is added to low tone stems in Makaa. dà 'eat'→ dág (ɪᴍᴘ.Sg)/dágá (ɪᴍᴘ.sg). No it has nothing to do with the passive.

2.1.6 **Strategies for other clausemate environments**

Based on my linguistic skills, I cannot remember that there is any additional reflexive strategy I have not mentioned in the preceding sections. However, for comparative purposes I will just translate the sentences in (A6).

  A6a) *Jean mɔ́ mpú ɲə̀méfwó*
> *Jean mɔ́ mpù ɲə̀-méfwó*
> Jean PST know PRN.3rd.sg-REFL
> Peter knows himself.

   b) *Mital mɔ́ dɨ́ ʤùm ɲə̀méfwó*
> *Mital mɔ́ dɨ́-ʤùm ɲə̀-méfwó*
> Mital PST HAB-criticize/blame PRN.3rd.sg-REFL
> Mital habitualy criticizes/blame himself

c) *Mital mɔ́ ʧjèl dɨ́là fààg ɲə̀méfwó*
> *Mital mɔ́   ʧjèl   dɨ́-là   fààg   ɲə́-méfwó*
> Mital PST   like   HAB-INF   praise   PRN.3rd.sg-REFL
> Mital usually likes to praise himself.

Comment: The marker *mɔ́* gives me food for thought in Makaa. I have glossed it as PST for now, while waiting for a further thorough analysis of constructions with *mɔ́*.

Comment: *là* is the infinitive marker used as a derivational morpheme to obtain new verbs from existing verbs. I have preferred to change the verb because semantically, *fààg* means to praise, and *fáágɨ̀là* means to praise someone by offering him money.

  (b) In the Makaa language, quantificational constructions do not involve any separate strategy

different from the ones discussed earlier before.

A7a) *Mwá-mùdùm jêʃ ɲàá ngà dɨ́g nʤì ɲàmɛ́fwó*
    Mwân-mùdùm j-êʃ   ɲà-á   ngà dɨ́g nʤìɲà-méfwó
    Child-man   c1-QUANT   SM.3rd.sg-PST3 PROG see only PRN.3rd.sg-REFL
    Every boy looked at himself.

b) *Bùdà bêʃ bwáámà ʤàw bwɘ́mɛ́fwó ndàà Jean dísɘ́ jí*
    Bùdà b-êʃ bwâ-ámà   ʤàw bwà-mɛ́fwó ndàà Jean dísɘ̀jí
    Woman c2-QUANT SM.3rd.Pl-PST2 tell PRN.3rd.pl-REFL as Jean COP REL
    All the women described John to themselves.

c) *Jígìlì jêʃ ɲămà lwójà Bob ɲûl*
    jígìlì j-êʃ ɲà-ámà lwô-jà Bob ɲûl
    teacher c1-QUANT SM.3rd.sg-PST2 show-RFM Bob body.REFL
    Every teacher introduced himself to Bob.

KS: Does this example need both *jà* and *ɲûl* to have this meaning successfully? Is this possible with *ɲà-mɛ́fwó* in place of *ɲûl*? If it is possible, is there a difference in meaning? NI: Yes, *jà* and *ɲûl* are both needed for the meaning to be successful. Yes it is possible to have *ɲûl* replaced by *ɲà-mɛ́fwó* A7c, but with a slight change in the structure of the sentence as in A7c$_i$. A7ci is uttered in a context where someone failed to introduce teachers to Bob, so each of the teachers introduced himself then to Bob.

c$_i$) *Jígìlì jêʃ ɲămà lwójà ɲà-mɛ́fwó wó Bob*
    jígìlì j-êʃ ɲà-ámà lwô-jà wó Bobɲûl
    teacher c1-QUANT SM.3rd.sg-PST2show-RFM Prep Bob
    Every teacher introduced himself to Bob.

d) *Bɔ́l bwân bwáámà ngà kwínd nʤì bwɘ́mɛ́*
    Bɔ́l   bwân   bwâ-ámà   ngà   kwínd nʤì   bwɘ́-mɛ́
    some   children   SM-PST2   PROG help.someone only PRN.3rd.pl-REFL
    Some children were helping only themselves.

Comment: The verb kwínd means to 'help someone' so the addition of *nʤi bwɘ́mɛ́* provides the exclusive meaning.

(c) Makaa has no system of grammaticized honorifics.

(d) Examples in A9 reveal no new strategy.

A9a) *Sol ŋgà ʧì ná Alice mɘ́ ʧjèl ɲàmɛ́*
    Sol ŋgà ʧì ná Alice mɘ́ ʧjèl ɲà-mɛ́
    Sol PROG say that Alice PST1 love PRN.3rd.sg-REFL
    Sol says that Alice loves herself.

b) *Sol má ʃílà ná Alice fáágɨg ɲɜ̀mɛ́*
   Sol máʃílà ná Alicefàὰg-ɨg ɲɜ̀-mɛ́
    Sol PST1 ask that Alice praise-HORT PRN.3rd.sg-REFL
   Sol have required that Alice praise herself.

c) *Sol ŋgɜ̀ tádɜ̀gὰ ná Alice má ʤɜ̀lá nɜ̀ fàὰg ɲɜ̀mɛ́*
   Sol ŋgɜ̀ tádɜ̀gὰ ná Alice má ʤɜ̀lá nɜ̀fàὰg ɲɜ̀-mɛ́
   Sol PROG think that Alice PST1 COP PREP praise PRN.3rd.sg-REFL
   Sol thinks that Alice should praise herself.

d) *Sol ɲámɜ̀ ʃílɜ̀ Alice ná à fáágɨg ɲɜ̀mɛ́*
   Sol ɲɜ̀-ámɜ̀ ʃílɜ̀ Alice ná à fàὰg-ɨg ɲɜ̀-mɛ́
   Sol SM-PST2 ask Alice that PRN.3rd.sg praise-HORT PRN.3rd.sg-REFL
   Sol asked Alice to praise herself.

e) *Sol má ʧʃὲl fàὰg ɲɜ̀mɛ́*
   Sol má ʧʃὲl fàὰgɲɜ̀-mɛ́
   Sol PST1 like praise PRN.3rd.sg-REFL
   Sol likes praising herself.

f) *Sol ŋgɜ̀ bwánd ná Alice fáágɨg ɲɜ̀mɛ́*
   Sol ŋgɜ̀ bwánd nɜ̀Alice fàὰg-ɨg ɲɜ̀-mɛ́
   Sol PROG wait that Alice praise-HORT PRN.3rd.sg-REFL
   Sol expects Alice to praise herself.

g) *Sol ɲàámɜ̀ gwɜ́g Alice ŋgɜ́ fàὰg ɲɜ̀mɛ́*
   Sol ɲɜ̀-ámɜ̀ gwɜ́g Alice ŋgɜ̀ fàὰg ɲɜ̀-mɛ́
   Sol SM-PST2 hear Alice PROG praise PRN.3rd.sg-REFL
   Sol heard Alice praising herself.

Comment: In Makaa there are two pronouns glossed as 'he' or 'she' viz:*ɲɜ̀*and*à*. *ɲɜ̀*is the citation form and appears in front of vowel-initial elements while *à* context of occurrence is restricted to constructions whereby the immediate element that follows the subject position is consonant-initial.

2.2 Ordinary (potentially independent) pronouns

2.2.1 Independent use of pronouns

A10a) *Màámɜ̀ léʃà nɜ̀ Abraham nɜ̀kùgú.Nàámɜ̀ dɨ́g Lela.*
       Mɜ̀-ámɜ̀ lás-jà nɜ̀ Abraham nɜ̀kùgú. ɲɜ̀-ámɜ̀ dɨ́g Lela.
       PRN.1st.sg-PST2 talk-RCM with Abraham yesterday.PRN.3rd.sg-PST2 seeLela
       I spoke with Abraham yesterday. He saw Lela.

  b) *Abraham ʤì ŋgɜ̀ŵ? Màámɜ̀ díg ɲɜ̀ ʃíʃʃɛ̂mìkùs.*
     Abrahamʤì ŋgɜ̀ŵ mɜ̀-ámɜ̀ díg ɲɜ̀ ʃíʃʃɛ̂-mìkùs.

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Abraham COP wherePRN.1st.sg-PST2 see PRN.3rd.sgyard-sales
Where is Abraham? I saw him in the market.

ci) *Sàámà dɨg bî. Jà bjô bâŋ ʃí dɨg sâ?*

    Sâ-ámà   dɨg bî. Jà bî-ò bâŋ ʃí dɨgsâ

    PRN.1st.pl-PST2 seePRN.2nd.plINT.PRN PRN.2nd.pl-FOC PRN.DEM.2nd.pl EVID see PRN.1st.pl

    We saw you (Pl). Did you(Pl) see us indeed?

cii) *Sàámà dɨg wà. Jà wèɛ ɲè ʃí dɨg sâ?*

    Sâ-ámà dɨg   wà.   Jà   wà-ɛ̀   ɲè   ʃí   dɨg sâ

    PRN.1st.pl-PST2 see   PRN.2nd.sgINT.PRNPRN.2nd.sg-PRN.EMPH PRN.3rd.sg EVID[2]see PRN.1st.pl

    We saw you. Did you see us indeed?

2.2.2 Various types of pronouns

2.2.2.1 Simple human subject pronouns

Person	Pronoun
1Sg	*mà*
2Sg	*wà*
3Sg	*ɲà/a*
1Pl.EXCL	*sâ*
1Pl.INCL	*ʃé*
1Pl.du	*ʃwâ*
2Pl.	*bɪ̆*
3Pl	*bwâ*

A10ciii)*Mà bá léʃà nà Abraham mán.*

    Mà bálás-jà nà Abrahammán.

    PRN.1st.sgFUT2 talk-RCM with Abraham tomorrow

    I will speak withAbraham tomorrow.

2.2.2.2 Non-human subject pronouns

Noun Class	Noun Prefix	Example	Gloss	Pronoun
1	*mù-*	*mù-ùd*	person	-
1a	*Ø-*	*Ø-kâm*	monkey	*í*
	N-	*n-ʤôŋ*	stranger	-
2	*bù-*	*bù-ùd*	people	-
2a	*ò-*	*ò-kâm*	monkeys	-
		ò-ʤôŋ	strangers	-

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[2] EVID stands for evidential marker

3	L-	L-lâm	heart	í
4	mì-	mì-lâm	hearts	mí
4s		mì-jòwdà	breathing	mí
5	Ø-	Ø-lùùn	hole	í
5a	d-	d-ə́nd	home village	í
	ʤ-	ʤ-wôw	day	í
6	mà-	mà-lùùn	holes	mə́
6a	m-	m-ə́nd	home villages	mə́
		m-wôw	days	mə́
6s		mà-ntə̀nd	saliva	mə́
7	L-	L-ká	leaf	í
		L-bùmə́	(one) seed	í
8	ì-	ì-ká	leaves	í
		ì-bùmə́	seeds	í
8s		ì-bɔ̀wú	vegetables species	í
9	Ø-	Ø-fà	machete	í
10	N-	m-pùmə́	seed	í
10s		m-pwɔ̀djè	mud	í

Comment: The noun classes and their prefixes listed in the table above are adapted from Heath (2003:338). To differentiate simple noun classes from subclasses and singles noun classes, the former are written as X, the subclasses as Xa and the single classes as Xs. (X standing for numbers).

A10civ) *Mìlám mísə́ mpɨ̀ʃ.*
　　　Mì-lám mí-sə̀ mpɨ̀-ʃ.
　　　c4-heart SM.c4-COP.PRS pot-LOC
　　　The hearts are in the pot.

A10cv) *mí　　Ø　　mpɨ̀-ʃ*
　　　PRN.c4　PRS　pot-LOC
　　　They are in the pot.

2.2.2.3　Compound human subject pronouns

Singular	Pronoun	Plural	Pronoun
1Sg + 3Sg	*sə́ná*	1Pl + 3Pl	*sə́nǒ*
2Sg + 3Sg	*bìná*	2Pl + 3Pl	*bìnǒ*
3Sg + 3Sg	*báná*	3Pl + 3Pl	*bwə́nǒ/ bə́nǒ*

A10cvi) *Sáná séé léʃà mán.*
   Sâ-nà-à sâ-é lás-jà   mán.
   PRN.1st.pl-with-PRN.3rd.sg   SM-FUT1 talk-RCM tomorrow
   We (I and he) will talk tomorrow.

2.2.2.4 Human object pronouns

Person	Pronoun
1Sg	*mә̀*
2Sg	*wә̀*
3Sg	*ɲә̀*
1Pl.EXCL	*sâ*
1Pl.INCL	*ʃé*
1Pl.du	*ʃwâ*
2Pl.	*bî*
3Pl	*bwә̀*

A10cvii) *Méé léʃà nә̀ wà mán.*
   Mә̀-é   lás-jà   nә̀ wà mán.
   PRN.1st.sg-FUT1 talk-RCM with PRN.2nd.sg tomorrow
   I will talk to you tomorrow.

2.2.2.5 Non-human object pronouns

Noun class	Pronoun
1	*ɲә̀*
2	*bwә̀*
3	*wә̀*
4	*mjә̀*
5	*dwә̀*
6	*nwә̀*
7	*gwә̀*
8	*bjә̀*
9	*ɲwә̀*
10	*ɲwә̀*

A10cviii) *Jean ɲàámә̀ kùsә̀ ókúwò. À ŋgè wîil bwà ná ìfwán.*
   Jean ɲә̀-ámә̀ kùsә̀ ó-kúwò. à ŋgè wîil bwà ná ì-fwán
   Jean SM-PST2 buy c2-fowl. PRN.3rd.sg PROG feed PRN.OBJ.c2 with c8-corn
   Jean bought fowls. He is feeding them with corn.

2.2.2.6 Human reflexive pronouns

Person	1st form	2nd form

1Sg	*mà-mɛ́fwó*	*mà-mɛ́*
2Sg	*wà-mɛ́fwó*	*wà-mɛ́*
3Sg	*ɲà-mɛ́fwó*	*ɲà-mɛ́*
1Pl.EXCL	*sə́-mɛ́fwó*	*sə-mɛ́*
1Pl.INCL	*ʃé-mɛ́fwó*	*ʃé-mɛ́*
1Pl.du	*ʃwə́-mɛ́fwó*	*ʃwə́-mɛ́*
2Pl.	*bì-mɛ́fwó*	*bì-mɛ́*
3Pl	*bwə́-mɛ́fwó*	*bwə́-mɛ́*

A10cixa) *Mə́ fɨm mà-mɛ́fwó.*
        Mà fɨm mà-mɛ́fwó.
         PRN.1st.sg hate.PRS PRN.1st.sg-REFL
          I hate myself.

cvixb) *Mə́ fɨm mà-mɛ́.*
        Mà fɨm mà-mɛ́.
         PRN.1st.sg hate.PRS PRN.1st.sg-REFL
         I hate myself.

2.2.2.7 Non-human reflexive pronouns

Noun class	1st form	2nd form
1	*ɲə́-mɛ́fwó*	*ɲə́-mɛ́*
2	*bwə́-mɛ́fwó*	*bwə́-mɛ́*
3	*wə́-mɛ́fwó*	*wə́-mɛ́*
4	*mjə́-mɛ́fwó*	*mjə́-mɛ́*
5	*dwə́-mɛ́fwó*	*dwə́-mɛ́*
6	*nwə́-mɛ́fwó*	*nwə́-mɛ́*
7	*gwə́-mɛ́fwó*	*gwə́-mɛ́*
8	*bjə́-mɛ́fwó*	*bjə́-mɛ́*
9	*ɲwə́-mɛ́fwó*	*ɲwə́-mɛ́*
10	*ɲwə́-mɛ́fwó*	*ɲwə́-mɛ́*

A10cx) Mì*ʃíngà mí ŋgà ʤáàl mjə́mɛ́fwó.*
        Mì-*ʃíngà mí ŋgà ʤáàl mjə́-mɛ́fwó.*
        C4-cat SM PROG lick PRN.c4-REFL
        Cats are licking themselves.

2.2.2.8 Subject markers

Person	marker
1Sg	*mà*
2Sg	*wà*
3Sg	*ɲà/à*

1Pl.EXCL	*sâ*
1Pl.INCL	*ʃé*
1Pl.du	*ʃwâ*
2Pl.	*bì*
3Pl	*bwá*

A10cxi) *Mà màá mpújɛ́ ʤàmb.*

    Mà   *mà-à*   *mpù-ɛ́*   *ʤàmb*

    PRN.1st.sg   SM.1st.sg-NEG   know-NEG   witchcraft.

    I have nothing to do with witchcraft.

2.2.2.9 Object markers

Person	marker
1Sg	*mà*
2Sg	*wà*
3Sg	*ɛ̀*

A10cxii) *Marie ɲàámà jɛ̀ɛ́ kúmà.*

    Marie ɲà-ámà jà-ɛ kúmà

    Marie SM.3rd.sg-PST2 give-OM.3rd.sg cassava

    Marie gave cassava to her.

2.2.2.10 Preposition object pronouns

Person	marker
1Sg	*dɔ̂ŋ*
2Sg	*dwâ*
3Sg	*dɛ́/nɛ́*[3]
1Pl.EXCL	*ʤɨ́sú*
1Pl.INCL	*ʤɨ́ʃé*
1Pl.du	*ʤúʃwá*
2Pl.	*ʤíŋ*
3Pl	*dáŋ*

A10cxiiia) *Màámà kùsə́ fɨláwà ʃúl dwâ.*

    Mà-ámà kùsá fɨláwà ʃúl dwâ

    PRN.1st.sg-PST2 buy flower/rose for PRN.PREP.OBJ.2nd.sg

    I bought a rose for you.

cxiiib) *Màámà léʃà nà nɛ́*

    Mà-ámà   *lás-jà*   *nà*   *nɛ́*

    PRN.1st.sg-PST2   talk-RCM   with   PRN.PREP.OBJ.3rd.sg

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[3] With the preposition *nɛ́* held constant, the preposition object pronouns are similar to the object pronouns in 2.2.2.4 except that for the 3Sg.PRN form, there are two possibilities, namely, *ɲà* and nɛ́.

I had a talk with him.

2.2.2.11 The possessive determiner (pronoun)

Noun class	1Sg	2Sg	3Sg	1Pl.EXCL	1Pl.INCL	2Pl.	3Pl
	-ɔ́ŋ	-ə́ə́	-ɛ́	-sú	-ʃə́	-ín	-áŋ
1	w-ɔ́ŋ	w-ə́ə́	j-ɛ́	wú-sú	í-ʃə́	w-ín	w-áŋ
2	b-ɔ́ŋ	bw-ə́ə́	b-ɛ́	bɨ́-sú	ó-ʃə́	b-ín	b-áŋ
3	w-ɔ́ŋ	w-ə́ə́	j-ɛ́	wú-sú	í-ʃə́	w-ún	w-áŋ
4	mj-ɔ́ŋ	mj-ə́ə́	mj-ɛ́	mí-sú	mí-ʃə́	m-ín	mj-áŋ
5	d-ɔ́ŋ	dw-ə́ə́	d-ɛ́	dɨ́-sú	í-ʃə́	d-ín	d-áŋ
6	m-ɔ́ŋ	mw-ə́ə́	m-ɛ́	mɨ́-sú	má-ʃə́	mín	m-áŋ
7	dʒ-ɔ́ŋ	gw-ə́ə́	dʒ-ɛ́	dʒí-sú	í-ʃə́	dʒ-ín	dʒ-áŋ
8	bj-ɔ́ŋ	bj-ə́ə́	bj-ɛ́	bí-sú	í-ʃə́	b-ín	bj-áŋ
9	ɲ-ɔ́ŋ	ɲw-ə́ə́	ɲ-ɛ́	ɲí-sú	í-ʃə́	ɲ-ín	ɲ-áŋ
10	ɲ-ɔ́ŋ	ɲw-ə́ə́	ɲ-ɛ́	ɲí-sú	í-ʃə́	ɲ-ín	ɲ-áŋ

A10cxiva) *Marie ɲààmà jà bwà ìsá bjáŋ.*
        Marie ɲà-ámà jà bwà_i ì-sá bj-áŋ_i
        Marie ɲà-ámà jà bwà*ᵢ* ì-sá bj-áŋ*ᵢ*
        Marie PRN.3rd.sg-PST2 give PRN.OBJ.3rd.pl c8-thing c8-POSS.PRN
         Marie gave their things to them.

cxivb) *Marie ɲààmà jà bwà_i bjáŋ_i.*
        Marie ɲà-ámà jà bwà bj-áŋ
        Marie PRN.3rd.sg-PST2 give PRN.OBJ.3rd.pl c8-POSS.PRN
        Marie gave them theirs (things).

Comment: As a generalization, possessives in Makaa occur within noun phrases and function as anaphoric determiners (A10li). In the discourse however, there exist constructions whereby the head noun of the NP is left out and only the possessive surfaces as a pronoun that is coconstrued with a preceding element (see A10lii).

cxvb) *bwán bá lɔ̂ŋ òkálàd báŋ*
        bù-án   b-á ŋgà̀   lɔ̂ŋ   ò-kálàd   b-áŋ
        c2-child   c2.AGR-P3   PROG   read c2-book c2-POSS-PRN
        The boys read their books

KS: Does AGR.POSS allow for both group and distributed reflexive readings? For example 'The boys read their books" could mean that each boy read the books he had or it could mean the boys had all read the books that belong to them as a group? The sentence could mean that each boy read the books he had or the boys   had all read the books that belong to them as a group.

2.2.2.12 Emphatic personal pronouns

Person	1st from	More emph.1st form	2nd form	More emph.2nd form
1Sg	mɛ̀-ɛ́	mɛ̀-ɛ́-ɲɛ̀-ɛ́		-
2Sg	wɛ̀-ɛ́	wɛ̀-ɛ́-ɲɛ̀-ɛ́		-

3Sg	ɲɛ̀-ɛ̀	-	-	-
1Pl.EXCL	sá-báŋ	sá-báŋ-ɛ̀-ɲɛ̀-ɛ̀	sá-ó-báŋ	sá-ó-báŋ-ɛ̀-ɲɛ̀-ɛ̀
1Pl.INCL	ʃá-báŋ	ʃá-báŋ-ɛ̀-ɲɛ̀-ɛ̀	ʃá-ó-báŋ	ʃá-ó-báŋ-ɛ̀-ɲɛ̀-ɛ̀
1Pl.DUAL	ʃwá-báŋ	ʃwá-báŋ-ɛ̀-ɲɛ̀-ɛ̀	ʃwá-ó-báŋ	ʃwá-ó-báŋ-ɛ̀-ɲɛ̀-ɛ̀
2Pl.	bì-báŋ	bì-báŋ-ɛ̀-ɲɛ̀-ɛ̀	bì-ó-báŋ	bì-ó-báŋ-ɛ̀-ɲɛ̀-ɛ̀
3Pl	bwá-báŋ	bwá-báŋ-ɛ̀-ɲɛ̀-ɛ̀	-	-

cxva) *Mɛ̀ɛ̀ màámà̀ kùsá fɨláwà ʃúl dwâ.*

　　Mà̀-ɛ̀　mà-ámà̀　　　kùsá fɨláwà ʃúl dwâ

　　PRN.1st.sg-EMP.PRN SM-PST2　　buy flower/rose for PRN.OBJ.2nd.sg

　　I(as I am concerned) bought a rose for you.

cxvb) *Sá-ò-báŋ sáá mpújɛ́*

　　Sá-ò-báŋ　　　　　　　　　sà̀-á　　　mpù-ɛ́

　　PRN.1st.pl.EXCL-FOC-PRN.EMP　SM-NEG　　know.PRS-NEG

　　 We (as we are concerned and not any other group) don't know.

2.2.3 As far as I am concerned, I cannot remember constructions in Makaa whereby null arguments are accepted.

　A10d) **Dà̀ ʃû*

　　　　Ate fish.

　　　　 (meaning *he/she/they/it/we/you/I ate fish*)

Comment: This sentence would be acceptable if it had a subject marker.

　　e) *Hal ɲàámà̀ ɲífà̀*

　　　Hal ɲà̀-ámà̀ ɲífà̀

　　　Hal SM-PST2 hit

　　　Hal hit (meaning *Hal hit him/her/them/it/us/you/me*)

Comment: This sentence is only acceptable within a particular discourse/context. It can be understood and accepted if and only if it was stated earlier that Hal hit someone. A10e will be then uttered to confirm or reaffirm that Hal did hit someone already mentioned.

　　f) **Hal ɲàámà̀ lás nà̀*

　　　Hal ɲà̀-ámà̀　　　lás nà̀

　　　Hal PRN.3rd.sg-PST2 talk with

　　　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

NOTE FOR DATA ENTRY OF A10 – make sure references to sentence numbers are references to the database IDs.

　A10g) *Ali ɲàámà̀ fààg ɲà̀*

　　　Ali ɲà̀-ámà̀ fààg ɲà̀

　　　Ali PRN.3rd.sg-PST2 praise PRN.3rd.sg

　　　Ali praised him.

Comment: No possible coreference between *ɲà̀* and *Ali* here.

gi) *Ali ɲàámà̀ fààgɛ́*
  Ali ɲà̀-ámà̀ fààg-ɛ́
  Ali PRN.3rd.sg-PST2 praise-OM.3rd.sg
  Ali praised him.
Comment: In A10g there is no possible coreference between Ali *ɲà̀* and *ɛ́*.

h) *Ali mɑ́ ʧjɛ̀l ɲà̀*
  Ali mɑ́ ʧjɛ̀l ɲà̀
  Ali PST1 like PRN.3rd.sg
  Ali has liked him.
Comment: No possible coreference between *ɲà̀* and *Ali* here.

hi) *Ali mɑ́ ʧjɛ̀lɛ́*
  Ali mɑ́ ʧjɛ̀l-ɛ́
  Ali PST1 like-OM.3rd.sg
  Ali has liked him.
Comment: In A10h there is no possible coreference between Ali *ɲà̀* and *ɛ́*.

i) *Ali ɲà̀à dɨ́g ɲà̀*
  Ali ɲà̀-à dɨ́g ɲà̀
  Ali SM-PST3 see PRN.3rd.sg
  Ali saw him
Comment: No possible coreference between *ɲà̀* and *Ali* here.

ii) *Ali ɲà̀à dɨ́gɛ́*
  Ali ɲà̀-à dɨ́g-ɛ́
  Ali SM-PST3 see-OM.3rd.sg
  Ali saw him
Comment: In A10i there is no possible coreference between Ali *ɲà̀* and *ɛ́*.

j) *Ali ɲà̀ámà̀ léʃà̀ nà̀ nɛ́*
  Ali ɲà̀-ámà̀ lás-jà̀ nà̀ nɛ́
  Ali SM-PST2 speak-RCM with PRN.PREP.OBJ.3Sg
  Ali talked with him
Comment: In A10j there is no possible coreference between Ali and *nɛ́*.

k) *Ali ɲà̀ámà̀ kà̀ndɛ́ kálàd*
  Ali ɲà̀-ámà̀ kà̀nd-ɛ́ kálàd
  Ali SM-PST2 send-OM.3rd.sg book
  Ali sent a book to him.
Comment: In A10k there is no possible coreference between Ali and *ɛ́*.

l) *Ali ɲà̀ámà̀ kwíndɛ́*

Ali ɲ̀-ámὲ kwínd-έ
Ali SM-PST2 help s.o.-OM.3rd.sg
Ali helped him
Comment: In A10l there is no possible coreference between Ali and έ.

m) *Ali ɲ̀àà kwὲjὲ mὲsὲgjà*
   Ali ɲ̀-á kwὲj-ὲ mὲ-sὲgjà
   Ali SM-PST3 find-OM.3rd.sg c6-suprise
   Ali surprised him
Comment: In A10m there is no possible coreference between Ali and έ.

n) *Ali ɲ̀àà kùsὲ kálàd ʃúl dέ*
   Ali ɲ̀-à kùsὲ kálàd ʃúl dέ
   Ali SM-PST3 buy book for PRN.PREP.OBJ.3rd.sg
   Ali bought a book for him
Comment: In A10n, there is possible coreference between Ali and dέ. A10n has two possible interpretations viz: - 1) Ali bought a book for someone else different from him – 2) Ali bought a book for himself.

o) *Ali ɲ̀àámὲ l‌̂ kálàd má dɨ́gjá nὲ nέ*
   Ali ɲ̀-ámὲ l‌̂ kálàd má dɨ́g-já nὲ nέ
   Ali SM-PST2 read book COMPLsee-RFM with   PRN.PREP.OBJ.3rd.sg
   Ali read a book about him/that concerns him
Comment: At first sight, in A10o, there is coreference between Ali and nέ. This sentence in Makaa will be understood as: 'Ali read a book about himself'. However, in a context where it was stated earlier that the book was about someone else, the OM nέ will be coconstrual with a referent different fromAli.

p) *Ali ɲ̀àámὲ kwὲj kálàd ɲádí kàgú*
   Ali ɲ̀-ámὲ kwὲj kálàd ɲá-dí kàgú
   Ali SM-PST2 find book PRN.3rd.sg-LOC side
   Ali found a book by his side
Comment: Same remark as in A10o. The pronoun ɲádícan refer to Ali or to someone else depending on the context of enunciation.

2.3 Reciprocal Readings

2.3.2 Sorts of reciprocal strategies in Makaa

  A- Verb-*jà*strategy

A11ai) *Bùdà bwə́ ŋgə́ dɨ́gjà*
     Bùdà bwə̂ ŋgə̀ dɨ́g-jà
     Woman SM PROG see-RCM
      The women see each other

NI: A11ai could never mean 'The women see themselves' as a group. It could also never mean each woman sees herself. However, sentence A11ai has a reflexive counterpart. See A11aii

A11aii) *Bùdà bwə́ ŋgə́ dígjà ìjènìʃ*
     b-ùdà   bwə̂   ŋgə̀   díg-jà   ì-jèn-ìʃ
     c2-woman   SM.3rd.Pl PROG see-RFM c8-mirror-LOC
     The women see their reflection in the mirrors.

The sentence above has a distributed reflexive reading where each woman sees herself in the mirror. The sentence can never have a group reflexive reading as contextually, the plurality of mirrors express the idea according to which each of the women is in possession of one. However, the sentence could also mean that several groups of women see themselves in different mirrors. I don't understand how this is a reflexive reading, unless you mean that the only reading available here is a group reflexive reading, that is, the whole group of women see the whole group of women and there is no distributed reflexive reading where each woman sees herself in the mirror NI: Unlike A11ai[insert ID# assigned to A11ai], which could not have a reflexive reading, this sentence permits a reciprocal reading since each woman is able to see the reflection of another woman in the mirror.

  aii) *À ŋgə́ jíljà ʃílú*
     à ŋgə́ jíl-jà ʃílú
     he PROG remove-CAUS.RFM hair
     He/she is causing someone to remove his/her own hair.

Comment: In A11Aii, *jà* solely expresses reflexive meaning.. Both constructions are clearly distinguished by Makaa native speakers. More so, some reflexive constructions, with regard to the main verb inherent meaning could also express causative as in A11aii. A11aii could never mean that the subject of remove-CAUS causes someone to remove her (3rd party) hair. The equivalent of such a sentence in Makaa is

  aiii) À ŋgə̀ sá nə́ à jíljàg *ʃílú*
     À   ŋgə̀   sá nə́   à   jíl-jà-g   ʃílú
     He/she PROG do COMPL he/she remove-CAUS.RFM-HORT.2nd.sg hair
     He/she is causing someone (different form SUBJ) to remove his/her (different from
      subject) hair

  B- Total reduplication of the reflexive pronoun
     b) *bwə́-bùdùm bwàámə̀ gùsà bwə́mɛ́ nə̀ bwə́mɛ́*
     bwân-bùdùm bwə̂-ámə̀ gùsà bwə́-mɛ́ nə̀ bwə́-mɛ́
     children-men SM-PST2 wash PRN.3rd.pl-REFL with PRN.3rd.pl-REFL
     The boys washed each other.

Comment: In sentence A11 b, it is the total reduplication of the reflexive pronoun that expresses reciprocity. KS: Can this be used with a singular pronoun for something like 'John played basketball one-on-one'? NI: To my knowledge, I can't find any example of a reduplicated singular form. I have asked some other Makaa native speakers and none could come out with a single example of such a form. The strategy can be used with a fully transitive verb. See aiv.

  aiv) Bìím dɨ́ fààg bímɛ́fwó nə̀ bímɛ́fwó

Bìí-m   dɨ́   fààg   bí-mɛ́fwó nè̀ bí-mɛ́fwó
PRN.2nd.Pl-xx   HAB   praise PRN.2nd.Pl-REFL   with PRN.2nd.Pl-REFL
   You always praise each other (in your group).

   c) *Bùdúm bwàámè̀ wè̀ʃà mìlû.*
    B-ùdùm bwâ-ámè̀ wàs-jà mì-lû
    C2-man SM-PST2 comb-RCM   C4-head
    The men combed each other's hair.

   d) *Bwàámè̀ ʃwè̀jà*
    bwè̀-ámè̀ ʃwè̀jà
    they-PST2   argue with each other
    They argued with each other.

Comment: KS: What is the gloss of *ʃwè̀jà*? Is it *ʃwè̀-jà*, argue-RCM?
NI: Some verbal stems in Makaa present remnant traces of a possible derivational process that consisted of suffixing the RFM/RCM to a root to form a new lexical item. These roots however have been fossilized in Makaa and have no meaning any more. Thus, I prefer to write such stems as a whole rather than separating them.

   e) *Bwá-bùdùm bwàámè̀ nágjà mésân̂*
     b-uân-b-ùdùm bwâ-ámè̀ nág-jà   mé-sân̂
     c2-child-c2-man SM-PST2 kick-RCM   c6-kick
     The boys kicked each other.

   f) *Bwá̂ fɨmjà*
    Bwâ fɨm-jà
    they hate-RCM
    They hate each other.

2.3.3 Oblique arguments

   C-   Verb-*jà* + mpə́dígà + Pronoun

A12a)*Bùdúm bwàámè̀ ŋgè̀ lwə́jà Maria mpə́dɨ́gá bwè̀*
     b-ùdúm bwè̀-ámè̀ ŋgè̀   lwâ-jà   Maria   mpə́dɨ́gá   bwè̀
     c2-men SM-PST2 PROG   show-RCM   Maria   between   PRN.OBJ.3rd.pl
     The men introduced Maria to each other.
Comment: The RCM obligatory here. Without the RCM, the sentence is ungrammatical.

   b) *Òkè̀lŏnʤònd bwàámè̀ láʃà*
    Ò-kè̀lŏnʤònd bwè̀-ámè̀ lás-jà
    c2-traveler   SM-PST2   speak-RCM
    The travelers spoke to each other.

   D-   Verb-*jà* + object (noun) + preposition+ Pronoun

c) *Òsɛ́ɲèjómázáŋ bwààmà ŋgà gwág ìsá í dɨ́gjá nà bwá jí*

  Òsɛ́ɲè-ómázáŋ bwà-ámà   ŋgà   gwág ì-sá   í   dɨ́g-já   nà   bwâ   jí

  dowers-feats   SM.3rd.pl-PST2 PROG   hear c8-thing c8.AGR see-RCM with PRN.3Pl.Obj c8.REL

  The priests heard stories about each other ORThe priest heard stories that concern them.

c$_i$)*Òsɛ́ɲèjómázáŋ bwààmà ŋgà gwág ìsá í dɨ́gjá nà bwámɛ́fwó jí*

  Òsɛ́ɲè-ómázáŋ bwà-ámà ŋgà gwág ì-sá í dɨ́g-já nà bwámɛ́fwó jí

  dowers-feats SM.3rd.pl-PST2 PROG hear c8-thing c8.AGR see-RCM with PRN.3Pl.Obj c8.REL

  The priests heard stories about each other ORThe priest heard stories that concern them.

KS: Any thoughts about what the REL is doing here? Is that a relative marker or a relative pronoun? Is 'things' c8?

NI: (1) see the gloss for the presence of the REL. (2) I will call it a relative pronoun because in Makaa it agrees with the head noun, another form of pronominal anaphora I forgot among pronominal strategies??

KS: How does REL agree? Does it have an agreement paradigm (matching c8.thing)? This is an odd detail that might be worth looking into independently of the anaphora sketch. NI: REL agrees with the head noun as follows: (c1 REL is *jɛ́*, c2 REL is *wá,* c4 REL is *mî,* c6 REL is *má,* c3, c5, c7, c8, and c9 REL is *jí*. (See aforementioned section B dealing with relative clauses in Makaa) [Not for data entry]

2.3.4 Other persons and numbers

No new strategy is used in the examples below.

  A13a) *ʃwá ʃí dɨ́gjà*

    ʃwâ   *ʃí*   *dɨ́g-jà*

    PRN.1st.pl.INCL   EVID.PST.COP see-RCM

    We saw each other.

    b) *Bǐm ʤàlá nà kwíndjà*

      Bǐ-mʤàlá nà kwínd-jà

   2Pl.PRN-COP COP PREP help-RCM

   You(pl.) ought to help each other.

Comment: This sentence cannot mean 'you ought to help yourselves' – it cannot have a reflexive meaning.

    c) *Séé gùsà*

      Sâ-é gùsà

     we-FUT1 wash.RFM

      We will wash ourselves.

Comment: KS: Is the RFM morphologically fused with the verb or is there some regular morphology that derives *gùsà*from *gùs-jà*, or whatever the original verb root is?

NI: Yes the RFM is morphologically fused with the verb root. The verb to wash has two interchangeably forms in Makaa namely, gùjàand gùsà. *gù-* or *gùs-* are meaningless in Makaa.

    d) *Bwá dɨ́ ʤùmjà*

bwə̂ dɨ́ dʒùm-jà
PRN.3rd.pl HAB criticize.someone-RCM
They always criticize each other.

Comment: For more generic readings:
Á bùl *ʧjèl dʒùmɨ́là búúd*

Á	bùl	*ʧjèl*	*dʒùm-là*		*b-úúd*
PRN.3rd.sg	QUANT	like	criticize.someone-INF		c2-person

He/she likes criticizing people a lot

            or
Á *dɨ dʒùm búúd*

Á		*dɨ́*	*dʒùm*		*b-úúd*
PRN.3rd.pl		HAB	criticize.someone		c2-person

He always criticizes people

2.3.5 Other clause types, and other strategies

No new strategy in reciprocal embedded clauses.

  A14a) *Sol ŋgà ʧí ná mà sás mə́ ŋgà ʧə̀ljà*
    Sol ŋgà ʧí ná mà-sás mə́ ŋgà ʧə̀l-jà
    Sol PROG say that c6-girl SM.c6 PROG love-RCM
    Sol says that the girls love each other.

    b) *Sol ŋgà ʃílà ná məsás mə́ ʧə́ljàg*
    Sol ŋgà ʃílà ná mà-sás mə́ ʧə̀l-jà-g
    Sol PROG ask/demand that c6-girl SM.c6 love-RCM-HORT
    Sol demands that the girls should love each other.

    c*) Sol ɲàámà tádàgà ná màsás mə́ jídà nà̀ ʧə̀ljà*
    Sol ɲà̀-ámà̀ tádàgà ná mà-sás mə́ jídà nà̀ ʧə̀l-jà
    Sol SM-PST2 think that c6-girl SM.c6 COP PREP love-RCM
    Sol thought that the girls should praise each other.

    d) *Sol ɲàámà ʃílà nə́ mìʃílà mífə́gjàg*
    Sol ɲà̀-ámà̀ ʃílà nə́ mì-ʃílà mí fààg-jà-g
    Sol SM-PST2 ask that c4-girl SM.c4 praise-RCM-HORT
    Sol asked the girls to praise each other.

    e) *Mà̀sás mə́ ʧjèl fà̀gjà*
    Mà̀-sás mə́ ʧjèl fààg-jà
    c4-girl SM.c4 wish/want praise-RCM
    The girls wish to praise each other.

    f) *Sol ŋgà tə́də́gá nə́ mà̀sás mə́ jídà nà̀ ʧə̀ljà*

    Sol ŋgà tádágá ná mà-sás má jídà nà ʧàl-jà
    Sol PROG think/expect that c4-girl SM.c4 COP PREP love-RCM
    Sol expects the girls to praise each other.

    g) *Sol ɲàámə̀ gwə́g mə́sás má ŋgə́ fə̀gjà*
      Sol ɲə̀-ámə̀ gwə́g mə́-sás má ŋgə́ fə̀àg-jà
      Sol SM-PST2 hear c4.girl SM.c4 PROG praise-RCM
      Sol heard the girls praising each other.

2.4.1 Possessives, alienable and inalienable

A15a) *Paul ɲàámə̀ ʤímbàl mə́ŋgùp m-ɛ́*
      Paul ɲə̀-ámə̀ ʤímbàl mə́-ŋgùp m-ɛ́
      Paul SM-PST2 lose c4-shoe AGR.c4-POSS.3rd.sg
      Paul lost one side of his shoes.

    b) *Paul ɲàámə̀ bîn kŭ dɛ́*
      Paul ɲə̀-ámə̀ bîn kŭ d-ɛ́
      Paul SM-PST2 raise c5.leg AGR.c5-POSS.3rd.sg
      Paul raised his leg.

    c) *Paul mə́ bêw*
      Paul mə́ bêw
      Paul PST1 cut oneself
      Paul has cut himself. (e.g., accidentally)

    d) *Paul ɲàámə̀ ɲìnzà mbwə́ jɛ́*
      Paul ɲə̀-ámə̀ ɲìnzà mbwâ j-ɛ́
      Paul SM-PST2 examine c5.hand AGR.c5-POSS.3rd.sg
      Paul examined his hand.

    e) *Paul ɲàámə̀ fə́nzə́là ʧîgùlù dɛ́*
      Paul ɲə̀-ámə̀ fə́nzə́là ʧîgùlù d-ɛ́
      Paul SM-PST2 twist c5.ankle AGR.c5-POSS.3rd.sg
      Paul twisted his ankle (or 'stubbed his toe')

2.4.2 Reflexives and reciprocals in nominals

A16) *Ǹdă Andre ɲàá búgùlà ɲə̀mɛ́ jí, já ntágɨ̀là Maria.*
    Ǹdă Andre ɲə̀-á búgùlà ɲə̀-mɛ́ jí, í-á ntágɨ̀là Maria
    as Andre SM-PST3 proud.of.oneself PRN.3rd.sg-REFL c1.REL, SM-PST3 annoy Maria
    Andrew's self-confidence annoyed Mary. (the way Andre was proud of himself annoyed Mary)

    A17a) *Jígɨ̀lì ɲàámə̀ káàm nà àlwə́jà mə́ Andre*
      Jígɨ̀lì ɲə̀-ámə̀ káàm nà a-lwâ-jà mə́ Andre
      Teacher SM-PST2 wonder/impress with c1-show-RFM ASS Andre

The teacher was impressed by Andrew's introduction of himself.

Comment: In *a-lwâ-jà*, *a-* and *jà* are nominalizing affixes; they are morphologically fused with the verbal root *-lwâ-* 'to show something'.

b) *ʒìmàlâ Andre ɲàámà ʒìmàl ɲámɛ́ jí, ɲí kɨ bâw*
  ʒìmàlâ Andre ɲà-ámà ʒìmàl ɲá-mɛ́ jí, ɲ-í kɨ bâw
   c9.evaluation Andre SM.3rd.sg-PST2 evaluate PRN.3rd.sg-REFL c.9.REL.c9, AGR.c9-SM COP bad
   Andrew's evaluation of himself was too critical.

c) *Mìnʒíljá bwáámà jíjà mí, mí ʃígɛ́ bà ná sáŋ*
  Mì-nʒílí-já bwâ-ámà jà-jà mí, mí ʃí-gɛ́ bà ná sáŋ
   c4-question-NOM PRN.3rd.pl-PST2 give-RCM c4.REL, c4.SM EVID.PST-NEG COP with clarity
   Their instructions to each other were not clear indeed.

d)*ʒìmàlâ ɲáŋ bwáámà bà nà ʃí jí, í ʃígɛ́ bà nà kàkílà*
  ʒìmàlâ ɲ-áŋ bwâ-ámà bà nà ʃí jí, í ʃí-gɛ́ bà nà kàkílà
   c9.Evaluation AGR.c9-POSS.3rd.pl PRN.3rd.pl-PST2 COP with EVID REL.c9, SM EVID-NEG COP with noise
   Their evaluations of each other were too generous indeed.

2.4.3 To my knowledge, there arefour (4) other sorts of local coconstrual between arguments of a predicate not mentioned in the preceding section. Below are those I could identify.

A. N1 + N2 + Possessive (N2 belongs to N1/The possessive is coreferent to N1)

A18) *Kúkúmá ʃilà jɛ̀*
  Kúkúmá ʃilà j-ɛ̀
   Chief daughter AGR.c3-POSS
   The chief's daughter.

Comment: This sentence is different from the Noun+Poss strategy already listed in the sense that in this particular construction, the possessive is coconstrual with an NP that semantically is the possessor of the noun it determines whereas in the Noun+Poss strategy, the possessive is part of an object NP and it is coreferent with the subject NP.

KS: So this is like 'The chief's his daughter'. Norwegian has something like this, but they use a reflexive corresponding to *his*. We will come to this later probably. NI: Exactly

B. Coreference in relative clauses

One can also notice coreference within relative clauses in Makaa. The particularity of this type of construction is that the relativizer occurs at the end of the RC and it agrees with it antecedent that can be a noun or a demonstrative pronoun (see table below).

Makaa relative and demonstrative pronouns

Noun class	REL	DEM PRN
1	*jɛ́*	*ɲ-àŋ*
2	*wá*	*b-àŋ*

3	jí	w-àŋg
4	mjá	mj-àŋg
5	jí	d-àŋg
6	má	m-àŋg
7	jí	ʤ-àŋg
8	jí	b-àŋg
9	jí	ɲ-àŋg
10	jí	ɲ-àŋg

A19a) *Màkúmà* mə́ ŋgə́ də̀ má máá ɲwájɛ́

    Mà-kúmà mə̀ ŋgə́ də̀ má mə̀-á ɲwá-ɛ́
    c4-cassava AGR.c4 PROG eat REL.c4 SM.c4-NEG be.good-NEG
    The cassavas that I am eating are not good (spoilt).

   b) *Mèé kùsà̀* wàŋg wúsə́ ná gúgwân jí

    Mə̀-é kùsà̀ w-àŋg wú-sə́ ná gúgwân jí
    1Sg-FUT1 buy AGR.c3-DEM.PRN AGR.c3-COP still new REL.c3
    I will buy that which is still new.

KS: This is a very interesting phenomenon, but I would not call it an anaphoric strategy. I would speculate that REL is a relative clause final complementizer that agrees with the head noun. NI: Yes right.

C. Noun + AGR-òŋgû

The demonstrative determiners listed below function differently from those listed in the preceding section in that they function as determiners though they are anaphoric, i.e, they refer to aforementioned referent. They can never replace a noun as it is the case in A19b.

Noun class	ANAPH.DEM. DET
1	w-òŋgû
2	b-òŋgû
3	w-òŋgû
4	mj-òŋgû
5	d-òŋgû
6	m-òŋgû
7	ʤ-òŋgû
8	bj-òŋgû
9	ɲ-òŋgû
10	ɲ-òŋgû

A20) *Mèé kùsà̀ ʤə́w w-òŋgû*

    Mə̀-é kùsà̀ ʤə́w w-òŋgû
    1Sg-FUT1 buy c3.house AGR.c3-ANAPH.DEM.DET

I will buy that house (the aforementioned house).

The verb bə̆lə̀ 'to become/to be' in Makaa, when conjugated in the present tense occurs with agreement marker– coconstrual with the subject – prefixed to it. The verb root changes its form as in most of Indo-European languages (French, English, German…) from bə̀ to sə̀; H-lə̀ being the infinitive marker. In the table below the forms in classes 1 and 2 are equivalent to the forms that go both with personal pronouns and with non-animate items that belongs to gender 1/2. It is worth mentioning that most of the time, Makaa native speakers leave out either the proclitic or the verb sə̀. But this does not affect the meaning of the sentence. If the main subject is left out as in A21d, the construction becomes a cleft construction.

KS: I would not normally think of this as an anaphoric strategy, but rather a construction for asserting that a nominal property pertains to the subject – no actual referring back. Useful to have this, however. NI: You have a point here. I totally agree with your remarks and suggestions. Should we remove it or present the data differently?

Noun class		Syntactic Marker
1	1st.Sg	ʤì-sə̀
	2nd.Sg	ʤì-sə̀
	3rd.Sg	ʤì-sə̀
2	1st.Pl	bí-sə̀
	2nd.Pl	bí-sə̀
	3rd.Pl	bí-sə̀
3		wú-sə̀
4		mú-sə̀
5		dú-sə̀
6		mú-sə̀
7		ʤí-sə̀
8		bí-sə̀
9		ɲí-sə̀
10		ɲí-sə̀

KS: We will leave this in, with our discussion. Maybe someone looking at the AQR will have a different idea about it. NI: Ok

A21a) *Mè$_i$ ʤìsə̀$_i$ mùdûm$_i$*
    Mè ʤì-sə̀ m-udûm
    PRN.1st.sg   AGRc1-COP c1-man
    I am a man.

b) *Mè ʤì múdûm*
    Mè   ʤì   m-údûm
    PRN.1st.sg   AGR.c1.COP   c1-man

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I am a man.

A21c) *Mè sà múdûm*
    Mè   sà   m-údûm
    PRN.1st.sg COP c1-man
    I am a man.

   d) *ʤìsà múdûm*
    ʤì-sà   m-údûm
    c1.AGR-COP c1-man
    It is a man.

2.4.4 Summary of reflexive and reciprocal strategies

REFLEXIVES

   A- Pronoun-*mɛ́fwó* strategy
   B- Pronoun-*mɛ́* strategy
   C- Object-Null strategy
   D- BODY-object strategy
   E- Verb-*jà* strategy
   F- Noun + possessive strategy
   G- Independent pronoun
      Pronoun-*dí* strategy
      Preposition ʃúl (for) / nà (with) + pronoun
      nà (with) + Pronoun strategy

   H- N1+N2 + Possessive – possessor agreement
   I- Noun+AGR-òŋgû

RECIPROCALS

   A- Verb-*jà* strategy
   B- Total reduplication of the reflexive pronoun
   C- Verb + mpɘ́dígâ + pronoun
   D- Verb-j*à* + Object (noun) + preposition + pronoun

KS: This is an edited version of sections 3 and 4 of the Anaphora Questionnaire (AQ) that is available at our site. I have truncating the remainder of the questionnaire so as to speed the work.

3.6 Interaction with verb morphology - Incompatibilities
3.6.1 Tense, Mood, Aspect.
Makaa counts 7 absolute tenses: 3 future tenses; 4 past tenses in addition to a present tense. The present tense has two sub-categories, namely, a general present and a gnomic present (Ibrahim 2007, 2009, 2013b). Makaa distinguishes three moods: Indicative, Subjunctive and Imperative

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(Heath, 2003: 345).

Based on Nurse's 2008 analysis of TAM in Bantu and on empirical data from Makaa, Ibirahim (2013b: 14ff.) shows that Makaa uses inflectional morphemes at Pre-Stem, Post-stem position, reduplication, repetition and compounding to mark 13 aspects grouped as follows: (i) Imperfective (progressive, habitual, iterative, persistive and continuative), (ii) Perfective (factative, completive and evidential), and Miscellaneous aspects (inceptive, prioritive, proximate, counter-assertive and haste).

To the best of my knowledge, Makaa tenses, aspects and moods are almost all compatible with the coconstrual strategies examined in the preceding section (B3a-c), exception made from the continuative aspect which is solely compatible with the object-Null strategy (B3d) and generates ungrammatical constructions with other coconstrual constructions (B3e).

B3a) *Gina mɔ́ dɨ́ gùsà ɲûl*
 Gina mɔ́ dɨ́ gùsà ɲûl
 Gina COP HAB wash body.REFL
 Gina (generally) washes herself

b) *Gina ⃞mɔ́ gùsá ɲûl*
 Gina mɔ́ gùsà ɲûl
 Gina PST1 wash body.REFL
 Gina has washed.

c) *Gina mɔ́ ʤɔ̀là̆ nɔ̀ gùsà ɲûl*
 Gina mɔ́ ʤɔ̀là nɔ̀ gùsà ɲûl
 Gina COP ought to wash body.REFL
 Gina should wash herself.

d) *Gina ngɔ̀ gùsà-gùsăg*
 Gina ngɔ̀ gùsà-gùsà-g
 Gina PROG wash.REFL-wash.REFL-CNTI
 Gina keeps washing herself.

e) **Gina ngɔ̀ gùsà-gùsăg ɲûl*
 Gina ngɔ̀ gùsà-gùsà-g ɲûl
 Gina PROG wash.REFL-wash.REFL-CNTI body.REFL
 Gina keeps washing herself.

Comment: B3e is ungrammatical because continuative constructions in Makaa end in reduplicated verb. Thus, the occurrence of the object ɲûl 'body' violates the rule.

3.6.3 (formerly 3.6.1) To my knowledge, I am not aware of operations or morphemes that cannot co-occur with this strategy.

f) *Ali ɲàámɔ̀ lɔ̂ kálàd mɔ́ dɨ́gjá nɔ̀ ɲɔ́mɛ́fwó*
 Ali ɲɔ̀-ámɔ̀ lɔ̂ kálàd mɔ́ dɨ́g-já nɔ̀ ɲɔ́-mɛ́fwó
 Ali SM-PST2 read book COMPL see-RFM PREP PRN.3rd.sg-REFL
 Ali read a book about him/that concerns him.

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3.7 Uses that are not quite coreference

In Makaa, there are other usages of the PRN-*mɛ́fwó and* PRN-*mɛ́*which does not express coreference between two arguments or adjuncts (e.g., like locatives or directionals). PRN-*mɛ́fwó and* PRN-*mɛ́ are used (with a slight difference, see examples B3g-j)* to convey the meanings 'also' and 'alone'.

g) *Jean ŋgà gùsà ɲàmɛ́fwó*
Jean ŋgà   gùsà   ɲà-mɛ́fwó
Jean PROG wash.REFL   PRN.3rd.sg-REFL.
Jean is bathing alone.

h) *Jean ŋgà gùsà ɲàmɛ́*
Jean ŋgà   gùsà   ɲà-mɛ́
Jean PROG wash.REFL   PRN.3rd.sg-REFL.
Jean is bathing alone.

i) *Jean ɲàmɛ́fwó ŋgà gùsà*
Jean ɲà-mɛ́fwó   ŋgà   gùsà
Jean PRN.3rd.sg-REFL PROG   wash.REFL
Jean is bathing also

J) **Jean ɲàmɛ́ ŋgà gusa*

Comment:Both PRN-*mɛ́fwó and* PRN-*mɛ́*at Object position are accepted in contructions conveying the meaning 'Jean is bathing alone'. On the contrary, to convey the meaning 'Jean is bathing also', only the PRN-*mɛ́fwó* is acceped at post-subject position and not the PRN-*mɛ́*. I cannot find a reason to justify why (j) is just not acceptable.

3.7.1 Idiosyncratic or inherent. Makaa distinguishes two major categories of verbs inherently expressing reciprocity (few) or reflexivity (the majority). The first category comprises verbs equivalent in meaning to the English set of 'verb oneself' or the French pronominal verbs, such as 'se mentir'(B3k). The second group is made-up of derived verbs comprising an existing or fossilized root that has fused with the RFM/RCM (B3l).

(B3k)	Verb	Gloss	Verb	Gloss
	bàgɨwà	brag (se vanter)	*bwèèʃ*	get oneself wet
	búd	cover oneself	*finzɨwà*	weave one's way
	bwááᵈ	dress oneself	*bêw*	wound oneself
	bwágɨwò	lie oneself down	*ʧjè*	bump oneself into sm.
	bììl	to get onself trapped	*dôw*	make oneself buried
	gwódɨgà	give a sign of life	*ʤágɨwò*	lean oneself against sm.
	gwógɨwà	rub oneself	*káám*	wonder (se vanter)
	ɲâw	get on one's knees	*ʃwàw*	hide oneself
	wògà	rest (oneself)	*ntɨ́mɨ́*	get spoiled (se gâter)

l)

Verb	Gloss	Verb	Gloss
bájá	wed (se marier)	*làgjà*	be doubled up with pain
bâ (wed) +*já*		*ləg*(?)+ *já*	(se tordre de douleur)
ʧíljà	enroll oneself	*lwójà*	show oneself
ʧílə̀ (écrire) + *já*		*lwâ*+*já*	(se faire voir)
léʃà	have a talk		
lás (écrire) +*já*			

3.7.2 Emphatic or intensifier. As in the English, <u>The president himself answered the phone</u>.

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) *Jean ɲàá dà̀ ʃû ɲàmɛ́fwó*

  Jean ɲà-á   dà̀ ʃû ɲà-mɛ́fwó

   Jean SM-P3 eat fish PRN.3sg-REFL.

   John ate fish himself.

d) *Jean ɲà̀mɛ́fwó   ɲàá dà̀ ʃû*

  Jean ɲà̀-mɛ́fwó ɲà-á dà̀ ʃû

   JeanPRN.3sg-REFL.SM-P3 eat fish

   John himself ate fish.

Comment: Sentence B1c, in context, could have reading B or C. Sentence B1d solely conveys reading D in Makaa. Reading A also could be obtained from (B1c) if Jean is focused as in (B1e).

B1e) *Jean ó ɲáá dà̀ ʃû ɲà̀mɛ́fwó*

   Jean ó ɲà-á dà̀ ʃû ɲà̀-mɛ́fwó

    Jean FOC SM-P3 eat fish PRN.3sg-REFL

    John (and no one else) ate fish 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)

3.7.3 Middle (or passive). Makaa uses two distinct morphemes: –*ja* (for participle, equivalent to the English Verb+ed forms) and –*ow* (for passives) for middles.

➢ Participle (very productive in makaa)

B1f_i) *Jean sà̀ mbájá*

   Jean sà̀ bâ-já

   Jean COP wed-<small>RCM</small>

   John is wedded/married.

f_{ii}) A sample list of participles in Makaa

Participle	Gloss	Verb	Gloss

mbə́já *bâ+ já*	wedded	*<bâ*	wed
mbɛ́zjá *báánz+ já*	sharpened	*<báánz*	sharpen
càgjǎ *cáád+já*	carved	*<cáád*	carve
càljà *càl+já*	cut down	*<càl*	cut down
ndə̀mjà *dààm+já*	packed	*<dààm*	pack
fə́gjá *fáág+já*	combed	*<fáág*	comb
ŋgùjá *gù+já*	rooted	*<gù*	root
mə́ndjá *máánd+já*	tightened	*<máánd*	tighten
jédjá *fáág+já*	spoiled	*<jád*	spoil

> Passive (productive in makaa)

B1gᵢ)   *Jé síjòw*
        Í-é sâ-òw
        PRN.3sg-F1   do-PASS.
        It will be done.

gᵢᵢ)   A sample list of passive forms in Makaa

Passive forms	Gloss	Verb	Gloss
jìljòw *jìl+òw*	sitted	*<jìl*	make sit down
jídjòw *jíd+ òw*	beaten up	*<jíd*	beat up
ɲə̀jòw *ɲàà+òw*	torn	*<ɲàà*	tear
mpújòw mpù+*òw*	known	*<*mpù	know
síjòw	done	*<*sâ	do

sâ+*òw*

3.7.4 Distributive, sociative, etc. To my knowledge, no such strategies exist in Makaa.

3.7.6 Focus.
Please translate these question-answer pairs. (Numbers are out of sequence here for a reason)
B15) *Zá òʃôlófàmbá bwáámə̀ dɨ́g jɛ́?*

 Zá ò-ʃôl-ó-fàmbá bwà-ámə̀ dɨ́g jɛ́?
  PRN.INT.C2-worker-ASS-farmPRN.2pl-P2 seeREL
  Who did the farmers see?

 Bwáámə̀ dɨ́gê
 bwá-ámə̀ dɨ́g-ê
 PRN.2pl-P2 see-OM.3sg
 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) *Ómbɔ̌ɔ̀l ó ʃígɛ́ dɨ́g Maria.Nǒ bwáámə̀ dɨ́g jí.*
  O-mbɔ̌ɔ̀l ó ʃí-gɛ́ dɨ́g Maria.Nə̀-ó bwà-ámə̀ dɨ́g jí.
  C2-farmer c2.AGr EVID.PAST-NEG see Mary. PRN.3sg-FOC PRN.3pl-P2 see REL
  The farmers didn't see Mary. They saw *him.*

3.7.7 To my knowledge, there is no other way of using any strategy mentioned earlier in any other construction without expressing reciprocity or reflexivity.
3.8 Proxy readings

nor the PRN-mɛ́fwó can be used to refer to someone's statue. Culturally, the Makaa people do not carve, the have no statues. Similarly, their tradition is oral, and the majority of the population is not learned. Anything carve or moulded is called vàgɨ̀lɛ̀ 'image'. To get the right interpretation in some B8-9 sentences or a closer one, 'himself has to be replaced by vàgɨ̀lɛ̀-jὲ 'his image' or mɨ̀ʧìljá mjɛ́ 'his writings'.

B8a) *Tasibi ŋgà dɨ́g vàgɨ̀lɛ́ ʤɛ́ mpáánzá ìvàgɨ̀lɛ́.*
    Tasibi ŋgà dɨ́g vàgɨ̀lɛ́ ʤ-ɛ́ mpáánzá ì-vàgɨ̀lɛ́
    Tasibi PROG see C7.image C7-POSS hall C8-image
    Tasibi admires her statue in the museum.

  b) *Mongo Beti ɲàà fwɛ́ lôŋ mɨ́ʧìljá mjɛ́ Swàhílɨ̀ʃ,*
  Mongo Beti ɲà-à fwɛ́ lôŋ mí-ʧìlà-já mj-ɛ́ Swàhílɨ̀-ʃ
  Mongo Beti PRN.3sg-NEG AUX.NEG read C4-write-NOM c4.AGr-POSS Swahili-LOC
  Mongo Beti has not yet read his writings in Swahili,

    tɔ́ɔ́ ndǎ ɲáá mɔ́ lôŋ mɨ́ʧìljá mjɛ́ Èspàɲɔ́lɨ̀ʃ
    tɔ́ɔ́ ndà ɲà-á mɔ́ lôŋ mì-ʧìl-já mj-ɛ́ Èspàɲɔ́l-ɨ̀ʃ
    even as PRN.3sg-P3 PST1 read C4-write-NOM c4.AGr-POSS Spanish-LOC
    though he has read his writings in Spanish (a long time ago).

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.

B9a) *Tasibi ɲàámɔ̀ gùsà vàgɨ̀lɛ́ ʤɛ́ tòògú-tòògú ʃúl nɔ́ í kú ntámà.*
    Tasibi ɲà-ámɔ̀ gùsà vàgɨ̀lɛ́ ʤ-ɛ́ tòògú-tòògú ʃúl nɔ́ í kú ntámà
    Tasibi SM-P2 wash C7.image C7-POSS suffery-RED for that SM COP.NEG spoil
    Tasibi washed her statue carefully, so that it will not get damaged.

  b) *Tasibi ɲàámɔ̀ gùsà tòògú-tòògú ʃúl nɔ́ vàgɨ̀lɛ́ ʤɛ́ í kú ntámà.*
  Tasibi ɲà-ámɔ̀ gùsà tòògú-tòògú ʃúl nɔ́ vàgɨ̀lɛ́ ʤ-ɛ́ í kú ntámà
  Tasibi SM-P2 wash suffery-RED for that C7.image C7.AGr-POSS SM COP.NEG spoil
  Tasibi washed carefully, so as not to damage her statue.

  c) *Tasibi ɲàámɔ̀ bjɛ́ɛ́d vàgɨ̀lɛ́ ʤɛ́ míkáándɔ́ tòògú-tòògú ʃúl nɔ́ í kú ntámà.*
  Tasibi ɲà-ámɔ̀ bjɛ́ɛ́d vàgɨ̀lɛ́ ʤ-ɛ́ mí-káándɔ́ tòògú-tòògú ʃúl nɔ́ í kú ntámà
  Tasibi SM-P2 dress s.o. C7.image C7.AGr-POSS C4-*cloth* suffery-RED for that SM C7 COP.NEG spoil
  Tasibi dressed her statue carefully, so as not to damage it.

  d) *Tasibi ɲàámɔ̀ bwááд míkáándɔ́ tòògú-tòògú ʃúl nɔ́ vàgɨ̀lɛ́ ʤɛ́í kú ntámà.*
  Tasibi ɲà-ámɔ̀ bwáád mí-káándɔ́ tòògú-tòògú ʃúl nɔ́ vàgɨ̀lɛ́ ʤ-ɛ́ í kú ntámà
  Tasibi SM-P2 dress C4-cloth suffery-RED for that C7.image C7-POSS SM COP.NEG spoil
  Tasibi dressed carefully, so as not to damage her statue.

Comment: Contextually, B9d can only refer to a situation whereby Tasibi dressed herself avoiding any false movement that could make her damage her statue.

e) *Tasibi ɲàámɔ̀ dɨ́g mbɛ̀là jè záɲɨ́ʃ, vɔ̀dɔ̆ à ʃígɛ́ ʧjèlê dɨ́g.*
   Tasibi nɔ̀-ámɔ̀ dɨ́g mbɛ̀là j-ɛ̀ záŋ-ɨ́ʃ, vɔ̀dɔ̆ à ʃí-gɛ́ ʧjèl-ê dɨ́g
   Tasibi SM-P2 see spitting image C1-POSS show-LOC, but she EVID.PAST-NEG like-OM.PRN.3sg see
   Tasibi saw her spitting image in the show, but she didn't like to see her.
Comment: The object marker *-ê* cannot refer to Tasibi.

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) *Mongo Beti ŋgɔ̀ ʧì ná mítʃìljá mjɛ́ Swàhílìʃ mî ɲwɔ̆là*
      Mongo Beti ŋgɔ̀ ʧì nɔ́ mí-ʧìlà-já mj-ɛ́ Swàhíl-ìʃ mî ɲwà-Hlɔ̀
      Mongo Beti PROG say that C4-write-NOM C4-POSS Swahili-LOC SM be.fine/good-INF
      Mongo Beti says he sounds better in Swahili.

    b) *Tasibi ɲàámá búgɨ̀là ná vɔ̀gɨ̀lè ʤɛ́ ʤísá ʤɔ̂̃*
      Tasibi nɔ̀-ámá búgɨ̀lànà vɔ̀gɨ̀lè ʤ-éʤí-sá ʤɔ̂̃
      Tasibi SM-P2 believe thatC7.image C7-POSS C7.SM-COP beautiful
      Tasibi thought that she looked handsome. (<u>he</u> = statue of Castro)

Proxy readings are also possible for reciprocals in many languages. For (B11a), once again the antecedents are the authors and <u>each other </u>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 <u>each other</u> refers to the person Marlene and Castro, but the second <u>each other</u> refers to the actors (or statues) representing them on the stage or in the show.

B11a) *Mongo Beti bɔ́ná Mveng bwáá ʃígɛ́ lɔ̂̀jà mítʃìljá Bɛ̀rbɛ̀rɨ̀ʃ*
   Mongo Beti bwɔ̀-nɔ̀-à Mveng bwɔ̀-á ʃí-gɛ́ lɔ̂̀-jà mì-ʧìlà-já Bɛ̀rbɛ̀r-ɨ̀ʃ
   Mongo Beti PRN.3pl-with-PRN.3sg Mveng SM-P3 EVID.PAST-NEG read-RCM C4.write-NOM berber-LOC
   Mongo Beti and Mveng did not read each other in Berber.

    b) *Marlene bɔ́ná Tasibi bwáá ʃígɛ́ dɨ́gjɔ̆ mpɔ́dɨ́gá bùùd,*
      Marlene bwɔ̀-nɔ̀-à   Tasibi bwɔ̀-á ʃí-gɛ́   dɨ́g-jɔ̆ mpɔ́dɨ́gá b-ùùd,
      Marlene PRN.3pl-with-PRN.3sg Tasibi PRN.3pl-P3 EVID.PAST-NEG see-RCM among c2-person
      Marlene and Tasibi did not see each other in the audience (in between people).

      vɔ̀dɔ̆ bwáá dɨ́g mìmbɛ̀là mjáɲ ʃìʃjɛ̂ zàŋ.
      vɔ̀dɔ̆ bwɔ̀-ádɨ́g mì-mbɛ̀là mj-áŋ ʃìʃjɛ̂ zàŋ
      but PRN.3pl-P3 see c4.spitting image c4-POSS yard show
      but they did see each other on the stage/in the show.

Comment: Makaa requires the use of a nominal describing the representation (*mì-mbɛ̀là*) to get readings that correspond to the proxy cases. No reflexive or reciprocal strategy avoides this.

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) *Mary mé ʧjèl ɲámé ʧɔ̂ Bill*
     Mary mé ʧjèl ɲá-mé ʧɔ̂ Bill
     Mary COP love PRN.3sg-REFL surpass Bill
     Mary likes herself more than Bill

NI: B12a is grammatical, and it means exactly that 'Mary likes herself more than she likes Bill'

b) *Mary mé ʧjèl ɲámé ʧɔ̂ ndàà Bill mé ʧjèl ɲámé jí*
   Mary mé ʧjèl ɲé-mé ʧɔ̂ ndàà Bill mé ʧjèl ɲá-mé jí
   Mary COP love PRN.3sg-REFL surpass as Bill COP love PRN.3sg-REFL REL
   Mary likes herself more than Bill loves himself

English permits both of these, though I suspect (B12b) may not be as widely available as (B12a). If not, then concentrate on (B12a). The following readings, where the Italicized portions are what is missing for (B12a,b) but can be interpreted as if it was there (which is what is meant here by 'ellipsis'). Makaa does not permit B12a. On the other hand, B12b can only have the reading in (iii).

i) *Mary mé ʧjèl ɲámé ʧɔ̂ ndàà Bill mé ʧjél Mital jí*
   Mary mé ʧjèl ɲà-mé ʧɔ̂ ndàà Bill mé ʧjèl Mital jí
   Mary COP love PRN.3sg-REFL surpass as Bill COP love Mital REL
   Mary likes herself more than *Bill likes* Mital.

ii) *Mary mé ʧjèl ɲémé ʧɔ̂ ndàà Bill mé ʧjél ɲà jí*
    Mary mé ʧjèl ɲà-mé ʧɔ̂ndàà Bill mé ʧjél ɲà jí
    Mary COP love PRN.3sg-REFL surpass as Bill COP love PRN.3sg REL
    Mary likes herself more than Bill *likes her*(=Maria).

iii) done in B12b
     Maria likes herself more than Bill *likes himself*.

Please try to formulate sentences like those in (B12a) (and/or B12b, if that is possible) trying out each of the non-reciprocal strategies in the first clause and determining for each strategy which of the readings i-iii. are possible. If you have several strategies in your language, then we expect you will have many examples as translations of (12a,b) for whatever verb works with the strategy in question. Please adjust the examples to use appropriate verbs for the strategy you are testing, and if there are generalizations about which verbs go with which strategies more successfully, that would be very interesting to know. Remember to try both affixal and argument anaphor strategies, if your language has both.

➢ *- ja* (participle)
c) *Fwán sà mpŭ bà kwàgjá ʧɔ̂ wùnd*
   fwán sà mpù bà kwààg-já ʧɔ̂ wùnd
   maize COP COP be grind-REFL surpass peanuts
   Maize is better ground than peanuts (are ground)

➢ **- *jow*** (passive)

   c) *Maria nàámɜ̀ kwɜ̀gjòw ʧɔ̂ Bill*
     Maria ɲɜ̀-ámɜ̀ kwàɜ̀g-jow ʧɔ̂ Bill
     Maria PRN.3sg-P2 grind-PASS surpass Bill
     Mary was beaten mercilessly than Bill (was beaten)

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.

➢ Pronoun-*ɲɜ̀mɛ́fwó*

  C1a) *Bob ŋgɜ̀ díg ɲɜ̀mɛ́fwó*
    Bob ŋgɜ̀ díg ɲɜ̀-mɛ́fwó
     Bob PROG see PRN.3sg-REFL
     Bob saw himself.

   b) *Bùdá bwámɜ̀ ŋgɜ̀ ʤàw ndàá bwɜ́mɛ́fwó bwɜ́ sá nɜ́*
    b-ùdá bwɜ̀-ámɜ̀ ŋgɜ̀ ʤàw ndàà bwɜ̀-mɛ́fwó bwɜ̀ sá nɜ́
     c2-woman SM-P2 PROG say as PRN.3pl-REFL they COP REL
     The women described themselves.

KS: In the absence of the verb corresponding to 'describe', would this correspond to something like "the women said as to themselves how they are"? NI: Yes sure. It could also mean that the women described themselves to a third party; it depends on the context or the speaker's intention.

   c) *Bjǎmɜ̀ náág bímɛ́fwó mɜ̀sǎŋ*
    bǐ-ámɜ̀ náág bǐ-mɛ́fwó mɜ̀-sǎŋ
     PRN.2pl-P2 kick PRN.2pl-REFL c6-action.of.kicking.with.leg(s)
     You (pl.) kicked yourselves.

   d) *bwámɜ̀ fààg bwɜ́mɛ́fwó*
    bwɜ̀-ámɜ̀ fààg bwɜ̀-mɛ́fwó
     PRN.3pl-P2 praise PRN.3pl-REFL
     They praised themselves

4.1.1.2 Commonly reflexive predicates - Can this strategy be used with verbs of grooming, inalienable-possession objects, etc? Give judgements on the following. Provide some additional examples of your own. We already have 'wash', so try 'dress' and 'shave', if they have appropriate translations. You might also try predicates like 'scratch', 'stretch', 'sit' and other body posture predicates that some languages express with reflexive forms. We also have 'cut' already, so please pick other predicates that behave in this way, adding perhaps a list of them.

  C3a) *Donna ŋgɜ̀ sá ɲɜ̀mɛ́fwó*
    Donna ŋgɜ̀ sâ ɲɜ̀-mɛ́fwó

Donna PROG do PRN.3sg-REFL
Donna harms herself. (X = Donna)

b) *Don ŋgà gwág mpìmbà nà ɲàmɛ́fwó*
 Don ŋgà gwàg mpìmbà nà ɲà-mɛ́fwó
   Don PROG hear anger with PRN.3sg-REFL
   Don is angry with himself. (X = Don).

c) *Sás ŋgà ɲààgɨ̀là ɲûl*
 sás ŋgà ɲààgɨ̀là ɲûl
   girl PROG scratch body.REFL
   The girl scratches herself [unintentionally] (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) *John mǎ fɨm ɲàmɛ́fwó*
   John mǎ fɨm ɲà-mɛ́fwó
     John COP hate PRN.3sg-REFL
     John hates himself

b) *John ŋgà gwág ʃwôn nà ɲàmɛ́fwó*
 John ŋgà gwág ʃwôn nà ɲà-mɛ́fwó
   John PROG hear shame with PRN.3sg-REFL
   John is ashamed of himself.

c) *John ŋgà gwág búgú nà ɲàmɛ́fwó*
 John ŋgà gwág búgú nà ɲà-mɛ́fwó
   John PROG hear c4.joy with PRN.3sg-REFL
   John is eager about himself

d) *John ŋgà gwág mìntààg nà ɲàmɛ́fwó*
 John ŋgà gwág mìntààg nà ɲà-mɛ́fwó
   John PROG hear c4.joy with PRN.3sg-REFL
   John is proud of himself

e) *John ŋgà ntágɨ̀là ɲàmɛ́fwó*
 John ŋgà ntágɨ̀là ɲà-mɛ́fwó
   John PROG worry/trouble PRN.3sg-REFL
   John worries/troubles/ himself

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) *Bùdá bwéé ntámàn bwámɛ́fwó*
   b-ùdá bwà-é ntámàn bwà-mɛ́fwó

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c2-woman SM-F1 spoil PRN.3pl-REFL
The women will destroy themselves

b) *Màʃínà má ŋgà kwàmbìlà mámɛ́fwó*
   mà-ʃínà má ŋgà kwàmbìlà má-mɛ́fwó
   c6-machine COP PROG built c6.PRN-REFL
   The machines built themselves (X = themselves)

c) *Bùdá bwéé gú bwámɛ́fwó*
   b-ùdá bwà-é gû bwà-mɛ́fwó
   c2-woman SM-F1 kill PRN.3pl-REFL
   The women will kill themselves

c) *Bùdá bwéé lààd bwámɛ́fwó míkáándá mjáŋ*
   b-ùdá bwà-é lààd bwà-mɛ́fwó mí-káándá mj-áŋ
   C2-woman SM-F1 sew PRN.3pl-REFL c4-cloth c4-POSS
   The women will sew their clothes themselves

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) *Màɲʧwámá máámà tâw ʃúl bwámɛ́fwó*
     mà-ɲʧwámá mà-ámà tâw ʃúl bwà-mɛ́fwó
     C6-boy SM-P2 stand for PRN.3pl-REFL
     The boys represented themselves.

b) *John ŋgà kèèm ɲàmɛ́fwó*
   John ŋgà kèèm ɲà-mɛ́fwó
   John PROG defend PRN.3sg-REFL
   John is defending himself

c) *John ɲààmà lás ʃúl ɲámɛ́fwó*
   John ɲà-ámà lás ʃúl ɲà-mɛ́fwó
   John SM-P2 talk for PRN.3sg-REFL
   John spoke for himself.

d) *John ɲààmà sáámbìlà ɲámɛ́fwó*
   John ɲà-ámà sáámbìlà ɲà-mɛ́fwó
   John SM-P2 disgrace PRN.3sg-REFL
   John disgraced himself.

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) *Mary ɲàámə̀ ɲífə̀ ɲə̀mɛ́fwó bóónz*
   Mary ɲə̀-ámə̀ ɲífə̀ ɲə̀-mɛ́fwó bóónz
     Mary SM-P2 hit PRN.3sg-REFL slap
     Mary gave a slap to herself/Mary slapped herself

  b) *John ɲàámə̀ ʧìlə̀ ɲə́mɛ́fwó kálə̀d*
  John ɲə̀-ámə̀ ʧìlə̀ ɲə̀-mɛ́fwó kálə̀d
     John PRN.3sg-P2 write PRN.3sg-REFL letter
     John wrote a letter to himself (X = John)

For comparison, also provide judgements for the following:

  C8a) same as in C7a
   Mary gave herself a slap (X = Mary)

    b) *John ɲàámə̀ lwə́ bwân ɲûl*
    John ɲə̀-ámə̀ lwê b-uân ɲûl
      John SM-P2 show c2-child body.REFL
      John showed himself to the children (X = John)

Comment: In Makaa, in ditransitive constructions, the indirect object always precedes the direct object as in C7a-b and C8b, reason why C7a and C8a can't be different.

KS: For (C8b), does that mean that he literally allows his body to be seen? I am trying to see if Body.REFL has a kind of inalienable possession reading, but I am not sure how to treat this example to get at it. Maybe you have an idea.

NI: Sentence C8b means that he introduced himself to the children. It does not mean that he showed his nakedness to the kids. To the best of my knowledge, I really don't think reflexive constructions is Makaa distinguish between alienable vs. inalienable.

4.1.2.2 Oblique arguments -

  C9a) *Dan ɲàámə̀ ʃúslə̀ nə̀ ɲə̀mɛ́fwó*
   Dan ɲə̀-ámə̀ ʃúslə̀ nə̀ ɲə̀-mɛ́fwó
     Dan SM-P2 got.angry with PRN.3sg-REFL
     Dan got angry with himself.

   b) *Dan ɲàámə̀ tɛ̂ɲ Mary láɲ í dɨ́gjá nə̀ ɲə̀mɛ́fwó jí*
   Dan ɲə̀-ámə̀ tɛ̂ɲ Mary lâɲ í dɨ́g-já nə̀ ɲə̀-mɛ́fwó jí
     Dan SM-P2 tell Mary story SM see-RFM with PRN.3sg-REFL REL
     Dan told Mary (a story) about himself (X = Dan)

   c) *Dan ɲàámə̀ kùsə̀ kálə̀d ʃúl ɲə́mɛ́fwó*
   Dan ɲə̀-ámə̀ kùsə̀ kálə̀d ʃúl ɲə̀-mɛ́fwó
     Dan SM-P2 buy book for PRN.3sg-REFL
     Dan bought a book for himself.

4.1.2.3 Subject-adjunct - Provide some examples of coreference between a subject and an adjunct, e.g., a locative PP. If appropriate translations are not prepositional objects, try to construct appropriate examples.

C10a) *Mary ɲàámə̀ díg ɲwâ ɲə́dí mpɪ́sə̀ kwòŋ*
    Mary ɲə̀-ámə̀ díg ɲwâ ɲə̀-dí mpɪ́sə̀ kwòŋ
        Mary PRN.3sg-P2 see snake PRN.3sg-LOC behind back
        Mary saw a snake behind her (X = Mary)

   b) *Mary ɲàámə̀ ʤâw mə̀ ʃúl mátêɲ má dɪ́gjá nə̀ ɲə̀méfwó*
   Mary ɲə̀-ámə̀ ʤâw mə̀ ʃúl mə̀-têɲ má dɪ́g-já nə̀ ɲə̀-méfwó
        Mary PRN.3sg-P2 call PRN.1sg for C6-issue SM see-RFM with PRN.3sg-REFL
        Mary called me because of an issue about herself (X = Mary)

   c) *John ɲàámə̀ ʃwὲὲnʒ Mary nə̀ ʧjé nə̀ ɲə̀méfwó*
   John ɲə̀-ámə̀ ʃwὲὲnʒ Mary nə̀ ʧjé nə̀ ɲə̀-méfwó
        John PRN.3sg-P2 offend Mary with why with PRN.3sg-REFL
        John offended Mary because of himself (X = John)

   d) *Sáámə̀ kwá gwò nə̀ ʧjé nə̀ sə̀méfwó*
   sə̂-ámə̀ kwá gwò nə̀ ʧjé nə̀ sə̂-méfwó
        we-P2 just laugh with why with PRN.2pl-REFL
        We laughed in spite of ourselves

4.1.2.4 Ditransitives and double complements- Can the strategy be used to indicate coreference between the two non-subject arguments of a verb?. If there is more than one way to express the two non-subject arguments of a verb like "give", give examples for each type of construction. In English, for example, we would want examples both of the type "show Hal the book" and "show the book to Hal." (where X = Hal for C11a-d). For example, for (C11c), <u>Bill gave Hal himself,</u> 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) **Mary ɲàámə̀ lwâ Hal wó ɲə̀méfwó*
    Mary ɲə̀-ámə̀ lwâ Hal wó ɲə̀-méfwó
        Mary PRN.3sg-P2 show Hal to PRN.3sg-REFL
        Mary showed Hal to herself.

   b) *Mary ɲàámə̀ lwájà ɲùl wó Hal*
   Mary ɲə̀-ámə̀ lwâ-jà ɲùl wó Hal
        Mary PRN.3sg-P2 show-RFM body to Hal
        Mary showed X (herself) to Hal.

   c) *Bill ɲáámə̀ jà Hal ɲə̀méfwó*
   Bill ɲə̀-ámə̀ jà Hal ɲə̀-méfwó
        Bill PRN.3sg-P2 give Hal PRN.3sg-REFL
        Bill gave Hal himself.

d) same as C11c as the indirect object always precedes the direct object in Makaa.
Bill gave X Hal.

e) *Mary ɲàámə̀ ʤàw máɲʧwámá mátêɲ má dɨ́gjá nə̀ bwámɛ́fwó*
Mary ɲə̀-ámə̀ ʤàw mə̀-ɲʧwámá mə̀-têɲ má dɨ́g-já nə̀ bwə̀-mɛ́fwó
Mary PRN.3sg-P2 tell C6-boy C6-issue SM see-RFM with PRN.3pl-REFL
Mary told the boys about themselves.

f) *Mary ɲàámə̀ ŋgə̀ lwá máɲʧwámá mpádɨ́gá bwə̀*
Mary ɲə̀-ámə̀ ŋgə̀ lwâ mə̀-ɲʧwámá mpádɨ́gá bwə̀
Mary PRN.3sg-P2 PROG show C6-boy between them
Mary showed/introduced/presented the boys between each other.

fi) *Mary ɲàámə̀ ŋgə̀ lwá máɲʧwámá mpádɨ́gá bwámɛ́ nə̀ bwámɛ́*
Mary ɲə̀-ámə̀ ŋgə̀ lwâ mə̀-ɲʧwámá mpádɨ́gá bwə̀-mɛ́ nə̀ bwə̀-mɛ́
Mary PRN.3sg-P2 PROG show C6-boy between PRN.3pl-REFL with PRN.3pl-REFL
Mary showed/introduced/presented the boys in between them.

fii) *Mary ɲàámə̀ ŋgə̀ lwá máɲʧwámá mpádɨ́gá bwámɛ́fwó*
Mary ɲə̀-ámə̀ ŋgə̀ lwâ mə̀-ɲʧwámá mpádɨ́gá bwə̀-mɛ́fwó
Mary PRN.3sg-P2 PROG show C6-boy between PRN.3pl-REFL
Mary showed/introduced/presented the boys between each other.

KS: Here the slashes are a bit confusing. Please provide separate sentences with a single strategy option and the appropriate interpretation. However, it looks like the reciprocal reading occurs here in the absence of RCM and that both independent pronouns and PRN-*mɛ́fwó* can have a reciprocal reading just in case it is embedded in a *mpádɨ́gá* PP. Is this right? NI: Yes, I espouse your analysis.

Also, please try the following:
g) The boys know that Mary likes *mpádɨ́gá bwə̀/bwə̀-mɛ́ nə̀ bwə̀-mɛ́/bwə̀-mɛ́fwó*
Does this have the reading that each boy knows that Mary likes the other boys? Does the reciprocal reading fail altogether?

g) *Máɲʧwámá má mpú ná Mary má ʧjɛ̀l bwə̀*
Má-ɲʧwámá má mpú ná Mary má ʧjɛ̀l bwə̀
C6-boy PST1 know that Mary COP like them
The boys know that mary like them (No possible RFL or RCM reading).

gi) **Máɲʧwámá má mpú ná Mary má ʧjɛ̀l bwàmɛ́ nə̀ bwàmɛ́/bwàmɛ́fwó*
The boys know that Mary loves each other/in between them

4.1.2.5 Two internal arguments or adjuncts - Consider coreference between two arguments of adjunct NPs in the same clause, neither of which is a subject and neither of which is a direct object

(if your language has such constructions - if not just say so and move on). Consider X=Hal in (C12). If I were answering for English, I would say that (C12c) is successful with the pronoun-SELF strategy, (C12b, d) fail with both pronoun-SELF and the independent pronoun strategies, and C12a is marginal with the independent pronoun strategy.

C12a) *Bill ɲáàmɜ̀ têɲ ɲɜ̀méfwó Hal ʧîg ʤjɛ́*
   Bill nɜ̀-àmɜ̀ têɲ nɜ̀-méfwó Hal ʧîg ʤj-ɛ́
      Bill PRN.3sg-REFL talk PRN.3sg-REFL Hal c7.life c7-POSS
      Bill talked about Hal to himself.

b) done in C12a
   Mary talked about X to Hal.

c) *Mary ɲáàmɜ̀ têɲ Hal láɲ í díɡjá nɜ̀ nɛ́/ɲɜ̀méfwó*
   Bill nɜ̀-àmɜ̀ têɲ Hal lâɲ í díɡ-já nɜ̀ nɛ́/nɜ̀-méfwó
      Bill PRN.3sg-P2 talk Hal story SM see-REFL with PRN.3sg/PRN.3sg-REFL
      Mary talked to Hal about himself.

d) Done in C12c
   Mary talked to X about Hal.

Comment: C12 is successful only with the Noun + Possessive strategy (C12a) and the *nɜ̀* + Pronoun strategy (C12c). C12b and C12d are identical to C12a and C12c respectively as indirect objects always precede direct objects in ditransitive constructions.

4.1.2.6 Clausemate non-coarguments
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.
Please indicate if the verb+*jà* strategy is the only one possible for the coreference relation in C13 or if a simple possessive pronoun without *jà* is also possible, perhaps with optional   non-coreferent readings

Noun + Possessive pronoun strategy (the only possible strategy with C13a, but an alternative strategy for C13b, c)

C13a) *Nick ɲàámɜ̀ ʤɜ̂w ɲóŋgú jɛ́*
   Nick nɜ̀-ámɜ̀ ʤɜ̂w nòŋgû j-ɛ́
      Nick PRN.3sg-P2 call/telephone c1.mother c1-POSS
      Nick telephoned to his mother.
b) *Nick ɲàámɜ̀ wààs ʃilú ʤɛ́*
   Nick nɜ̀-ámɜ̀ wààs ʃilú ʤ-ɛ́
      Nick PRN.3sg-P2 comb c7.hair c7-POSS
      Nick combed his hair.
Comment: The verb+*jà* strategy is not really the only possible alternative for C13b. There is a possibility to have these constructions with a simple coconstrual possessive pronoun without *jà*.

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c) *Nick ɲàámɔ̀ lás nà ɲʤúú jɛ́*
  Nick ɲɔ̀-ámɔ̀ lás nà ɲʤúù j-ɛ́
    Nick PRN.3sg-P2 speak with C1.boss C1-POSS
    Nick spoke to his boss.

Comment: The verb+*jà* strategy is not really the only possible alternative for C13c. There is a possibility to have these constructions with a simple coconstrual possessive pronoun without *jà*.

body reflexive strategy (an alternative for C13b)

bi) *Nick ɲàámɔ̀ wààs lû*
  Nick ɲɔ̀-ámɔ̀ wààs lû
    Nick PRN.3sg-P2 comb head
    Nick combed his hair. .[sentence related to (C13bii, biii)]

 Verb-jà strategy coupled with Noun + possessive pronoun (an alternative for C13c)

bii) *Nick ɲàámɔ̀ wɔ̀ʃà lû*
  Nick ɲɔ̀-ámɔ̀ wààs-jà lû
    Nick PRN.3sg-P2 comb-RFM head
    Nick combed his hair.[sentence related to (C13bi, biii)]
biii) *Nick ɲàámɔ̀ wààs lú jɛ́*
  Nick ɲɔ̀-ámɔ̀ wààs lû j-ɛ́
    Nick PRN.3sg-P2 comb head C1-POSS
    Nick combed his hair. .[sentence related to (C13bi, bii)]

ci) *Nick ɲàámɔ̀ léʃà nà ɲʤúú jɛ́*
  Nick ɲɔ̀-ámɔ̀ lás-jà nà ɲʤúù j-ɛ́
    Nick PRN.3sg-P2 speak-RCM with C1.boss C1-POSS
    Nick interacted with his boss.

KS: What makes this version of *jà* reciprocal-like? There is no plural antecedent. NI: The reciprocal reading is inherently express by the verb meaning. I have revised the gloss to fit with the context. Noun + Possessive pronoun strategy (an alternative for C13bi; ci)

Pronoun-dí strategy (the only possible strategy for C13d-e)

d) *Nick ɲàámɔ̀ bɔ̀d kálád jɛ́ ɲɔ́dí mpwòòmb-íʃ*
  Nick ɲɔ̀-ámɔ̀ bɔ̀d kálád j-ɛ́ ɲɔ̀-dí mpwòòmb-íʃ
    Nick PRN.3sg-P2 put.on C1.book C1-POSS PRN.3sg-LOC face-LOC
    Nick put his book on his face.

Pronoun-dí strategy (the only possible strategy for C13d)

e) *Ŋgwámɩ̀nà ɲàámɔ̀ jà Nick ʧùmlâ ɲɔ́dí kwáádɔ́*
  ŋgwámɩ̀nà ɲɔ̀-ámɔ̀ jà Nick ʧùmlâ ɲɔ̀-dí kwáádɔ́
    authority PRN.3sg-P2 give Nick prize PRN.3sg-LOC village
    The authority gave Nick a prize in his village.

    f) *Màɲʧwámá màámà gùsà Nick mpwòòmbú*
    mà-ɲʧwámá mà-ámà gùsà Nick mpwòòmbú
      C6-boy SM-P2wash Nick face
      The boys washed Nick's face.

Body strategy (the only possibility for C13f)

    C14a) *Nick sóŋgú má ʧjèl dɨ ê dɨg*
    Nick sóŋgú má ʧjèl dɨ ê dɨg
      Nick father.REFL COP like HAB OM.PRN.3sg see
      Nick's father admires him.

Comment: C14a in Makaa goes neither with body reflexive nor PRN-REFL strategies. C14a rather goes requires the presence of an OM or a PRN that is coconstrual with Nick.

    b) *Ìmàmí í Paul já má ntágɨlà ɲà*
    ìmàmí í Paul í-á má ntágɨlà ɲà
      C8.ambition ASS Paul SM-P3 destroy PRN.3sg
      Nick's ambition destroyed him.

Comment: C14b in Makaa goes neither with body reflexive nor PRN-REFL strategies. C14b rather goes requires the presence of an OM or a PRN that is coconstrual with Nick.

    c) *Paul ɲòŋgù ɲàámà kùʃà ɲà màtwà*
    Paul ɲòŋgù ɲà-ámà kùʃà ɲà màtwà
      Paul mother SM-P2 sell PRN.3sg car
      Nick's mother sold his car.

Please provide translations and judgments for the following examples where the plural pronoun is coconstrued with <u>the boys</u> or <u>the poltiticians</u>.

Below are the possible strategies that can be used depending on the construction.

Noun + possessive pronoun strategy (the only possibility for X20a)

    X20a) *Màɲʧwámá bwáá dɨg ìjɔ̀g bjáŋ*
    mà-ɲʧwámá bwà-á dɨg ì-jɔ̀g bj-áŋ
      c2-boy SM-P3 see c8-picture c8-POSS
      The boys saw pictures of themselves/each other/them

Comment: Body reflexive and PRN-REFL can not go with X20a in Makaa.

Noun + possessive pronoun strategy (a possibility for X20b)

    b) *Mary ɲáá lás nà màɲʧwámá ʃúl ìjɔ̀g bjáŋ*
    Mary ɲà-á lás nà mà-ɲʧwámáʃúl ì-jɔ̀g bj-áŋ
      Mary PRN.3sg-P3 talk with c6-boy for c8-picture c8-POSS

Mary told the boys about pictures of themselves

Comment: Body reflexive and PRN-REFL can not go with X20b in Makaa. Noun + possessive pronoun strategy (a possibility for X20b)

Verb-*jà* coupled withNoun + possessive pronoun strategy (a possibility for X20b)

bi) *Mary ɲáá lə́ʃà nə̀ mə̀ɲʧwə́má ʃúl ìjɔ̀g bjáŋ*
　 Mary ɲə̀-á lás-jà nə̀ mə̀-ɲʧwə́máʃúl ì-jɔ̀g bj-áŋ
　　 Mary PRN.3sg-P3 talk-RCM with c6-boy for c8-picture c8-POSS
　　 Mary interacted with the boys about pictures of themselves

Comment: Body reflexive and PRN-REFL can not go with X20c in Makaa. Verb-*jà* strategy (a possibility for X20b)
KS: Why do you gloss the *jà* as RCM if the translation is reflexive? Could this also be translated as 'Mary talked to the boys about pictures of each other'? NI: I have changed the verb talk to read interact to justify the RCM used. Yes, the sentence could also mean 'Mary talked to the boys about pictures of each other'.

　 Verb-*jà*strategy (a possibility for X20b)

　　　 c) *Ò̜ʃwə̀jɛ̀ ó íʧúnd bwáá kwíʃà lúmbúlú*
　　　 Ò-ʃwə̀jɛ̀ ó í-ʧúnd bwə̀-á kwíʃà lúmbúlú
　　　　 c2-taker ASS c8-decision SM-P3 plan.RCM attack
　　　　 The politicians planned attacks against each other.

Comment: Body reflexive and PRN-REFL can not go with X20c in Makaa.

　　　 d) *Ò̜ʃwə̀jɛ̀ ó íʧúnd bwáá sá ndàà bwá kwíʃà lúmbúlú*
　　　 Ò-ʃwə̀jɛ̀ ó í-ʧúnd bwə̀-á sâ ndàà bwə̀ kwíʃà lúmbúlú
　　　　 c2-taker ASS c8-decision SM-P3 do as.if they plan.RCM attack
　　　　 The politicians faked/simulated attacks against themselves.

Comment: Body reflexive and PRN-REFL can not go with X20c in Makaa.

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. It might be easier to go back to 3.6 to do what is asked there once you have done this section.

For English, the <u>by</u>-phrases in (C15a, b) are not interpretable as "alone" (see 3.6) and are not generally regarded as acceptable with <u>by herself</u>.
Comment: For Makaa likewise, the <u>by</u>-phrases in (C15a, b) cannot be interpretable as "alone" and are not regarded as acceptable with <u>by herself</u>. In Makaa, in C15a, b, it can only be understood that Poly was praised and helped by someone else. Passivized constructions in Makaa exclude the by-phrases.

　 C15a) *Polly ɲàá fə̀gjòw*
　　　 Polly ɲə̀-á fààg-jòw

Polly PRN-3sg-P3 praise-PASS

Polly was praised (by X=different from Polly)

Comment: Passive constructions do not have the by phrase in Makaa. It is not tolerated at all. The passive marker implies the by phrase.

C15ai) *Polly ɲàá fààg ɲàmɛ́(fwó)*

Polly ɲà-á fààg ɲà-mɛ́(fwó)

Polly PRN-3sg-P3 praise PRN.3sg-REFL

Polly praised herself

b) *Polly ɲàá kwììdjòw*

Polly ɲà-á kwììd-jòw

Polly PRN.3sg-P3 help-PASS

Polly was helped (by X=different from Polly)

bi) *Polly ɲàá kwììd ɲàmɛ́(fwó)*

Polly ɲà-á kwììd ɲà-mɛ́(fwó)

Polly PRN.3sg-P3 help PRN.3sg-REFL

Polly was helped (by X=different from Polly)

c) *Polly mɔ́ mpú bɨ́bàlɛ̀ ìsá í dɨ́gjá nà̀ nɛ́ jí*

Polly mɔ́ mpù bɨ́bààlɛ̀ ì-sâ í dɨ́g-jà nà̀ nɛ́ jí

Polly COP know small C8-thing SM see-REFL with PRN.3sg REL

Little is known by Polly about him-/herself (X = Polly)

ci) *Polly mɔ́ mpú bɨ́bààlɛ̀ ìsá í dɨ́gjá nà̀ ɲàmɛ́(fwó) jí*

Polly mɔ́ mpù bɨ́bààlɛ̀ ì-sâ í dɨ́g-jà nà̀ ɲà-mɛ́(fwó) jí

Polly COP know small C8-thing SM see-REFL with PRN.3sg-REFL c8.REL

Little is known by Polly about him-/herself (X = Polly)

d) *Líí jámà̀ ʤígjòw*

líí í-ámà̀ ʤíg-jòw

tree SM-P2 burn-PASS

The wood burnt

di) *Líí jámà̀ ʤígà̀ dwɔ́mɛ́fwó*

líí í-ámà̀ ʤígà̀ dwɔ́-mɛ́fwó

tree SM-P2 burn c7.PRN-REFL

The wood burnt itself

There are more subtle cases, like (C15d), where the interpretation is not equivalent to "the wax melted", but requires an odd agency for the subject such that it acted on itself to melt itself. The latter interpretation requires some sort of animacy for the subject, but the problem for C15d in this regard is can be mitigated, insofar as it is possible to imagine a fairy story in which an animate wax character Max commits suicide, hence Max melted himself.

4.1.3 Properties of antecedents

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) History repeats X

Comment: Can't find an appropriate translation in Makaa

b) *Mbìì ʃú gà má dɨ dà dwámɛ́fwó*
mbìì ʃû gà má dɨ dà dwà-mɛ́fwó
   species fish DEM COP HAB eat c7.PRN-REFL
   This type of fish cannibalizes itself

c) *ʃínà gà mə́ dɨ ntàmá dwámɛ́fwó*
ʃínà gà mə́ dɨ ntàmá dwə́-mɛ́fwó
   machine DEM COP HAB spoil c7.PRN-REFL
   This machine destroys itself (e.g., after you use it)

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.

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.

C19a) *Mùdá jɛ́ʃ ɲàámà dɨ́g ɲámɛ́(fwó)*
m-ùdá j-ɛ́ʃ ɲə̀-ámə̀ dɨ́g ɲə́-mɛ́(fwó)
   c1-woman c1-QUANT PRN.3sg-P2 see PRN.3sg-REFL
   Every woman saw herself.

b)*Mwán jɛ́ʃ ɲàámà gùsă ɲámɛ́(fwó)*
m-uân j-ɛ́ʃ ɲə̀-ámə̀ gùsà ɲə̀-mɛ́(fwó)
   c1-child C1-QUANT PRN.3sg-P2 wash PRN.3sg-REFL
   Every child washed himself/herself.

c) *Mwá ʃikùl jɛ́ʃ mə́ fɨm ɲámɛ́(fwó)*
m-uân ʃikùl j-ɛ́ʃ mə́ fɨm ɲə́-mɛ́(fwó)
   c1-child school c1-QUANT COP hate PRN.3sg-REFL
   Every student hates himself/herself.

d) *Mwán jɛ́ʃ ɲàámà dɨ́g ɲwâ kúnə́kúná nə̀ ɲámɛ́(fwó)*
m-uân j-ɛ́ʃ ɲə̀-ámə̀ dɨ́g ɲwâ kúnə́kúná ɲə́-mɛ́(fwó)
   c1-child c1-QUANT PRN.3sg-P2 see snake near PRN.3sg-REFL
   Every child saw a snake near himself/herself.

e) *Mwán jɛ́ʃ ɲàámà dʒâw ɲòŋgû jɛ́*
m-uân j-ɛ́ʃ ɲə̀-ámə̀ dʒâw ɲòŋgû j-ɛ́
   c1-child c1-QUANT PRN.3sg-P2 telephone c1.mother c1-POSS
   Every child telephoned his/her mother.

f) *Sóŋú mwán jɛ́ʃ mə́ ʧjèl dɨ́là dɨ́g jɛ́ mwán*
Sóŋû m-uân j-ɛ́ʃ mə́ ʧjèl dɨ-Hlà dɨ́g j-ɛ́ m-uân

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father c1-child c1-QUANT COP like/admire HAB-INF see c1-POSS c1-child

Every child's father admires him/her.

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

C19a) *Tò mùdá ʃígé díg ɲámé(fwó)*

    tò mùdá ʃí-gé díg ɲà-mé(fwó)

       no woman EVID.PAST-NEG see PRN.3sg-REFL

       No woman saw herself.

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). If your language leaves question words in situ, translate accordingly, and if your language allows both in situ and fronted questions, then provide examples of both possibilities and judgments for each of the coreference strategies.

C20a) *Zə́ ɲàámà̀ díg ɲə́méfwó?*

   zə́ ɲə̀-ámà̀ díg ɲə̀-méfwó

     who PRN.3sg-P2 see PRN.3sg-REFL

     Who saw himself/herself?

   b) *Zə́ ɲàámà̀ gùsă ɲə́méfwó?*

  zə́ ɲə̀-ámà̀ gùsà ɲə̀-méfwó

     who PRN.3sg-P2 wash PRN.3sg-REFL

     Who washed himself?

   c) *Zə́ ɲàámà̀ díg ɲwâ kúnə́kúnə́ nà ɲə́méfwó?*

  zə́ ɲə̀-ámà̀ díg ɲwâ kúnə́kúnə́ nə̀ɲə̀-méfwó

     who PRN.3sg-P2 see snake near with PRN.3sg-REFL

     Who saw a snake near himself/herself?

   d) *Zə́ ɲàámà̀ʤâw ɲòŋgû jɛ́?*

  zə́ ɲə̀-ámà̀ ʤâw ɲòŋgû j-ɛ́

     who PRN.3sg-P2 telephone c1.mother c1-POSS

     Who telephoned his/her mother?

   e) *Zə́jé sóŋgû mə́ ʧjél dílà̀ ê díg?*

  zə́j-ɛ́ sóŋgû mə́ ʧjél dí-Hlà̀ ê díg?

     who c1-POSS father COP like HAB-INF OM.PRN.3sg see

     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. Try to translate these into your language. It is expected that many sentences constructed in this section, possibly all, will be unacceptable in many languages (as *<u>Himself saw Fred</u> is in English). Naturally, any examples which are not ungrammatical are of particular interest.

C21a) **ɲə̀mɛ̀fwó ɲáámà̀ díg Fred*

      ɲà-mɛ̀fwó   ɲà-ámɜ̀   díg Fred
        PRN.3sg-REFL PRN.3sg-P2 see Fred
        Himself saw Fred.

  b) *Sɜ́méfwó sɜ́ámɜ̀ dígjà
   sɜ̂-méfwó sɜ̂-ámɜ̀ díg-jà
     we-REFL we-P2   see-RCM
     We saw us. (X=us)

  c) *ɲɜ̀mɛ̀fwó ɲáámɜ̀ díg ɲwâ Fred dɨ́ mpɨ́sɜ̀
   ɲɜ̀-mɛ̀fwó   ɲɜ̀-ámɜ̀ díg ɲwâ Fred dɨ́   mpɨ́sɜ̀
     PRN.3sg-REFL SM-P2   see snake Fred LOC behind
     Himself saw a snake behind Fred.

  d) X impressed Fred
Comment: Can't find a possible translation in Makaa

  e) *Bill ɲáámɜ̀ lás nɜ̀ ɲɜ̀mɛ̀fwó ìsá í dígjà nɜ̀ Fred jí
   Bill ɲɜ̀-ámɜ̀   lás nɜ̀ ɲɜ̀-mɛ̀fwó   ì-sâ   í díg-jà   nɜ̀   Fred jí
     Bill PRN.3sg-P2 speak with PRN.3sg-REFL c8-thing SM see-RFM with Fred c8.REL
     Bill spoke to Himself about Fred.

  f) *Bill ɲáámɜ̀ têɲ ɲámɛ̀fwó ìsá í dígjà nɜ̀ Fred jí
   Bill ɲɜ̀-ámɜ̀   têɲ   ɲɜ̀-mɛ̀fwó ì-sâ   í díg-jà   nɜ̀ Fred jí
     Bill PRN.3sg-P2 tell/narrate PRN.3sg-REFL c8-thing SM see-REFL with Fred REL
     Bill told himself about Fred (but correct if himself=Bill)

  g) *ɲɜ̀mɛ̀fwó ɲáámɜ̀ fɜ̀gɨ̀ljòw
   ɲɜ̀-mɛ̀fwó   ɲɜ̀-ámɜ̀   fɜ́gɨ̀lɜ̀-jòw
     PRN.3sg-REFL   PRN.3sg-P2 praise.PASS
     Himself was praised by Fred.

  h) *Wòméfwó mɜ́ ʧjèl wò
    wò-méfwó   mɜ́ ʧjèl wò
      PRN.2sg-REFL COP like you
      Yourself is liked by you. (X = you)

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) *ɲàámɜ̀ ʤɜ̂w George ɲòŋgû
    ɲɜ̀-ámɜ̀   ʤɜ̂w George ɲòŋgû
     PRN.3sg-P2 call   George mother.REFL
     He telephoned George's mother. (He ≠ George)

b) *ɲòŋgû jɛ̀ ɲàá ʧjɛ̀l ʤús�à George

  ɲòŋgû   ɟ-ɛ̀   ɲà-á   ʧjɛ̀l ʤúsà   George

     c1-mother c1-POSS PRN.3sg-P3 like improve George

     His mother wanted to improve George. (His ≠ George)

c) X's mother worried/impressed George.
Comment: Can't find a possible translation in Makaa

d) *Mary ɲàámà bwììŋ ɲóŋgú mɀ̀tɛŋ mɀ́ dɀ́gjá nɀ́ George mɀ́

  Mary ɲà-ámà bwììŋ ɲóŋgû mɀ̀tɛŋ mɀ́ dɀ́g-já nɀ́ George mɀ́

    Mary SM-P2 tell/narrate mother c6.story SM see-REFL with George c6.REL

    Mary told his mother about George.

e) Jòg mà̰ ɲóŋgú jámà̰ kùd George ɲúʃ

  jòg mà̰ ɲóŋgú í-ámà̰ kùd George ɲûl-ʃ

   picture ASS mother SM-P2 fall George body-LOC

   A picture of his mother fell on George. (He = George)

f) Jòg mà̰ ɲóŋgú jámà̰ ɲwà George lámɀ́ʃ

  jòg mà̰ ɲóŋgú í-ámà̰ ɲwà George lâm-ɀ́ʃ

   picture ASS mother SM-P2 please George heart-LOC

   A picture of his mother pleased George.(He = George)

4.1.4 Some matters of interpretation
4.1.4.1   Distribution, reflexivity and reciprocity -
.

Which of the following meanings can the examples below 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.

Duplication of the reflexive pronoun
   C23i) Bùdá bwá ŋgà kwíínd bwámɛ́(fwó) nà bwámɛ́(fwó)

     b-ùdá bwà ŋgà kwíínd bwà-mɛ́(fwó) nà bwà-mɛ́(fwó)

     c2-woman SM PROG help.s.o PRN.3pl-REFL with PRN.3pl-REFL

    The women help themselves.

Comment: This sentence is equivalent to c24e, and c24a-d, f excluded)

Pronoun-*mɛ́(fwó)* strategy

   C23i') *Bùdá bwə́ ŋgə̀ kwííndbwə́mɛ́(fwó)*

      b-ùdá bwə̀ ŋgə̀ kwíínd bwə̀-mɛ́(fwó)

         c2-woman SM PROG help.s.o PRN.3pl-REFL

         The women help themselves. (This sentence is equivalent to 24e, and 24a-d, f excluded)

Verb-*jà* strategy

   C23i") *Bùdá bwə́ ŋgə̀ kwííndjà*

       b-ùdá bwə̀ ŋgə̀ kwíínd-jà

       c2-woman SM PROG help.s.o-RCM

The women help themselves/each other.

Comment: This sentence is equivalent to 24e, f, and 24a excluded,

Verb-*jà* strategy + Duplication of the reflexive pronoun

   C23ii) *Bùdá bwə́ ŋgə̀ kwííndjà bwə́mɛ́(fwó) nə̀ bwə́mɛ́(fwó)*

      b-ùdá bwə̀ ŋgə̀ kwííndbwə̀-mɛ́(fwó) nə̀ bwə̀-mɛ́(fwó)

         c2-woman SM PROG help.someone PRN.3pl-REFLwith PRN.3pl-REFL

         The women help themselves/each other.

Comment: This sentence is equivalent to 24e,f, and 24 a-d excluded)

KS: All the strategies above in (23) allow for the (24e) reading. What factors determine whether one or the other of these strategies is chosen to represent this reading? Are there nuances of meaning or focus that determine these choices, or are all these sentences equivalent when they express (24e)? NI: It all depends on the context and the speaker's choices.

The same question arises for (C23i") and (C23ii) – what, if anything, distinguishes the choice of strategies to represent the C24f reading?

 C24f) *Mùdá jê∫ ɲáámə̀ ŋgə̀ kwììd mùdá í∫ús*

     M-ùdá -jê∫ ɲə̀-ámə̀ ŋgə̀ kwììd m-ùdá í∫ús

        c1-woman QUANT PRN.3sg-P2 PROG help with c1-woman else/different

        Each woman was helping one of the women other than herself.

  C24fi) *Bùdúm bwáámə̀ gwííljà*

       b-ùdúm bwə̀-ámə̀ gwííl-jà

       c2-man PRN.3pl-P2 kill-RCM

       The men killed themselves (Where each man killed himself)

Comment: Most of the strategies do not allow distributed reflexive readings. Which strategy would be employed for 'The men killed themselves' when it is intended that each of the men killed himself? NI: the verb-jà strategy or verb+jà + body strategy, with the verb gwîl 'to kill oneself'

   fii) *Bùdúm bwáámə̀ gwííljà mə́ɲûl*

      b-ùdúm bwə̀-ámə̀ gwííl-jà mə̀-ɲûl

      c2-man PRN.3pl-P2 kill-RCM c6-body

      The men killed themselves (Where each man killed himself)

Comment: Most of the strategies do not allow distributed reflexive readings. Which strategy

would be employed for 'The men killed themselves' when it is intended that each of the men killed himself? NI: the verb-jà strategy or verb+jà + body strategy, with the verb gwîl 'to kill oneself'

Pronoun-*mɛ́(fwó)* strategy (The sentences below are equivalent to 24e, and 24a-d, f excluded)

C25a) *Bùdá bwáámə̀ fágɨ̀lə̀ bwə́mɛ́fwó*
    b-ùdá bwə̀-ámə̀ fágɨ̀lə̀ bwə̀-mɛ́fwó
      c2-woman SM-P2 praise PRN.3pl-REFL
      The women praised themselves. (This sentence is equivalent to 24e, and 24a-d, f excluded)

   b) *Bùdá bwéé kɛ̀ɛ̀m bwə́mɛ́fwó*
   b-ùdá bwə̀-é kɛ̀ɛ̀m bwə̀-mɛ́fwó
      c2-woman SM-F1 defend PRN.3pl-REFL
      The women will defend themselves.

   c) *Bùdá bwáámə̀ ŋwə̃̀ə̃̀ bwə́mɛ́fwó jògɨ̀ʃ*
   b-ùdá bwə̀-ámə̀ ŋwə̃̀ə̃̀ bwə̀-mɛ́fwó jòg-ɨ̀ʃ
      c2-woman SM-P2 take PRN.3pl-REFL picture-LOC
      The women photographed themselves.

   d) *Bùdá bwáámə̀ kùʃà nə̀ bwə́mɛ́fwó*
   b-ùdá bwə̀-ámə̀ kùsə̀-jà nə̀ bwə̀-mɛ́fwó
      c2-woman SM-P2 sell-RCM with PRN.3pl-REFL
      The women betrayed themselves.

Verb-*jà* strategy (The sentences below are equivalent to 24e,f, and 24a-d excluded)

C25a) *Bùdá bwáámə̀ fàgɨ̀ljà*
    b-ùdá bwə̀-ámə̀ fágɨ̀lə̀-jà
      c2-woman SM-P2 praise-RCM
      The women praised each other/themselves.

   b) *Bùdá bwéé kɛ̀ɛ̀mɨ̀ljà*
   b-ùdá bwə̀-é kɛ̀ɛ̀m-Hlə̀-jà
      c2-woman SM-F1 defend-INF-RCM
      The women will defend themselves/each other.

   c) *Bùdá bwáámə̀ ŋwə̃̀ə̃̀-jà íjòg*
   b-ùdá bwə̀-ámə̀ ŋwə̃̀ə̃̀-jà ì-jòg
      c2-woman SM-P2 take-RCM c8-picture
      The women photographed themselves/each other.

Comment: In the light of the observations made above, it appears that the Verb-*jà* strategy permits both reciprocal and reflexive readings whereas the Pronoun-*mɛ́(fwó)* and total reduplication of the reflexive only permits reflexive reading.

4.1.4.2   Reciprocal readings - Complete this section only if your strategy allows a reciprocal reading (i.e., permits a reading like those in (C24a) or (C24f). If the strategy is ambiguous, make sure to use verbs that allow the reciprocal interpretation.

Which of the following verbs can the strategy be applied to?

C26) *bwàmà*"meet", *dɨg* "see", "fight", *lás* "speak, talk", "hit"

Symmetric predicate

C26a) *John báná Bill bwáámà bwàmà*
 John bwà-nà-à Bill bwà-ámà bwàmà
  John PRN.3pl-with-PRN.3sg Bill SM-P2 meet.RCM
  John and Bill met each other.

Verb-*jà* strategy

C26a) *John báná Bill bwáámà dɨgjà*
 John bwà-nà-à Bill bwà-ámà dɨg-jà
  John PRN.3pl-with-PRN.3sg Bill SM-P2 see-RCM
  John and Bill saw each other.
KS: Suppose John and Bill are standing next to each other looking into a mirror – could this mean either 'John saw himself and Bill saw himself' or 'John and Bill saw themselves together'? NI: It has both meanings.

 b) *John báná Bill bwáámà láʃà*
 John bwà-nà-à Bill bwà-ámà lás-jà
  John PRN.3pl-with-PRN.3sg Bill SM.c2-P2 talk-RCM
  John and Bill spoke to each other.

C27) John met/saw X with Bill (Meaning: "John and Bill met/saw each other.")
Comment: Not possible in Makaa.

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? If so, tell us what you think the problem is and provide pairs like these for subsequent tests in this section (and let us know if male/female gender pairings introduce any complications).

C28a) *John báná Mary bwáámà fàgɨljà*
 John bwà-nà-à   Mary bwà-ámà fágɨlè-jà
  John PRN.3pl-with-PRN.3sg Mary SM.c2-P2 praise-RCM
  John and Mary praised each other.

 b) *Bùdá bwáámà fàgɨljà*
 b-ùdá bwà-ámà fágɨlè-jà
  c2-woman SM.c2-P2 praise-RCM
  The women praised X.
Comment: No, there is no difference between a plural subject and a plural conjoined subject. Both

are expressed by the same RCM.

d) Can the strategy express reciprocity between a subject and an indirect object?
Comment: No, as both the Object-Null and Verb-jà strategies do not admit an object.

> C29a) John and Mary spoke to X.
>   b) John and Mary met with X.
>   c) John and Mary gave this book to X.

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"?

> C30) *Bill báná Mary bwá ŋgà búgɨlá ná bwám ʧèljà*
>   *Bill bwà-nà-à Marybwà ŋgà búgɨlà ná bwà-máʧèl-jà*
>   Bill PRN.3pl-with-PRN.3sg Mary SM PROG think/believe that they-COP like-RCM
>   Bill and Mary think that they like each other.

Comment: This can have the matrix reciprocal reading.

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

> C31a) *Òkâm bwáámè tîj sámbá*
>   *Ò-kâm bwà-ámè tîj sámbá*
>   C2-monkey SM-P2 leave together
>   The monkeys left together

Comment: There is only one way to translate the sentences – none of the anaphors are used for sociative readings.

> b) *Òkâm bwáámè dè óʃû sámbá*
>   *Ò-kâm bwà-ámè dè ò-ʃû sámbá*
>   C2-monkey SM-P2 eat C2-fish together
>   The monkeys ate fish together

Comment: There is only one way to translate the sentences – none of the anaphors are used for sociative readings.

4.1.4.4 Antipassive readings

> C32a) *Ŋkwèɲ énè ŋgà kwàgɨlà bùùd*
>   *ŋkwèɲ énè ŋgà kwàgɨlà b-ùùd*
>   panther that PROG bite C2-person
>   That panther bites people.

Comment: There is no antipassive reading achieved by the use of an anaphoric strategy.

> b)*Ŋgwámɨnàŋgà bìì bùùd*

> *ŋgwámìnàŋgà bìì b-ùùd*
> government PROG arrest/catch C2-person
> The government arrests people.

Comment: There is no antipassive reading achieved by the use of an anaphoric strategy.

> c) *Bill ŋgà fágìlà bùùd*
> *Bill ŋgà   fágìlà b-ùùd*
> Bill PROG   praise c2-person
> Bill praises people

Comment: There is no antipassive reading achieved by the use of an anaphoric strategy.

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.

Pronominal strategy and Pronoun-mɛ́fwó strategy

> D1a) *Jack ɲàámà ʧì ná à sà ŋkɨ́ jàswà*
> *Jack ɲà-ámà ʧì ná à sà ŋkɨ́ jàswà*
> Jack SM.c1-P2 say that he COP COP smart
> Jack said that he is smart.

> ai) *Jack ɲàámà ʧì ná ɲàmɛ́fwó sà ŋkɨ́ jàswà*
> *Jack ɲà-ámà ʧì ná   ɲà-mɛ́fwó   sà   ŋkɨ́   jàswà*
> Jack SM-P2   say that PRN.3sg-REFL COP COP smart
> Jack said that he also is smart.

Comment: The use of the Pronoun-mɛ́fwó strategy in this section gives the reading 'Pronoun also' KS: Is *ɲà-mɛ́* instead of *ɲà-mɛ́fwó* bad in Dai? Is *ɲuĩ* in place of *ɲà-mɛ́fwó* bad in Dai? NI: *ɲà-mɛ́* instead of *ɲà-mɛ́fwó* are in free variation in Makaa. *ɲûl* is just not acceptable in Dai as *jàswà* cannot be used to qualify inalienable, *ɲuĩ* 'body' in this case.

> b) *Jack mà mpú ná George mɑ́ ʧjèlɛ̂*
> *Jack mà mpú ná George mɑ́ ʧjèl-ɛ̂*
> Jack COP know that George COP like-OM.PRN.3sg
> Jack knows that George likes him.

Comment: The Pronoun-*mɛ́fwó* strategy fails in D1b because the reflexive pronoun is coconstrued with George and not with Jack.

> bi) *Jack mà mpú ná George mɑ́ ʧjèl ɲà*
> *Jack mà mpú ná George mɑ́ ʧjèl ɲà*
> Jack COP know that George COP like PRN.3sg
> Jack knows that George likes him.

> c) *Jack mà mpú ná Bill ɲàà ʧì ná à sà ŋkɨ́ jàswà*
> *Jack mà mpú ná Bill ɲà-á ʧì ná à sà ŋkɨ́ jàswà*

Jack COP know that Bill PRN.3sg-P3 say that he COP COP smart
Jack knows that Bill said that he is smart.

ci) *Jack mə̀ mpú nə́ Bill ɲàá ʧì nə́ ɲə̀méfwó sə̀ ŋkɨ́ jàswə̀*
Jack mə̀ mpú nə́ Bill ɲə̀-á ʧì nə́ ɲə̀-méfwó sə̀ ŋkɨ́ jàswə̀
Jack COP know that Bill PRN.3sg-P3 say that PRN.3sg-REFL COP COP smart
Jack knows that Bill said that he also is smart.

d) *Jack mə̀ búgɨ́là nə́ Lisa mə̀ mpú nə́ Wendy mə́ ʧjèlɛ̂*
Jack mə̀ búgɨ́là nə́ Lisa mə̀ mpú nə́ Wendy mə́ ʧjèl-ɛ̂
Jack COP think that Lisa COP know that Wendy COP like-OM.PRN.3sg
Jack thinks that Lisa knows that Wendy likes him.

di) *Jack mə̀ búgɨ́là nə́ Lisa mə̀ mpú nə́ Wendy mə́ ʧjèl ɲə̀*
Jack mə̀ búgɨ́là nə́ Lisa mə̀ mpú nə́ Wendy mə́ ʧjèl ɲə̀
Jack COP think that Lisa COP know that Wendy COP like PRN.3sg
Jack thinks that Lisa knows that Wendy likes him.
Comment: The Pronoun-méfwó strategy fails in D1d because the reflexive pronoun is coconstrual with Wendy and not with Jack

e) *Jack mə̀ búgɨ́là nə́ Lisa mə̀ mpú nə́ á ʧjèl Alice*
Jack mə̀ búgɨ́là nə́ Lisa mə̀ mpú nə́ á ʧjèl Alice
Jack COP think that Lisa COP know that he like Alice
Jack thinks that Lisa knows that he likes Alice.

ei) *Jack mə̀ búgɨ́là nə́ Lisa mə̀ mpú nə́ ɲə̀méfwó mə́ ʧjèl Alice*
Jack mə̀ búgɨ́là nə́ Lisa mə̀ mpú nə́ ɲə̀-méfwó mə́ ʧjèl Alice
Jack COP think that Lisa COP know that PRN.3sg-REFL COP like Alice
Jack thinks that Lisa knows that he also likes Alice.

f) *Sarah ɲàə̀mə̀ ʤə̀w Jack nə́ Lisa mə́ ʧjèlɛ̂*
Sarah ɲə̀-ə̀mə̀ ʤə̀w Jack nə́ Lisa mə́ ʧjèl-ɛ̂
Sarah PRN.3sg-P2 tell Jack that Lisa COP love-OM.PRN.3sg
Sarah told Jack that Lisa loves him.

fi) *Sarah ɲàə̀mə̀ ʤə̀w Jack nə́ Lisa mə́ ʧjèl ɲə̀*
Sarah ɲə̀-ə̀mə̀ ʤə̀w Jack nə́ Lisa mə́ ʧjèl ɲə̀
Sarah PRN.3sg-P2 tell Jack that Lisa COP love-OM.PRN.3sg
Sarah told Jack that Lisa loves him.
Comment: The Pronoun-méfwó strategy fails in D1d because the reflexive pronoun is coconstrual with Lisa and not of Sarah.

g) *Sarah ɲàə̀mə̀ ʤə̀w Jack nə́ à ʧjèl Wendy*
Sarah ɲə̀-ə̀mə̀ ʤə̀w Jack nə́ à ʧjèl Wendy
Sarah PRN.3s-P2g tell Jack that he love Wendy
Sarah told Jack that he loves Wendy.

gi) *Sarah ɲààmə̀ ʤàw Jack ná nə̀mɛ́fwó mə́tʃjèl Wendy*
  Sarah nə̀-àmə̀ ʤàw Jack ná nə̀-mɛ́fwómə́ tʃjèl Wendy
    Sarah PRN.3sg-P2 tell Jack that PRN.3sg-REFL COP love Wendy
    Sarah told Jack that he also loves Wendy.

Although there is no morphological marking of the distinction in English, sometimes a difference in factivity makes a difference for what we are studying and we want you to consider this difference.

D2a) *Jack ɲàá màgɨ̀là ná Mary ɲàá tʃjèlɛ̂*
  Jack nə̀-á màgɨ̀là ná Mary nə̀-á tʃjèl-ɛ̂
    Jack PRN.3sg-P2 admit that Mary PRN.3sg-P3 love-OM.PRN.3sg
    Jack admitted that Mary loved him.

  b) *Jack ɲàá búgɨ̀là ná Mary ɲàá tʃjèlɛ̂*
  Jack nə̀-á búgɨ̀là ná Mary nə̀-á tʃjèl-ɛ̂
    Jack PRN.3sg-P3 believe that Mary PRN.3sg-P3 love-OM.PRN.3sg
    Jack believed that Mary loved him.

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

D3a) *Jeff ɲàámə̀ ʃwámàn Mary ʤă Ella ɲàámə̀ ʤùm nə̀ jí*
  Jeff nə̀-ámə̀ ʃwámàn Mary ʤă Ella nə̀-ámə̀ ʤùm nə̀ jí
    Jeff PRN.3sg-P2 accuse Mary when Ella PRN.3sg-P2 blame him REL
    Jeff complained about/accused Mary when Ella blamed him

  b) *Jeff ɲàámə̀ nìŋgə̀ nʤə́w ʤă ɲàámə̀ gwág tàg ɲûl jí*
  Jeff nə̀-ámə̀ nìŋgə̀ nʤə́w ʤă nə̀-ámə̀ gwág tàg ɲûl jí
    Jeff PRN.3sg-P2 return home when PRN.3sg-P2 hear tire body
    Jeff returned home when he became tired.

  c) *Jeff ɲàámə̀ nìŋgə̀ nʤə́w ʃúʃwógû nə̀ ná Mary tʃílə̀g nə̀*
  Jeff nə̀-ámə̀ nìŋgə̀ nʤə́w ʃúʃwógû nə̀ ná Mary tʃìlə̀-g nə̀
    Jeff PRN.3sg-P2 return home prior with that Mary write-HORT PRN.3sg
    Jeff returned home before Mary wrote to him.

  d) *Jeff ɲàámə̀ tîj Mary kú ê dɨ́g*
  Jeff nə̀-ámə̀ tîj Mary kú ê dɨ́g
    Jeff PRN.3sg-P2 leave Mary NEG.HORT OM.PRN.3sg see
    Jeff left without Mary seeing him.

  e) *Mary ɲàámə̀ jə̀ Jeff mə̀bɛ̀ɛ̂ à kú ê dɨ́g*
  Mary nə̀-ámə̀ jə̀ Jeff mə̀bɛ̀ɛ̂ à kú ê dɨ́g
    Mary PRN.3sg-P2 give Jeff C6.guilt PRN.3sg NEG.HORT OM.PRN.3sg see

Mary condemned Jeff without meeting him.

Comment: There is no difference, with respect to anaphoric strategies, between complements and adjuncts. None of the reciprocal strategies would work in these contexts. There is no change noticed in differences in gender, plurality or person.

4.2.1.2 Climbing from tensed complements -

D3h) *John ŋgà búgìlà fìg*
    John ŋgà búgìlà fìg
    John PROG believe intelligence
    John believes himself to be intelligent
Comment: This is not a climbing structure.

  hi) **Máʧwámá mə́ ʧjèljà fààg* 'The boys want to praise each other"
    Mə́-ʧwámá mə́ ʧjèl-jà fààg
    c6-boy PST want/like-RCM praise
    'The boys want to praise each other"
KS: Please try 'The boys want to praise each other", i.e., place the *jà* on the 'want' verb instead of on the 'praise' verb (*fààg*). I want to see if the RCM can be attached to a verb higher than the one it is thematically related to. Also try 'The prisoners tried to kill themselves' with the *ja* on 'try'. Please provide the sentences even if they are starred. NI: The RCM/RFM in Makaa never attaches to a verb higher than the one to which it is thematically related.

  hii) **Mìmbùùg mjámə̀ wə́jà gwîl ɲûl*
    Mì-mbùùg mí-ámə̀ wə́-jà gwîl ɲûl
    c4-prisoner c4-P2 try-RFM kill.oneself body
    'The prisoners tried to kill themselves'
Comment: The RCM/RFM in Makaa never attaches to a verb higher than the one to which it is thematically related.

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.

  X12a) I hope [to leave]
      I hope [for Bill to leave]
      I expect [Bill to be unpleasant]
      I persuaded Bill [to leave]
b)I made [Bill leave]
    c) I saw [someone leaving]
d I require [that he speak softly]
    e) I consider [Bill 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.

For subjunctives, if your language permits them and if your language permits them to have lexical subjects, the tests can probably proceed on the model of tensed clause complements. However, some of these clausal types require some adjustments if they require null subjects. For example, in providing data for infinitives (if your language has infinitives), and where X = Edgar, we want you to give us a range of examples where the infinitive subject is not controlled by the matrix subject. In other words, the understood subject of the infinitive (the understood giver or talker) should never be Edgar, but Bill (or else we will actually testing just a clausemate strategy instead of a long distance one). Thus in (D4a), for example, Bill is understood to be the one trusting, and we want to test whether or not X could be Edgar, and if so, which form makes the possible (in English, it is the otherwise independent pronoun him).

If only the pronominal strategy works for coreference in these positions, translate using the pronoun and then comment on the strategies that would fail if in that position, e.g., body reflexives, PRN-*mɛ́(fwó)*. NI: The PRN-*mɛ́(fwó)* strategy does not work for coreference here.

D4a) *Edgar ɲáámà̀ ʃílà Bill ná à jágê̂ búgá ʤjɛ́ ʤjêʃ*
    Edgar ɲà-ámà̀ ʃílà Bill ná à jà-g-ê̂ búgá ʤj-ɛ́ ʤj-êʃ
        Edgar PRN.3sg-P2 ask Bill that he give-HORT-OM.PRN.3sg C7.trust C7-POSS C7-QUANT
        Edgar asked Bill to trust Him.

b) *Edgar ɲáámà̀ ʃílà Bill ná à jágê̂ kálàd*
    Edgar ɲà-ámà̀ ʃílà Bill ná à jà-g-ê̂ kálàd
        Edgar PRN.3sg-P2 ask Bill that he give-HORT-OM.PRN.3sg book
        Edgar asked Bill to give a book to him.

c) *Edgar ɲáámà̀ ʃílà Bill ná à lásì̀g nà̀ nɛ́*
    Edgar ɲà-ámà̀ ʃílà Bill ná à lás-ì̀g nà̀ nɛ́
        Edgar PRN.3sg-P2 ask Bill that he talk-HORTwith PRN.3sg
        Edgar asked Bill to talk to him.

d) *Edgar ɲáámà̀ ʃílà Bill ná à tɛ́ɲì̀g ì̀sá í dɨ́gjá nà̀ nɛ́ jí*
    Edgar ɲà-ámà̀ ʃílà Bill ná à tɛ̂ɲ-ì̀g ì̀-sâ í dɨ́g-jà nà̀ nɛ́ jí
        Edgar PRN.3sg-P2 ask Bill that he talk-HORT C8-thing SM see-REFL with PRN.3sg REL
        Edgar asked Bill to talk about him.

e) *Edgar ɲáámà̀ búgì̀là ná Bill é jà̀ ɲà̀ búgá ʤjɛ́ ʤjêʃ*
    Edgar ɲà-ámà̀ búgì̀lànà Bill é jà̀ ɲà̀ búgá ʤj-ɛ́ ʤj-êʃ
        Edgar PRN.3sg-P2 expect that Bill F1 give PRN.3sg C7.trust C7-POSS C7-QUANT
        Edgar expected Bill to trust him.
f) *Edgar ɲáámà̀ ʃílà Bill ná à ʤánàg nà̀ nɛ́*
    Edgar ɲà-ámà̀ ʃílà Bill ná à ʤánà-g nà̀ nɛ́
        Edgar PRN.3sg-P2 ask Bill that he pay-HORTwith PRN.3sg

Edgar ordered Bill to pay him.

g) *Edgar ɲáámà ʃílà Bill ná à ʧíg ná à sà ŋkɨ́ jàswà*
Edgar ɲà-ámà ʃílà Bill ná à ʧì-g ná à sà ŋkɨ́ jàswà
　　Edgar PRN.3sg-P2 ask Bill that he say-HORTthat he COP COP smart
　　Edgar ordered Bill to say that he was smart.

h) *Edgar ɲáámà ʃílà Bill ná à ʧíg ná Mary mɔ́ ʧjèlê̂*
　Edgar ɲà-ámà ʃílà Bill ná à ʧì-g nɔ́ Mary mɔ́ ʧjèl-ê̂
　　Edgar PRN.3sg-P2 ask Bill that he say-HORT that Mary COP love-OM.PRN.3sg
　　Edgar ordered Bill to say that Mary loved him.

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 <u>for</u>) as in (D6), please also provide examples of this type.

D5a) *Edgar ŋgà búgɨ̀là ná ɲòó ɲéé tâw ʃwóóg*
　Edgar ŋgà búgɨ̀là náɲɲà-ó ɲé-é tâw ʃwóóg
　　Edgar PROG expect that PRN.3sg-FOC PRN.3sg-F1 stand ahead
　　Edgar expects that he is the one who will win.

b) *Edgar ŋgà búgɨ̀là nɔ́ Bill é ʧɔ̂ ɲà*
　Edgar ŋgà búgɨ̀là náBill é ʧɔ̂ ɲà
　　Edgar PROG expect that Bill F1 surpass PRN.3sg
　　Edgar expects Bill to defeat him.

D6a) *Edgar mɔ́ ʧjèl ná ɲòó tɔ́wùg ʃwóóg*
　Edgar mɔ́ ʧjèl ná ɲà-ó tâw-ug ʃwóóg
　　Edgar COP like that PRN:3sg-FOC stand-HORT ahead
　　Edgar hopes for him to win.

b) *Edgar mɔ́ ʧjèl nɔ́ Bill ó ʧõ̀ɲ̀g ɲà*
　Edgar mɔ́ ʧjèl nɔ́ Bill ó ʧɔ̂ŋ-ɨ̀g ɲà
　　Edgar COP like that Bill FOC surpass-HORT PRN.3sg
　　Edgar hopes for Bill to defeat him.

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

D7a) *Edgar ŋgà búgɨ̀là nɔ́ Bill é ʧɔ̃́ŋ ɲʧúúm jɛ́*
　Edgar ŋgà búgɨ̀là náBill é ʧɔ̂ ɲʧúùm j-ɛ́
　　Edgar PROG expect that Bill F1 surpass C1-brother C1-POSS
　　Edgar expects Bill to defeat his brother.

b) *Edgar mɔ́ ʧjèl nɔ́ Bill ʧõ̀ɲ̀g ɲʧúúm jɛ́*
　Edgar mɔ́ ʧjèl nɔ́ Bill ʧɔ̃̂ŋ-ɨ̀g ɲʧúùm j-ɛ́
　　Edgar COP like that Bill surpass-HORT C1-brother C1-POSS

Edgar hopes for Bill to defeat his brother.

c) *Edgar ŋgà búgɨ̀là nə́ ɲʧúúm jéɲèè ʧɔ̃́ŋ ɲə̀*
Edgar ŋgà búgɨ̀là nə́ɲʧúùm j-éɲə̀-è ʧɔ̃̂ ɲə̀
Edgar PROG expect that C1-brother C1-POSS PRN-3sg-F1 surpass him
Edgar expects his brother to defeat him.

d) done in b
Edgar hopes for Bill to defeat his brother.

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

D8a) *Tom mə́ dɨ́ búgɨ̀lǎ fɨg*
Tom mə́ dɨ́ búgɨ̀là fɨg
Tom COP HAB believe intelligence/knowledge
Tom considers himself intelligent.

b) *Tom ŋgà búgɨ̀là nə́ Mary mə́ ʤáág ʧjèlê*
Tom ŋgà búgɨ̀là nə́ Mary mə́ ʤáág ʧjèl-ê
Tom PROG believe that Mary COP ADV love-PRN.3sg
Tom considers Mary fond of him.

c) *Tom ŋgà búgɨ̀là nə́ Mary ŋgà gwə́g mpìmbà nə̀ nɛ́*
Tom ŋgà búgɨ̀là nə́ Mary ŋgə́ gwə́g mpìmbà nə̀ nɛ́
Tom PROG believe that Mary PROG hear anger with PRN.3sg
Tom considers Mary angry at him.

Note: If your language permits verb serialization, special issues may arise for some of the questions we have been raising. If this is the case, please let us know that verb serialization is possible in your language and alert us to any sorts of patterns that you think we might be interested in. We will address these issues in follow up research.

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 coconstrued with Oliver. Your language may not have a verb like <u>implicate</u>, 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.*

Comment: Makaa does not allow sentences beginning with 'that X…' or 'the fact that x'. Thus sentences in D9 will be revised with respect to Makaa syntax. No other strategy different from that used below can be used to translate the sentences in D9

D9a) *Oliver ɲàámà gwə́g mpìmbà nə̀ ɲə̀mɛ́fwó nə̀ ʧjé ɲàámà wóós mpɨ́sà wàlà*
Oliver ɲə̀-ámà gwə́g mpìmbà nə̀ ɲə̀-mɛ́fwó nə̀ ʧjé ɲə̀-ámà wóós mpɨ́sà wàlà

Oliver PRN.3sg-P2 hear anger with PRN.3sg-REFL with why PRN.3sg-P2 arrive behind time
Oliver got upset because he was late.

b) *Oliver ɲàámà̀ bà nà màbɛ̀ɛ́ nà ʧjé ɲàámà̀ wóós mpɨ́sà̀ wàlà*
  Oliver ɲà-ámà̀ bà nà màbɛ̀ɛ́ nà ʧjé ɲà-ámà̀ wóós mpɨ́sà̀ wàlà
  Oliver PRN.3sg-P2 COP with C6.guilt with why PRN.3sg-P2 arrive behind time
  Oliver was guilty because he was late.

c) *Oliver ɲàámà̀ bà nà màbɛ̀ɛ́ ndàá ɲàámà̀ wóós mpɨ́sà̀ wàlà*
  Oliver ɲà-ámà̀ bà nà màbɛ̀ɛ́ ndàà ɲà-ámà̀ wóós mpɨ́sà̀ wàlà
  Oliver PRN.3sg-P2 COP with C6.guilt as PRN.3sg-P2 arrive behind time
  Oliver was guilty as he was late.

d) *Oliver ɲàámà̀ jàjòw màbɛ̀ɛ́ ndàá ɲàámà̀ wóós mpɨ́sà̀ wàlà*
  Oliver ɲà-ámà̀ jà-jòw màbɛ̀ɛ́ ndàà ɲà-ámà̀ wóós mpɨ́sà̀ wàlà
  Oliver PRN.3sg-P2 give-PASS C6.guilt as PRN.3sg-P2 arrive behind time
  Oliver was said to be guilty [implicated] as he was late.

Section 4.3 Principle C-type effects
Comment: In Makaa either, it is neither possible to interpret he=Malik or he=the boy in (E1), nor possible for the pronoun in (E2)

E1a) *ɲàámà̀ ʤŭm Malik*
  ɲà-ámà̀ ʤùm Malik
    PRN.3sg-P2 blame Malik
    He Blamed Malik.
    Comment: He is not Malik

  b) *ɲàámà̀ ʧì ná Mariam ɲàámà̀ ʤŭm Malik*
   ɲà-ámà̀ ʧì ná Mariam ɲà-ámà̀ ʤùm Malik
     PRN.3sg-P2 say that Mariam PRN.3sg-P2 blame Malik
     He said Mariam blamed Malik.
Comment: He is not Malik
    c) *ɲàámà̀ ʤùm dúl ɲʧwámá*
    ɲà-ámà̀ ʤùm dúl ɲʧwámá
      PRN.3sg-P2 blame DET Malik
He blamed a boy.
Comment: He is not the boy
    d) *ɲàámà̀ ʧì ná Mariam ɲàámà̀ ʤùm dúl ɲʧwámá*
    ɲà-ámà̀ ʧì ná Mariam ɲà-ámà̀ ʤùm dúl ɲʧwámá
      PRN.3sg-P2 say that Mariam PRN.3sg-P2 blame DET Malik
      He said Mariam blamed a boy.
Comment: He is not the boy

  E2a) *ɲóŋgú jɛ́ ɲàámà̀ ʤŭm Malik*

ɲóŋgú j-ɛ́ ɲə̀-ámə̀ ʤùm Malik
    C1-mother C1-POSS PRN.3sg-P2 blame Malik
     His mother blamed Malik.
Comment: His is not Malik
    b) *ɲóŋgú jɛ́ ɲàámə̀ ʧì nə́ Mariam ɲàámə̀ ʤŭm Malik*
  ɲóŋgú j-ɛ́ ɲə̀-ámə̀ ʧì nə́ Mariam ɲə̀-ámə̀ ʤùm Malik
    C1-mother C1-POSS PRN.3sg-P2 say that Mariam PRN.3sg-P2 blame Malik
     His mother said Mariam blamed Malik.
Comment: His is not Malik
    c) *ɲóŋgú jɛ́ ɲàámə̀ ʤùm dúl ɲʧwámá*
  ɲóŋgú j-ɛ́ ɲə̀-ámə̀ ʤùm dúl ɲʧwámá
    C1-mother C1-POSS PRN.3sg-P2 blame DET boy
    His mother blamed a boy.
Comment: His is not the boy
    d) *ɲóŋgú jɛ́ ɲàámə̀ ʧì nə́ Mariam ɲàámə̀ ʤùm dúl ɲʧwámá*
  ɲóŋgú j-ɛ́ ɲə̀-ámə̀ ʧì nə́ Mariam ɲə̀-ámə̀ ʤùm dúl ɲʧwámá
    C1-mother C1-POSS PRN.3sg-P2 say that Mariam PRN.3sg-P2 blame DET boy
    His mother said Mariam blamed a boy.
Comment: His is not the boy.

4.4 More on long distance anaphor strategies
  D10) *John ŋgə̀ búgɨ̀là nə́ à sə̀ nə̀ mə̀bɛ̂ɛ́*
   John ŋgə̀ búgɨ̀là nə́ à sə̀ nə̀ mə̀bɛ̂ɛ́
    John PROG believe that he COP with guilt
    John believes *he* is guilty.
Comment: No special long distance form.

4.4.2 Antecedent properties

4.4.2.2 Quantified antecedents - Review the examples in the Jack, Zeke and Edgar paradigms, replacing these names with "every child" and "no child" or "many children".
Comment: There are no differences observed in D1 and D4 when Jack and Edgar are substituted by 'every child' and 'no child'.

Pronominal strategy and Pronoun-mɛ́fwó strategy
  D11a) *Mwán jɛ́ʃ ɲàámə̀ ʧì nə́ à sə̀ ŋkɨ́ jàswə̀*
   mwân j-ɛ́ʃ ɲə̀-ámə̀ ʧì nə́ à sə̀ ŋkɨ́ jàswə̀
    C1-child C1-QUANT SM-P2 say that he COP COP smart
    Every child said that he is smart.

    b) *Mwán jɛ́ʃɲàámə̀ ʧì nə́ ɲə̀mɛ́fwó sə̀ ŋkɨ́ jàswə̀*
   mwân j-ɛ́ʃ ɲə̀-ámə̀ ʧì nə́ ɲə̀-mɛ́fwó sə̀ ŋkɨ́ jàswə̀
    C1-child C1-QUANT SM-P2 say that PRN.3sg-REFL COP COP smart
    Every child said that he also is smart.
Comment: The use of the Pronoun-mɛ́fwó strategy in this section gives the reading 'Pronoun also'

D12a) *ɲʧýljá bwán ó mpú ná George má ʧjèl bwà*

   ɲʧýljá b-uán ó mpù ná George má ʧjèl bwà

     Many C2-child SM know that George COP like PRN.pl

     Many children know that George likes them.

  b) *Tɔ̀ mwân ɲàà mpújɛ́ ná George má ʧjèl ɲà*

  tɔ̀ m-uân ɲà-à mpù-jɛ́ ná George má ʧjèl ɲà

    no child PRN.3sg-NEG know-NEG that George COP like PRN.3sg

    No child knows that George likes him.

Comment: The Pronoun-mɛ́fwó strategy fails in D1b because the reflexive pronoun is coconstrual with George and not with no child in D12b. D12a will be ungrammatical because the reflexive pronoun that can only refer to George will be plural, refereeing thus to many children.

 D13a) *Mwán jɛ́ʃ ɲáámà ʃílà Bill ná à jágê búgá ʤjɛ́ ʤjêʃ*

   m-uán j-ɛ́ʃ ɲà-ámà ʃílà Bill ná à jà-g-ê búgá ʤj-ɛ́ ʤj-êʃ

    c1-child c1-QUANT PRN.3sg ask Bill that he give-HORT-OM.PRN.3sg C7.trust C7.AM-POSS C7.AM-QUANT

    Every child asked Bill to trust him.

  b) *Tɔ̀ mwán ʃígɛ́ ʃílà Bill ná à jágê kálàd*

  tɔ̀ m-uân ʃí-gɛ́ ʃílà Bill ná à jà-g-ê kálàd

    no C1-child EVID.PAST-NEG ask Bill that PRN.3sg give-HORT-OM.PRN.3sg book

    No child asked Bill to give a book to him.

  c) *ʧúljá bwán bwáámà ʃílà Bill ná à lásɨg nà bwà*

  ʧúljá b-uân bwà-ámà ʃílà Bill ná à lás-ɨg nà bwà

    Many C1-child SM-P2 ask Bill that he talk-HORT with PRN.3pl

    Many children asked Bill to talk to them.

Note: Try overt and null pronouns as the coreferent NP if your language has both.

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 Bill dislikes *them*," where <u>them</u> would be Ozzie and Harriet.

D14a) *Ozzie ɲààmà têɲ ʃɛ́ ìsá í dɨ́gjá nà Harriet jí*

   Ozzie ɲà-ámà têɲ ʃɛ́ ì-sâ í dɨ́g-já nà Harriet jí

Ozzie PRN.3sg-P2 talk/narrate PRN.2pl.INCL C8-thing SM see-RCM/REFL with Harriet REL

Ozzie talked about Harriet to us (INCL.).

Comment: The translation in D14a is the only pronominal strategy that can be used in Makaa for Ozzie to be coconstrual with the pronoun ʃɛ́ (we inclusive). Other strategies fail as they can produce any acceptable grammatical construction in Makaa. However, with the Pronoun-mɛ́fwó

strategy, sentence D14a is grammatical but the reflexive pronoun excludes Ozzie.
KS: I need to think about this one.

b) *Ozzie ɲàámɜ̀ têɲ Harriet ìsá í díɡjá nɜ̀ bwɜ̀ jí*
   Ozzie ɲɜ̀-ámɜ̀ têɲ Harriet ì-sâ   i   díɡ-já nɜ̀ bwɜ̀ jí
     Ozzie PRN.3sg-P2 talk/narrate Harriet c8-thing c8.SM see-RCM/REFL with PRN.3pl c8.REL
     Ozzie talked about them to Harriet.

bi) *Ozzie ɲàámɜ̀ têɲ Harriet ìsá í díɡjá nɜ̀ bwɜ́mɛ́(fwó) jí*
   Ozzie ɲɜ̀-ámɜ̀ têɲ Harriet ì-sâ í díɡ-já nɜ̀ bwɜ̀-mɛ́(fwó) jí
     Ozzie PRN.3sg-P2 talk/narrate Harriet c8-thing c8.SM see-RCM/REFL with PRN.3pl-REFL REL
     Ozzie talked about themselves to Harriet.

c) *Ozzie ɲàámɜ̀ ʤàw Harriet nɜ́ bwɜ́m ʤɜ̀lǎ nɜ̀ tîj*
   Ozzie ɲɜ̀-ámɜ̀ ʤàw Harriet nɜ́ bwɜ̀-mɜ́ ʤɜ̀lǎ nɜ̀ tîj
     Ozzie PRN.3sg-P2 tell Harriet that PRN.3pl-COP ought to leave
     Ozzie told Harriet that they should leave.

ci) *Ozzie ɲàámɜ̀ ʤàw Harriet nɜ́ bwɜ́mɛ́fwó bwɜ́m ʤɜ̀lǎ nɜ̀ tîj*
   Ozzie ɲɜ̀-ámɜ̀ ʤàw Harriet nɜ́ bwɜ̀-mɛ́fwó bwɜ̀-m ʤɜ̀lǎ nɜ̀ tîj
     Ozzie PRN.3sg-P2 tell/narrate Harriet that PRN.3pl-REFL PRN.3pl-PST ought to leave
     Ozzie told Harriet that they also should leave.
Comment: The use of the Pronoun-mɛ́fwó strategy in D14ci gives the reading 'Pronoun also'

d) *Ozzie ɲàámɜ̀ ʤàw Harriet nɜ́ Bill mɜ́ fɨm bwɜ̀*
   Ozzie ɲɜ̀-ámɜ̀ ʤàw Harriet nɜ́ Bill mɜ́ fɨm bwɜ̀
     Ozzie PRN.3sg-P2 tell/narrate Harriet That Bill PST PRN.3pl
     Ozzie told Harriet that Bill dislikes them.
Comment: The use of the Pronoun-mɛ́fwó strategy in D14d fails because it produces
unacceptable sentences whereby the plural reflexive pronoun *bwɜ́mɛ́fwó* is neither coconstrual
with Ozzie and Harriet nor with Bill. See also D14e.

e) *Ozzie ɲàámɜ̀ ʧ̑i nɜ́ Harriet ŋgɜ̀ búgɨlà nɜ́ Bill mɜ́ fɨm bwɜ̀*
   Ozzie ɲɜ̀-ámɜ̀ ʧ̑i nɜ́ Harriet ŋgɜ̀ búgɨlà nɜ́ Bill mɜ́ fɨm bwɜ̀
     Ozzie PRN.3sg-P2 tell/narrate that Harriet PROG think that Bill PST hate PRN.3pl
     Ozzie said that Harriet thinks that Bill dislikes them.
Comment: The use of the Pronoun-mɛ́fwó strategy in D14e fails because it produces
unacceptable sentences whereby the plural reflexive pronoun bwɜ́mɛ́fwó is neither coconstrual
with Ozzie and Harriet nor with Bill. See also D14d.

4.4.2.4 Discourse antecedents -

D15) *Mark ɲàá fúndɜ̀ nɜ́ mwán jɛ́ ʧúgɛ́ nɜ́ ʃjɛ̀ɛ̀.*
     Mark ɲɜ̀-á fúndɜ̀ nɜ́ m-uân j-ɛ́ ʧúgɛ́ nɜ́ ʃjɛ̀ɛ̀.
     Mark PRN.3sg-P3 fear that c1-child c1-POSS NEG PREP peace
     Mark feared that his son was not safe.

ɲàá gwág ʃwóòn ndàá ɲáá ʃígɛ́ kwàg kɛ̀ɛ̀mɨ́lə̀ mùùd à ɲʤów búùd jɛ́
ɲà-á gwág ʃwóòn ndàà ɲà-á ʃí-gɛ́ kwàg kɛ̀ɛ̀m-Hlə̀ m-ùùd à ɲʤów b-ùùd j-ɛ́
He-P3 hear shame as he-P3 EVID.PAST-NEG able protect-INF c1-peron ASS c3.house c2-person
He was ashamed that he could not protect his closest relative.

Oɲʧúùm bɛ́ bwéé tádɨ̀gà ná à sà̀ ɲéjɛ́ kjàgɨ̀lì múùd?
ò-ʧúùm b-ɛ́ bwà̀-é tádɨ̀gà ná à sà̀ ɲéjɛ́ kjàgɨ̀lì m-úùd
c2-brother c2-POSS SM-F1 think that PRN.3sg COP which type c1-person
What would his cousins think of him?

D16) *Mark ɲàámə̀ gwàg ʧə̀j lâm dɨ́gɨ́lá jòg ʤɛ́ kálàdɨ̀ʃ*
    Mark ɲà-ámə̀ gwàg ʧə̀j lâm dɨ́g-Hlá jòg ʤ-ɛ́ kálàd-ɨ̀ʃ
      Mark PRN.3sg-P2 hear pain heart see-INF c7.picture c7-POSS paper-LOC
      Mark was shocked to see his picture in the paper.

16i) *Wàbímə̀mpóónz bɛ́ bɛ̂ʃ bwéé mjààs ɲə̀*
    w-àbímə̀mpóónz b-ɛ́ b-ɛ̂ʃ bwà̀-é mjààs ɲə̀
      c2-supporter c2-POSS c2-QUANT PRN.3pl-F1 abandon PRN.3sg
      All of his supporters would abandon him.

16ii) *À mpûg ná ɲèɛ́ ʤàw ɲóóŋú ntɨ̀dèlê?*
    à mpù-g ná ɲà-é ʤàw ɲòòŋû ntɨ̀dèlê?
      PRN.3sg know-HORT that PRN.3sg-F1 tell mother how
      How would he tell his mother?

Scenario: 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 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. Enter this scenario under the commentary for (D17)

   D17) *Morris ɲàámə̀ ʧî ná múús jámə̀ bə̀ ŋkɨ́ ʤág kwə̀wlà ʃúl Mark*
        Morris ɲà-ámə̀ ʧî ná múús í-ámə̀ bə̀ ŋkɨ́ ʤág kwə̀wlà ʃúl Mark
          Morris PRN.3sg-P2 say that today SM-P2 COP COP very difficult for Mark
          Morris said it was a difficult day for Mark.

Fɔ́ɔ́g, Morris ɲàámə̀ ʤàwê ná mə̀twâ jɛ́ má ʤúwə̀jòw
fɔ́ɔ́g, Morris ɲà-ámə̀ ʤàw-ê ná mə̀twâ j-ɛ́ má ʤúwə̀-jòw
first, Morris PRN.3sg-P2 tell-OM.PRN.3sg that c1.car c1-POSS COP steal-PASS
First, Morris told him that his car had been stolen.
ʤə̀là nə̀ à mú zǎ ŋwə̃̀ òpə̀p kǎlà íʃéjíʃ
ʤə̀là.nə̀ à mú zà̀ ŋwə̃̀ òpə̀p kə̀-Hlə̀ í-ʃéj-íʃ
then PRN.3sg COP come take taxi go-INF c8-work-LOC

Then he had to hire a taxi to take him to work.

Morris ɲàá tádɨ̀gà ná ɲàá ʤjὲ gwàg mpɨ̀mbὰ
Morris ɲà-á tádɨ̀gà ná ɲà-á ʤjὲ gwàg mpɨ̀mbὰ
Morris PRN.3sg-P3 think that PRN.3sg-P3 might hear anger
Morris thought he might be angry.

Scenario 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). Please enter this under the commentary for D18 and D18a. The sentences should refer to each other as related.

D18) A: *Dɨ̀gjà Mark wà!*
       dɨ́g-í-à Mark wà
          see-HORT-Pl Mark here
          Look, there's Mark!
    B: *À ʤág bɛ̌ ʤŏŋ*
    à ʤág bὰ ʤŏŋ
       he very/so COP handsome
       He is so handsome.

D18i) A: *Vὰdá mὰ ʧúgὲ nὰ ŋkùl bwὰlɛ́ màgìlὰ bɛ̌lὰ múdá jɛ́. Bùdá bɛ́ʃ ó ŋgὰ fùdὰ ɲὰdí mpísὰ*
Vὰdá mὰ ʧúgὲ nὰ ŋkùl bwὰlɛ́ màgìlὰ bὰ-Hlὰ m-ùdá j-ɛ́. B-ùdá b-ɛ́ʃ ó ŋgὰ fùdὰ ɲὰ-dí mpísὰ
though I COP.NEG with power never accept be-INF C1-wife C1-POSS. C2-woman C2-QUANT c2 SM PROG die PRN.3sg-LOC behind
I would not want to be his wife though. All the women are chasing him.

Pronoun-*mɛ́(ʃwó)* strategy
D18ii) B: *Zɛ̌ bὰd nὰ ná à ʤág ʧjὲl ɲámɛ́(ʃwó)*
    Zὰ bὰd nὰ ná à ʤág ʧjὲl ɲá-mɛ́(ʃwó)
       come add with that he too.much like PRN.3sg-REFL
       Also, I think he praises himself too much.

Body strategy
D18iiiBi: *Zɛ̌ bὰd nὰ ná à ʤág ʧjὲl dɨ́lὰ ŋkɛ̂ɲ ɲûl*
    Zὰ bὰd nὰ ná à ʤág ʧjὲl dɨ́-Hlὰ ŋkɛ̂ɲ ɲûl
       come add with that he too.much like HAB-INF carry body
       Also, I think he praises himself too much.
KS: I am wondering if the difference between (D18B) and (D18Bi) supports the view that the use of Body.REFL is a reflexive reading related to inalienable possession in some sense, whereas PRN-REFL is not specific to such readings. What do you think? NI: It is possible…
Comment: D17 and D18 cannot be translated differently in Makaa as the translation will produce unacceptable sentences.

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 ŋgà mpù ná Mary má fɨmê*
   Ira ŋgà mpù ná Mary má fɨm-ê
      Ira PROG know that Mary COP hate-OM.PRN.3sg
      Ira knows that Mary hates him.

D22ai) *Ira ŋgà mpù ná Mary má fɨm ɲà*
   Ira ŋgà mpù ná Mary má fɨm ɲà
      Ira PROG know that Mary COP hate PRN.3sg
      Ira resents the fact that Mary hates him.

b) *Ira ŋgà gúmàl mùùd má ʧjélê jí*
 Ira ŋgà gúmàl mùùd má ʧjèl-ê jí
      Ira PROG respect man COP like-OM.PRN.3sg REL
      Ira respects the man who likes him.

bi) *Ira ŋgà gúmàl mùùd má ʧjél ɲà jí*
 Ira ŋgà gúmàl mùùd má ʧjèl ɲà jí
      Ira PROG respect man COP like PRN.3sg REL
      Ira respects the man who likes him.

c) *Ira ŋgà ʧî ná mùùd má ʧjélê jí sà nà fɨg*
 Ira ŋgà ʧî ná mùùd má ʧjèl-ê jí sà nà fɨg
     Ira PROG say that man COP like-OM.PRN.3sg REL COP with intelligence
     Ira says that the man who likes him is intelligent.

ci) *Ira ŋgà ʧî ná mùùd má ʧjélê jí sà nà fɨg*
 Ira ŋgà ʧî ná mùùd má ʧjèl-ê jí sà nà fɨg
     Ira PROG say that man COP like-OM.PRN.3sg REL COP with intelligence
     Ira says that the man who likes him is intelligent.

d) *Ira ɲààmà ʃílà ŋgɨ Bill ɲààmà dɨgê*
   Ira ɲà-ámà   ʃílà ŋgɨ   Bill ɲà-ámà   dɨg-ê
    Ira PRN.3sg-P2 ask whether Bill PRN.3sg-P2 see-OM.PRN.3sg
    Ira asked whether Bill saw him.

di) *Ira ɲààmà ʃílà ŋgɨ Bill ɲààmà dɨg ɲà*
 Ira ɲà-ámà ʃílà ŋgɨ Bill ɲà-ámà dɨg ɲà
   Ira PRN.3sg-P2 ask whether Bill PRN.3sg-P2 see PRN.3sg
   Ira asked whether Bill saw him.

e) *Ira ɲààmà ʃílà wòlà Bill ɲààmà dɨg dɨgê jí*
 Ira ɲà-ámà ʃílà wòlà Bill ɲà-ámà dɨg-ê jí
     Ira PRN.3sg-P2 ask when/time Bill PRN.3sg-P2 see-OM.PRN.3sg REL

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Ira asked when Bill saw him.

ei) *Ira ɲàámɔ̀ ʃílɔ̀ wɔ̀lɔ̀ Bill ɲàámɔ̀ dɨ́g dɨ́gɛ̂ jí*
  Ira ɲɔ̀-ámɔ̀ ʃílɔ̀ wɔ̀lɔ̀ Bill ɲɔ̀-ámɔ̀ dɨ́g-ɛ̂ jí
     Ira PRN.3sg-P2 ask when/time Bill PRN.3sg-P2 see-OM.PRN.3sg REL
     Ira asked when Bill saw him.

f) *Irà ʃìgɛ̀ mpù nɔ́ George ɲàámɔ̀ bɛ̀̂ɛ̂*
  Irà ʃì-gɛ̀ mpù nɔ́ George ɲɔ̀-ámɔ̀ bɛ̀̂-ɛ̂
     Ira EVID.PAST-NEG know that George PRN.3sg-P2 follow-OM.PRN.3sg
     Ira did not realize that George followed him.

fi) *Irà ʃìgɛ̀ mpù nɔ́ George ɲàámɔ̀ bɛ̀̂ ɲɔ̀*
  Irà ʃì-gɛ̀ mpù nɔ́ George ɲɔ̀-ámɔ̀ bɛ̀̂ ɲɔ̀
     Ira EVID.PAST-NEG know that George PRN.3sg-P2 follow PRN.3sg
     Ira did not realize that George followed him.

g) *Ira ɲàámɔ̀ ʧì nɔ́ Mary sɔ̀ ʤǒŋ ntɔ́ɔ́ ɲèè bá ɲɔ̀*
  Ira ɲɔ̀-ámɔ̀ ʧì nɔ́ Mary sɔ̀ ʤǒŋ ntɔ́ɔ́ ɲɔ̀-è bá ɲɔ̀
     Ira PRN.3sg-P2 say that Mary COP pretty thus he-F1 marry her
     Ira said that Mary was pretty and that he would marry her.

Comment: The ɛ̂ pronominal strategy does not work with D22g because it produces an
unacceptable construction. More, she and X has to permute in D22g as in the Makaa culture it is
the man that marry the woman and not the contrary.

4.4.5 De se reading
Makaa has no special morphology that marks logophoric readings.

D23a) *Oedipus ŋgɔ̀ búgɨ̀là nɔ́ ɲòòŋgú sɔ̀ ŋkɨ́ ɲwà*
  Oedipus ŋgɔ̀ búgɨ̀là nɔ́ ɲòòŋgú sɔ̀ ŋkɨ́ ɲwà
     Oedipus PROG think that mother.REFL COP COP nice/good
     Oedipus thinks *his* mother is nice.

D23ai) *Oedipus ŋgɔ̀ búgɨ̀là nɔ́ ɲòòŋgú jɛ́ sɔ̀ ŋkɨ́ ɲwà*
  Oedipus ŋgɔ̀ búgɨ̀là nɔ́ ɲòòŋgú j-ɛ́ sɔ̀ ŋkɨ́ ɲwà
     Oedipus PROG think that c1.mother c1-POSS COP COP nice/good
     Oedipus thinks *his* mother is nice.

b) *Oedipus ŋgɔ̀ ʧì nɔ́ ɲòòŋgú sɔ̀ ŋkɨ́ bâw*
  Oedipus ŋgɔ̀ búgɨ̀là nɔ́ ɲòòŋgú sɔ̀ ŋkɨ́ bâw
     Oedipus PROG think that mother.REFL COP COP bad/mean
     Oedipus says *his* mother is mean.

bi) *Oedipus ŋgɔ̀ ʧì nɔ́ ɲòòŋgú jɛ́ sɔ̀ ŋkɨ́ bâw*
  Oedipus ŋgɔ̀ búgɨ̀là nɔ́ ɲòòŋgú j-ɛ́ sɔ̀ ŋkɨ́ bâw

Oedipus PROG think that c1.mother c1-POSS COP COP bad/mean
Oedipus says *his* mother is mean.