Anaphora in the African Languages

Anaphora Questionnaire Response for Babanki (Kejom) - version 1.3
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PART 1 General information

Babanki (ISO 693-3 [bbk]), or Kejom as the native speakers prefer to call it, is a Centre Ring Grassfields Bantu Language spoken in Kejom Ketinguh and Kejom Keku in the North West Region of Cameroon.

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(a) Syntax: some
(b) Typological linguistics: some
(c) Formal semantics: some
(d) Pragmatics or discourse analysis: some
(e) Other relevant subfield: Morphology and some Lexicograph

Language biography

a. What language(s) did your parents speak at home? Kejom
b. What language(s) do/did your parents speak natively? Kejom
c. What language (languages) did you receive school instruction in? English
d. How old were you when you learned the subject language? I acquired Kejom from birth
e. Do you speak an identifiable subdialect of this language? What is it called? No

PART 2 An inventory of reflexive and reciprocal strategies

2.1 Coreference in a single clause

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

A1) John saw himself.
   dʒǒyn tə̂ yén ə̀wɛ́n ə́ wɛ́n
   dʒǒyn tə̂ yén ə̀-wɛ́n ə́ wɛ́n
   John P3 see c5-body AM 3SG
   ‘John saw himself’

Comment: Strategy A = ‘body-pronoun’ (where P3 = past tense marker of yesterday, c = noun class marker and AM = associative marker). The difference between ə̀-wɛ́n ‘body’ and wɛ́n ‘3SG (third person singular pronoun)’ is that the former has a prefix.

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

2.1.3 Other verb types - Some languages use a special reflexive strategy with certain verbs, especially "commonly reflexive" verbs of grooming such as "wash", "shave", "bathe", "dress", etc. Do any of the following (or any other verbs you can think of) involve a strategy that you have not listed already? If so, give an example now and label it with a new name (or letter).

A2a) John washes himself.
   dʒǒyn ə́ shù ə̀wɛ́n ə́ wɛ́n
   dʒǒyn ə́ shù ə̀-wɛ́n ə́ wɛ́n
   Mary PRES wash c5-body AM 3SG
   ‘John washes himself.’

b) Mary cut herself. [accidentally]
   mèrí tə̂ lyɔ̀msə́ ə̀wɛ́n ə́ wɛ́n
   mèrí tə̂ lyɔ̀m-sə́ ə̀-wɛ́n ə́ wɛ́n
   Mary P3 wound-EXT c5-body AM 3SG
   ‘Mary cut herself’. [accidentally]

c) John is ashamed of himself.
   dʒǒyn ə́ bànə̀ ə̀wɛ́n ə́ wɛ́n
   dʒǒyn ə́ bànə̀ ə̀-wɛ́n ə́ wɛ́n
   John PRES hate c5-body AM 3SG
   ‘John is ashamed of himself.’

d) John destroyed himself.
dʒǒyn tɔ byîpsɔòw èn òwèn

dʒǒyn tɔ byîpsɔòwèn ə̀w ènèn

John P3 spoil-EXT c5-body AM 3SG
‘John destroyed himself’.

e) We hate ourselves.
yès ə̀ cow èn ə̀ tyès(tá)
yès ə̀ bàn-ə̀ tə̀wèn ə̀ tyès(tá)
1P PRES hate-EXT c13-body AM 1pp
‘We hate ourselves.’

f) They praise themselves
və̀wə́(nə́) bwɔ́msə̀ tə̀wèn tɔ və́wə́(nə́)
və̀wə́(nə́) bwɔ́m-sə̀ tə̀wèn tɔ və́wə́(nə́)
3P praise-EXT c13-body AM 3pp
‘They praise themselves.’

Comment: No new strategy uncovered. The extensions (EXT) are suffixed to the verb roots to derive attenuative meaning in the above data. The other extensions that occur in Kejom are tə̀ (repetitive, used with transitive verbs), kə̀ (repetitive, used with intransitive verbs), and mə̀ (intensifier). These extensions have an underlying CV structure and are suffixed to verb roots.

Comment: The glossing of ə̀-wèn ə́ wèn renders the word wèn with two different glosses, where the first one bearing the class agreement morpheme is 'body' and the second is '3SG'. Examples (A2e) and (A2f) justify this analysis of these two occurrences as homonyms.

Comment: The noun class agreement changes from c5 to c13 in (A2e-f) because c13 is the plural of c5 (as well as c3).

2.1.4 Obliques and other argument types - In the preceding examples, the coindexed arguments were subject and object. Many languages use a different coreference strategy for oblique arguments. Does yours? Consider a variety of oblique objects (dative, genitive, etc., as appropriate for your language), as well subcategorized prepositional arguments (e.g., English Karl counted on himself) and finally prepositional adjuncts (e.g., Sally saw a snake near her/herself).

A3a) John spoke to Mary.

dʒǒyn tɔ gàʔ á mèrí
dʒǒyn tɔ gàʔ á mèrí
'John spoke to Mary.'

b) John spoke about himself. (subject/PP argument)

dʒǒyn tə̂ gàʔ byiʔ ə̀wén ə́ wén
dʒǒyn tə̂ gàʔ byiʔ ə̀-wén ə́ wén

'John spoke about himself.'

c) 'John told Mary about himself.' (same, with intervening NP)

dʒǒyn tə̂ shə̀ʔ-tə̀ byiʔ ə̀wén ə́ wén á mèrí
dʒǒyn tə̂ shə̀ʔ-tə̀ byiʔ ə̀-wén ə́ wén á mèrí

'John told Mary about himself.'

d) Bill told us about ourselves. (object/argument)

bíl tə̂ shəʔtə̀ byiʔ yèś ə̀ yèś
bíl tə̂ shəʔtə̀ byiʔ yès ə̀yès

'Bill told us about ourselves.'

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

mèrí tə̂ kú á vwón á vyǐ
mèrí tə̂ kú á vwón á vyǐ

'Mary gave the children themselves.'

f) Mary saw a book behind her. (subject/locative)

mèrí tə̂ yén ɲwàʔlə̀ ə̀ wè(nə́) bàm
mèrí tə̂ yén ɲwàʔlə̀ á wè(nə́) bàm

'Mary saw a book behind her.'

g) John bought the book for himself. (benefactive)

dʒǒyn tə̂ vi nə̀ ɲwàʔlə̀ yì á wè(nə́) wén
dʒǒyn tə̂ vi nə̀ ɲwàʔlə̀ yì á wè(nə́) wén

'John bought the book for himself.'
'John bought the book for himself.'

Also consider things like experiencer-subject verbs:

A4a) Etta likes herself.

ëtá ó kù ã-wén ó wén
ëtá ó kù ã-wén ó wén
Etta PRES like c5-body AM 3SG

'Etta likes herself.'

b) Etta scares herself.

ëtá ó báŋ-só ã-wén ó wén
ëtá ó báŋ-só ã-wén ó wén
Etta PRES frighten-EXT c5-body AM 3SG

'Etta scares herself.'

c) Etta worries herself.

ëtá ó kú ŋgə́ʔ á ã-wén ó wén
ëtá ó kú ŋgə́ʔ á ã-wén ó wén
Etta PRES give trouble LOC c5-body AM 3SG

'Etta worries herself.'

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

Consider the preceding sentences with first and second person subjects, and also with plurals. Also check for differences between full NPs, overt third person pronouns, and null subjects/objects (if your language allows them).

A5a) I saw myself.

mà yí yèn ã-wén ó ghómá
màyí yèn ã-wén ó ghómá
1S P2 see C5-body AM 1ps

‘I saw myself’

b) You cut yourself [accidentally].

wù yí lyòmsó ã-wén ó wú
wùyí lyòmsó ã-wén ó ghó
2S P2 wound C5-body AM 2ps

‘You cut yourself [accidentally]’

c) We will wash ourselves.
yè(sō) né shù tà-wén ṣ tyés(tó)
1P F2 wash c13-body AM 1pp

Comment: As I said above, the portion in parentheses does not have a separate meaning. Tyés and tyés(tó) mean exactly the same thing. Either of them can be used freely in all contexts, as far as I know.

'We will wash ourselves.'

d) You must help yourselves.
ghə̀ŋ díʔí gyàmtə̂ tà-wén ṣ tyán(tó)
ghə̀ŋ díʔí gyàmtə̂ tà-wén ṣ tyán(tó)
2P should help c13-body AM 2pp

'You must help yourselves.'

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

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

A6a) Peter knows himself.
bítà ṣ kiʔi ñwén ñwén
bítà ṣ kiʔi ñ-wén ṣ wén
Peter PRES know c5-body AM 3SG

'Peter knows himself'
b) Peter (habitually) criticizes himself.
bítà ṣ kiʔi ñwén ñwén
bítà ṣ gháʔá ñ-wén ṣ wén
Peter PRES accuse c5-body AM 3SG

'Peter (habitually) criticizes himself'
c) Peter is likely to praise himself.
bítà zì ghò kúʔsó ñwén ñwén
bítà zì ghò kúʔsó ñ-wén ṣ wén
Peter can him praise c5-body AM 3SG

'Peter is likely to praise himself'
(b) Do quantificational constructions involve a separate strategy?

A7a) Every boy looked at himself.

\[ \text{nò wàn wùlim kò ŋkyì òwén òwèn} \]
\[ \text{each C1.child c2-male any P4-look c5-body AM 3SG} \]

'Every boy looked at himself'

Comment: Both nò (that qualifies the subject) and kò must occur together. If one is dropped the other must also be dropped. Therefore it seems to be an obligatory discontinuous part of every (nò...kò)

b) All the women described John to themselves.

\[ \text{nò kyì viỳ nò vòtsòm ŋgàʔ låli byì djòyn à tòwèn tò vòwò(nò)} \]
\[ \text{each c2.woman C2.the C2-all P4-speak-P4 about John to c13-body AM 3pp} \]

'All the women described John to themselves.'

c) Every teacher introduced himself to Bob.

\[ \text{nò ndžìʔ sòtsòm ŋshàtò byì òwènò vòwò à bòb} \]
\[ \text{each teacher.c10 c10-all P4-speak-P4 about c5-body 3pp to Bob} \]

'Every teacher introduced himself to Bob.'

KS: There is a missing morpheme corresponding to 'to'

d) Some children only help themselves.

\[ \text{vwòn vòtsòvò gyàmtò tà tòwèn tò vòwò(nò)} \]
\[ \text{vwòn vò-tsòvò gyàmtò tà tò-wèn tò vòwò(nò)} \]
\[ \text{c2.child c2-some help only C13-body AM 3pp} \]

'Some children only help themselves.'

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

A8) They saw themselves.

\[ \text{vòwò yì yèn tòwèn tò vòwò(nò)} \]
\[ \text{vòwò yì yèn tò-wèn té vòwò(nò)} \]
\[ \text{3P P2 see C13-body AM 3pp} \]

"They saw themselves." or "They saw each other." or "They saw their bodies."

Comment: The reading is not honorific.
(d) Experiment with placing both coreferring arguments in various types of subordinate clauses, as your language allows.

A9a) Sol says that Alice loves herself.

sól gàʔ lá ə́lís ə́ kù ə́wén ə́wén  
sól gàʔ  lá ə́lís ə́ kù ə́wén ə́wén  
Sol  speak  that Alice  PRES  love  c5-body  AM  3SG

'Sol says that Alice loves herself'

b) Sol required that Alice praise herself.

sól tə̀ gàʔ  lá ə́lís kúʔsó ə́wén ə́wén  
sól tə̀ gàʔ  lá ə́lís kúʔsó ə́wén ə́wén  
Sol  P3  speak  that Alice  praise  c5-body  AM  3SG

'Sol required that Alice praise herself'

c) Sol thought Alice should praise herself.

sól tə kwòʔtə lá ə́lís kúʔsó ə́wén ə́wén  
sól tə kwòʔtə lá ə́lís kúʔsó ə́wén ə́wén  
Sol  P3  think  that Alice  praise  c5-body  AM  3SG

'Sol thought that Alice should praise herself'

d) Sol asked Alice to praise herself.

sól tə  gàʔ  á ə́lís lá ə́  kúʔsó ə́wén ə́wén  
sól tə  gàʔ  á ə́lís lá ə́  kúʔsó ə́wén ə́wén  
Sol  P3  speak to Alice  that  3SG  praise  c5-body  AM  3SG

'Sol asked Alice to praise herself'

Comment: The same verb mean 'ask', 'speak' and 'require'.

e) Sol wants to praise himself.

sól ə́  kúʔsó ə́wén ə́wén  
sól ə́  kúʔsó ə́wén ə́wén  
Sol  PRES  want  praise  c5-body  AM  3SG

'Sol wants to praise himself'

f) Sol expects Alice to praise herself.

sól ə́  kəʔtə lá ə́lís kúʔsó ə́wén ə́wén  
sól ə́  kəʔtə lá ə́lís kúʔsó ə́wén ə́wén  
Sol  PRES  expect  that Alice  praise  c5-body  AM  3SG

'Sol expects Alice to praise herself'

g) Sol heard Alice praising herself.
2.2 Ordinary (potentially independent) pronouns

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

A10a) I spoke with Abraham yesterday. He saw Lela.
   mà tò gà? yúwù ábràhám zón. ghə̀ tò yen lélà
   1S P3 speak with Abraham yesterday. 3S P3 see lela
   "I spoke with Abraham yesterday. He saw Lela."

b) Where is Abraham? I saw him in the market.
   ábràhám yê. Mà yì yen ọ́ wén á wòŋ
   Abraham where 1S P2 see c5-him LOC market
   "Where is Abraham? I saw him in the market."

c) We saw you. Did you see me/us?
   yè(sá) yì yen wù. Wù yì yen mò/yés à
   1P P2 see you. 2S P2 see me/us question
   "We saw you. Did you see me/us?"

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

‘yours’, kávówɔ ‘theirs’
Prepositional object: à mò ‘me’, à wù ‘you’, à wён ‘him/her/it’, à yès ‘us’, à ghɔn ‘you’, à vówɔ ‘them’
Note: [a] is toneless and gets its tone by spreading from the object pronoun.

2.2.3 Null arguments - If your language allows argument drop (null pronouns, or pro-drop) as a pronominalization strategy in simple (single clause) sentences, then name it here as an additional pronominalization option.

A10d) Ate fish. (meaning he/she/they/it/we/you/I ate fish)

* mpfì?lì shú
m-pfì?-lì shú
P4-eat-P4 fish
‘Ate fish. (he/she/they/it/we/you/I ate fish)’

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

*hal ṇghôm
hal ṇ-ghômè-lí
hal P4-beat-P4
‘Hal hit (him/her/them/it/us/you/me)’

f) Hal talked to (meaning Hal talked to him/her/them/it/us/you/me)

*hal ṇgá?àlì à
hal ṇ-gá?à-lí à
hal P4-speak-P4 to
‘Hal talked to (him/her/them/it/us/you/me)’

Comment: These sentences are unacceptable without overt subject and or overt object.

2.2.4 The use of otherwise independent pronouns for clausemate anaphora

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

A10g) Ali praised him.

àlí ṇkú?sá-lí wén
àlí ṇ-kú?sá-lí wén
Ali P4-beat-P4 3SG
‘Ali praised him’

Comment: wén (3SG) above can only refer to someone else, not Ali. In other words, it cannot be used here to form a reflexive reading.

h) Ali liked him.
àlí ngəŋlí wén
àlí ŋ-kɔŋ-lí wén
Ali P4-like-P4 3SG
‘Ali praised him’

Comment: wén (3SG) above can only refer to someone else, not Ali. In other words, it cannot be used here to form a reflexive reading.

i) Ali saw him.
àlí nyénlí wén
àlí n-yén-lí wén
Ali P4-see-P4 3SG
‘Ali saw him’

Comment: wén (3SG) above can only refer to someone else, not Ali. In other words, it cannot be used here to form a reflexive reading.

j) Ali talked to him
àlí ngá?àií wén
àlí ŋ-gáʔà-lí wén
Ali P4-talk-P4 3SG
‘Ali talked him’

Comment: wén (3SG) above can only refer to someone else, not Ali. In other words, it cannot be used here to form a reflexive reading.

k) Ali sent a book to him.
àlí nùmlí ŋwàʔlò á wén
àlí n-tìmlí ŋwàʔlò á wén
Ali P4-send-P4 book to 3SG
‘Ali sent a book to him’

Comment: wén (3SG) above can only refer to someone else, not Ali. In other words, it cannot
be used here to form a reflexive reading.

l) Ali helped him
   â lí ñgyámtàlí wén
   â lí ñ-gyámtà-lí wén
   Ali P4-help-P4 3SG
   ‘Ali helped him’
Comment: wén (3SG) above can only refer to someone else, not Ali. In other words, it cannot be used here to form a reflexive reading.

m) Ali surprised him
   â lí ñkímsálí wén
   â lí ñ-kímsálí wén
   Ali P4-surprise-P4 3SG
   ‘Ali surprised him’
Comment: wén (3SG) above can only refer to someone else, not Ali. In other words, it cannot be used here to form a reflexive reading.

n) Ali bought a book for him
   â lí nzénlí ñwà?lò á wén
   â lí n-zén-lí ñwà?lò á wén
   Ali P4-send-P4 book to 3SG
   ‘Ali bought a book for him’
Comment: This could be interpreted to refer to Ali but it remains less natural.

o) Ali read a book about him
   â lí ndzáŋə́lí ñwà?lò byì wén
   â lí n-dzáŋə́-lí ñwà?lò byì wén
   Ali P4-read-P4 book about 3SG
   ‘Ali read a book about him’
Comment: This could be interpreted to refer to Ali but it remains less natural.

p) Ali found a book near him
   â lí nyënlí ñwà?lò á wé(nó) bén
   â lí n-yën-lí ñwà?lò á wé(nó) bén
   Ali P4-see-P4 book LOC 3SG side
   ‘Ali found a book near him’
2.3 Reciprocal Readings

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

Some children only help themselves.

vwón vátsóvó ó gyàmtò tà tòwéntò vòwá(nò)

c2.child c2-some PRES help only C13-body AM 3pp

‘Some children only help each other.’

2.3.2 As a means of assessing what sorts of reciprocal strategies your language contains, consider these typical sorts of reciprocal sentences in English. If a new strategy is involved (a special reciprocal form, or affix, or clitic or argument drop, or verb form, etc.), name it and give an example. (For argument drop, consider English They argued, which can be understood to mean that ‘they argued with each other’).

A11a) The women see each other.

kyí vyí yénó tòwéntò vòwá(nò)

c2.woman c2.the see PRES C13-body AM 3pp

‘The women see each other.’

b) The boys washed each other.

vwú lúmò vyí yì shù tòwéntò vòwá(nò)

c2.child c2.male c2.the P2 wash C13-body AM 3pp

‘The boys washed each other.’

c) The men combed each other's hair.

lúmò vyí yì sàsè âtù vòwá(nò)

c2.man c2.the P2 comb c8-head AM 3pp

‘The men combed each other's hair.’

Comment: ‘body’ is not used with ‘hair’ as in (c) above.

d) They argued with each other.

vòwá yì tànjmò (vòwá vòwá)
və̀wə́ yǐ təŋmā (və̀wə́ və̀wə́)
3P P2 argue (them them)

‘They argued with each other.’

Comment: KS:. I see the ‘them-them’ phrase can be used with other verbs (A12b). Is it only used with verbs that can be understood as reciprocal in the absence of Agr-BODY AM PRN?
ANS: I think so.

e) The boys kicked each other.
vwú lūmā vyí yǐ chyɔ̀ tə-wén tò və̀wə́(nə́)
c2.child c2.male c2.the P2 kick C13-body AM 3pp

‘The boys kicked each other.’

e) They hate each other.
və̀wə́ bàǹ̀ tə-wentò və̀wə́(nə́)
və̀wə́ bàǹ̀ tə-wén tò və̀wə́(nə́)
3P hate C13-body AM 3pp

‘They hate each other.’

2.3.3 Oblique arguments - Continue looking for new reciprocal strategies by translating sentences like those in (A12), which involve reciprocals embedded in prepositional phrases.

A12a) The men introduced Bill to each other.
lūmā vyí yǐ jì? bíl à tə-wentò və̀wə́(nə́)
lūmā vyí yǐ jì? bíl à tə-wén tò və̀wə́(nə́)
c2.manc2.the P2 show Bill to c13-body AM they

KS: Missing gloss.

‘The men introduced Bill to each other.’

b) The travelers spoke to each other.
viʔí jèʔò tə gàʔà (və̀wə́ və̀wə́)
viʔí jèʔò tə gàʔà (və̀wə́ və̀wə́)
c2.person walk P3 speak (them them)

‘The travelers spoke to each other.’

c) The priests heard stories about each other.
nshə̀tə̀shìsə́ zhú lí mə̀-títì byì və̀wə̀ və̀wə̀
nshə̀tə̀shìsə́ zhú lí mə̀-títì byì və̀wə̀ və̀wə̀
priest-the-c10 hear P1 c6-story about them them
‘The priests heard stories about each other.’

d) They left presents in front of each other.

və̀wə́ yì wù̀ fó à və̀wè shì

və̀wə́ yì wù̀ ə-fó à və̀wè shì

3P P2 keep c8-thing LOC them front

‘They left presents in front of each other.’

e) We heard stories about each other.

yèsò zhú lí mà-ttí byì yès yès

yèsò zhú lí mà-ttí byì yès yès

1P hear P1 c6-story about us us

‘We heard stories about each other.’

f) You heard stories about each other.

ghə̀ŋə́ zhú lí mà-ttí byì ghə̀ŋ ghə̀ŋ

ghə̀ŋə́ zhú lí mà-ttí byì ghə̀ŋ ghə̀ŋ

2P hear P1 c6-story about you you

‘You heard stories about each other.’

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

A13a) We saw each other.

yè(sə́) yì yen tə́w ɛ́(nə́) tyə́s(tə́)

yè(sə́) yì yen tə́w ɛ́(nə́) tyə́s(tə́)

1P P2 see c13-body ours

‘We saw each other.’

b) You(pl.) must help each other.

ghə̀ŋ di?í gyàmtə̀ tə́wé(ná) tyə́ŋ(tá)

ghə̀ŋ di?í gyàmtə̀ tə́wé(ná) tyə́ŋ(tá)

2P be help c13-body yours

‘You(pl) must help each other.’

c) We will wash ourselves.

yè(sə́) né shù tə́wé(ná) tyə́s(tá)

yè(sə́) né shù tə́wé(ná) tyə́s(tá)

1P F2 wash c13-body ours

‘We will wash ourselves.’
d) They always criticize each other.

They always hold them.

‘They always criticize each other.’

e) Many boys kicked each other.

Many boys kicked each other.

KS: Are A13a-e OK with reflexive interpretation here too? Is pronoun-pronoun and reciprocal interpretation possible here? If pronoun-pronoun is used here is it necessarily reciprocal in interpretation? Please give these examples again replacing body-pronoun with pronoun-pronoun and reporting the results.

JP: This is where Billy left off with data entry

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

A14a) Sol says that Alice loves herself.

Sol says that the girls love each other.'

b) Sol required that the girls praise each other.

c) Sol thought the girls should praise each other.
'Sol thought the girls should praise each other.'

d) Sol asked the girls to praise each other.

sól tə̀ gàʔ á vwú kyí vyí la vəwó kú?q só təwɛ́ntó vəwó(ná)

Sol P3 speak to c2.child c2.female c2.the that 3P praise c13-body AM 3pp

'Sol asked the girls to praise each other.'

e) The girls want to praise each other.

vwú kyí vyí ó kó kú? só təwɛ́ntó vəwé(ná)

c2.child c2.female c2.the PRES want praise c13-body AM 3pp

'The girls want to praise each other.'

f) Sol expects the girls to praise themselves.

sól ó kəʔ tə̀ lá vwú kyí vyí kú?q só tə-wén tó vəwó(ná)

Sol PRES expect that c2.child c2.female c2.the praise c13-body AM 3pp

'Sol expects the girls to praise themselves.'

g) Sol heard the girls praising themselves.

sól tə̀ zhwù vwú kyí vyí vó kú?q só tə-wén tó vəwó(ná)

Sol P3 hear c2.child c2.female c2.the 3P praise c13-body AM 3pp

'Sol heard the girls praising themselves.'

h) 'The girls heard Sol praise each other.'

vwú kyí vyí tə zhwù sól kú?q só vəwé(ná)

c2.child c2.female c2. the P3 hear Sol praise 3pp

'The girls heard Sol praise each other.'

a) John made the boys wash themselves.

dʒǒyn tə̀ nè vwú lyumó vyí shù təwén tó vəwé(ná)

dʒǒyn tə̀ nè vwú lyumó vyí shù təwén tó vəwé(ná)

John P3 do c2.child c2.male c2.the wash c13-body AM 3SG

'John made the boys wash themselves.'

b) The boys made John wash themselves.

vwú lyumó vyí tə nè dʒǒyn shù təwén tó vəwé(ná)

vwú lyumó vyí tə nè dʒǒyn shù təwén tó vəwé(ná)
The boys made John wash themselves.

c) The boys made John wash only them.

KS: Is it the case that this sentence cannot be interpreted as reciprocal for the pronoun-pronoun strategy?

d) John made the boys wash only us.

KS: Is it the case that this sentence cannot be interpreted as reciprocal for the pronoun-pronoun strategy?

2.4 Other types of local coreference

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

A15a) Paul lost his shoes.

Paul P4-throw-P4 shoe-c10 his

‘Paul lost his shoes.’

b) Paul raised his hand. (e.g., in class).

Paul P4-raise-P4 c7-hand AM his

‘Paul raised his hand. (e.g., in class).’

c) Paul cut his hand. (e.g., accidentally)

Paul P4-cut-P4 c7-hand AM his
‘Paul cut his hand. (e.g., accidentally).’

d) Paul examined his hand.

\[pól  n-lyé-lí  kó-vú  kó  wén\]
Paul  P4-examine-P4  c7-hand  AM  his

‘Paul examined his hand.’

e) Paul twisted his ankle (or ‘stubbed his toe’)

\[pól  m-bisè-lí  kó-wú  kó  wén\]
Paul  P4-twist-P4  c7-foot  AM  his

‘Paul examined his hand.’

2.4.2 Reflexives and reciprocals in nominals - Some languages use a different affix or form to establish a reflexive relationship inside of a nominal. Identify any strategies that can apply to nouns rather than verbs. (Other possibilities: self-destruction, self-help, etc.)

A16) Andrew's self-confidence annoyed Mary.

\[ə̀kúʔ  sə̂ ə́wɛ̀n ə́ ándrù yì  zàf  mérì\]
INF-raising  c5-body  of  Andrew  P2  annoy  Mary

‘Andrew's self-confidence annoyed Mary.’

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

\[ə̀shə́ʔ  tə̂ ə́wɛ̀n ə́ ándrù yì  bəŋ  à  njiʔsə̀\]
INF-tell  c5-body  of  Andrew  P2  good  to  teach-c10

‘Andrew's introduction of himself impressed the teacher.’

b) Andrew’s evaluation of himself was too critical.

\[dʒì  á  ándrù lyé  ə́wɛ́n  ə́wɛ́n  fá  tsú  yì  tó\]
way  that  Andrew  P2  look  c5-body  AM  his  of  it  P2  strong

‘Andrew’s evaluation of himself was too critical.’

c) Their instructions to each other were not clear.

\[təsə́ʔ  tó  vòwò  vòwò  kó  yì  lán\]
c13-law  AM  them  them  NEG  P2  clear

‘Their instructions to each other were not clear.’
Comment: This example requires the pronoun-pronoun strategy instead of the body-pronoun strategy because it has only reciprocal meaning.

d) Their evaluations of each other were too generous.

dʒì á vòwé yì lyé tòwèntó vòwè(nò) fá tsú yì bwàʔmò

dʒì á vòwé yì lyé tò-wèn to vòwè fá tsú yì bwàʔmò

way that 3P P2 look c13-body AM their of it P2 easy

‘Their evaluations of themselves was too critical.’

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

- The ‘body-pronoun’ strategy
- The ‘pronoun-pronoun’ strategy
- The ‘EMPH-pronoun’ strategy
- The null object strategy
- The simple pronoun strategy
- The yi strategy (logophoric?)

Part 3 General details about the strategies

3.1 Marking

3.1.1 We would like to focus for part of this section on the way strategies are marked in your language.

Marking Strategies for coconstrued interpretations

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

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

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

d) Coconstrual is signaled by a specialized adjunct. (Such as l’un l’autre in (Y1)).

Comment: The body-pronoun strategy used in Kejom is (Ma) which is similar to the English reflexive ‘himself’.

KS: I would think that pronoun-pronoun would be of this class.

a) wàn yì nó ghɔ̀mə̀ ə́wɛ́nə́ wɛ́n
That child usually beats himself.

You(pl) must help each other.

The travelers spoke to each other.

They argued with each other.

Comment: In these sentences the optional appearance of pronoun-pronoun is actually required for the reciprocal meaning to be understood.

KS: The pronoun-pronoun strategy needs to be presented as a separate strategy.

3.2 Productivity

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

‘show’, ɗʒèŋ ‘walk’.

KS: How productive is the pronoun-pronoun strategy?

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

Comment: The use of the body-pronoun strategy has a few exceptions. For example ‘body’ is not used when referring to action on body parts.

a) The men combed each other’s hair.

b) Paul examined his hand.

KS: You mean his foot or his hand?

3.3 Context of Use

3.3.1 How marked or natural is this strategy?

Comment: The body-pronoun strategy is natural. This is the way people talk to each other in any context.

KS: What about the pronoun-pronoun strategy?

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

Comment: No special intonation or emphasis is necessary for the body-pronoun strategy.

KS: What about the pronoun-pronoun strategy?

3.3.3 Is a particular discourse context (e.g., contradicting) necessary?

Comment: No particular discourse context is necessary for the body-pronoun strategy.
KS: What about the pronoun-pronoun strategy?

3.4 Morphology

3.4.1 Does the reflexive element, in its entirety, have a stateable lexical translation?
Comment: The reflexive or reciprocal element consists of ‘body-pronoun’.

We saw each other.

\[
\begin{array}{c|c|c|c|c|c}
1P & P2 & see & c13-body & 1pp \\
\end{array}
\]

‘We saw each other.’

3.4.2 If the term used as a reflexive or reciprocal can be used for a non-reflexive/non-reciprocal meaning, is it an ordinary noun that can be possessed by other pronouns?
Comment: ə́w n ‘body’ is an ordinary noun that can be possessed by other pronouns without changing its meaning.

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

(a) Agreement features etc.

\[
\begin{array}{c|c|c}
\text{c5-body} & \text{AM} & 3SG \\
\text{tò-wén} & tó & vòvó(nó) \\
\end{array}
\]

Comment: The presence of absence of (nó) does not have any semantic implications. This means that it may or may not occur but the meaning remains the same.

(b) Does this morpheme have a lexical meaning?
Comment: wén means ‘body’ and clearly makes reference to the people concerned in any discourse.

\[
\begin{array}{c|c|c|c|c|c}
\text{c5-body} & \text{it} & \text{must} & \text{c5-rest} \\
\end{array}
\]

‘The body must get rest.’
The agreement paradigm

3.5.1 Give the morphological paradigm of each reflexive strategy. Be sure to vary all features that could cause the form of the reflexive to vary, even if some feature is only relevant in combination with a single combination of other feature values (e.g., include gender even if it is only relevant in nominative uses of the reflexive).

**Body-pronoun strategy:** ə̀wɛ́nə́ ghə̀ŋə́, ə̀wɛ́nə́ wú, ə̀wɛ́nə́ wɛ́n, ə̀wɛ́nə́ yɛsə́, ə̀wɛ́nə́ ghə̀ŋə́, ə̀wɛ́nə́ vəwə́nə́, tə̀wɛ́nə́ tyəmə́, tə̀wɛ́nə́ tyəstə́, tə̀wɛ́nə́ tyəntə́, tə̀wɛ́ntə́ vəwə́nə́,

**Pronoun-pronoun strategy:** mò mò, wù wù, wɛ́n wɛ́n, yès yès, ghə̀ŋ ghə̀ŋ, və́wə́ və́wə́.

KS: I have edited above – is it the way you want it? This might work better as a table with the feature values specified. Also, do we have any examples of pronoun-pronoun when it is not plural? If this strategy is uniquely reciprocal in interpretation, we would not expect them. Can you show that this does or does not occur (for all singular persons).

3.5.2 For each morphological feature, what determines its value? (For example, agreement with the antecedent, or agreement, in the case of possessives in some languages, with the possessed N.) In particular, for each agreement feature, indicate whether it must agree with the antecedent, or perhaps with something else, and whether it must do so (a) obligatorily, or (b) usually or optionally.

Comment: The value of the strategy is determined by agreement depending on the noun class of BODY. If it is singular (from noun class five) then it takes the noun class five agreement marker [ə] but if it plural (from noun class thirteen where class five forms its plural) then it takes the noun class thirteen agreement marker [tə́].

KS: Would it be correct to say (a) that ‘body’ agrees in number, not noun class, with its antecedent, such that a plural antecedent requires the plural noun class for body, but (b) the pronoun agrees with the noun class of the antecedent? This is true for person, but are there...
pronouns of any other class than what you call 3pp that occur with the body-pronou strategy, or for that matter, any third person pronouns of any other noun class? The evidence in C18 suggests that there is no noun class distinction beyond plural and person.

KS: For the pronoun-pronoun strategy, is it ever the case that the pronoun agrees with its antecedent in noun class other than in person, or are all third person pronouns the same?

3.6 Interaction with verb morphology - Incompatibilities

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

B3a) Gina (generally) washes herself
\[dʒínà nọ nshù ə́wɛ́nə́ wɛ́n\]
\[dʒínà nọ n-shù ə́-wɛ́n ə́ wɛ́n\]
Gina HAB HAB-wash C5-body AM her
‘Gina (generally) washes herself.’

b) Gina has washed/was washing herself.
\[dʒínà yī shù ə́wɛ́nə́ wɛ́n\]
\[dʒínà yī shù ə́-wɛ́n ə́ wɛ́n\]
Gina P2 wash C5-body AM her
‘Gina has washed.’

c) Gina should wash herself.
\[dʒínà shú ə́wɛ́nə́ wɛ́n\]
\[dʒínà shú ə́-wɛ́n ə́ wɛ́n\]
Gina wash.HOR C5-body AM her
‘Gina should wash herself.’

Comment: Tense and aspect do not have any syntactic effect on the strategy (HAB = habitual aspect and HOR = hortative mood).
3.6.2 Grammatical Function (GF)-changing - Consider GF-changing constructions or operations in your language that affect the argument structure of a verb, adding, promoting, or demoting arguments. For example, passive, antipassive, stative, benefactive, applicative, etc. Manipulate the verbs meaning talk to, give, visit, and kill.

B4a) Gina killed herself.
\[
\text{džínà yì zhwì ə́wɛ́nə́ wɛ́n} \\
\text{Gina P2 kill C5-body AM her}
\]
‘Gina killed herself.’

b) Gina was killed by herself.
\[
\text{džínà yì zhwì ə́wɛ́nó wén tà wɛ́n} \\
\text{Gina P2 kill C5-body AM her by her}
\]
‘Gina was killed by herself.’

Comment: The extensions mentioned above do not occur in Kejom. Kejom is a somewhat isolating language and most of the constructions are expressed using separate lexical items rather than verbal extensions. There is no causative morpheme, no applicative, no passive, no middle, no impositive.

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

Comment: Does not apply.

3.7 Uses that are not quite coreference

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

3.7.1 Idiosyncratic or inherent.

Comment: I am not aware of any verbs that lexically require a reflexive which does not correspond to an argument. There is nothing like 'behave oneself' or 'perjure oneself'?
3.7.2 Emphatic or intensifier.

B1c) John ate fish himself.

\[ \text{dʒɔyn yì pfì? shù fá wá ŋgə́ŋ} \]
\[ \text{dʒɔyn P2 chew c9.fish by 3SG EMPH} \]

‘John ate fish himself.’

Comment: There is no independent context where ŋgə́ŋ independently means something else.

d) John himself ate fish.

\[ \text{ŋkà dʒɔyn yì pfì? shù} \]
\[ \text{ŋkà dʒɔyn yì pfì? shù} \]
\[ \text{real John P2 chew c9.fish} \]

‘John himself ate fish.’

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

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

Comment: (C) is most permitted. (D) can also be permitted marginally but will generally require nɔ̀ ‘even’ at the beginning of the sentence. In other words, 'even' is required to obtain the meaning in (D) but not (C).

3.7.3 Middle. The argument structure of the verb is changed into a form that has an explicit patient, but no agent is present and an agent may or may not be implied.

\[ \text{kɔkáŋ kyì kó pfú lí} \]
\[ \text{kɔ-káŋ kyì kó pfú lí} \]
\[ \text{c7-pan c7.the AM die P1} \]

‘The plate is broken.’

Comment: There is no overt morphology marking for middles. In the following example the
speaker acts on the plate but reports it as if the plate broke itself.

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

\[
\text{lyúmá vyí yèn mèrí ámú?ò}
\]
\[
\text{lyúmá } \text{vyí yèn mèrí ámú?ò}
\]
\[
c2.\text{man } c2.\text{the } \text{P2 see } \text{Mary together}
\]
‘The men saw Mary together.’

\[
\text{lyúmá vyí lù ámú?ò}
\]
\[
\text{lyúmá } \text{vyí lù ámú?ò}
\]
\[
c2.\text{man } c2.\text{the } \text{P2 leave together}
\]
‘The men left together.’

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

B5a) Bill did not see X

\[
bíl kó yèn ghàŋ
\]
\[
bíl kó yèn ghàŋ
\]
\[
\text{Bill NEG P2 see 2pp}
\]
‘Bill did not see you.’

b) Does Mary like X?

\[
mèrí ò kù wèn à
\]
\[
mèrí ò kù wèn à
\]
\[
\text{Mary PRES like 3SG QUES}
\]
‘Does Mary like him/her.’

c) X went to the bank yesterday.

\[
ghò tà djà á bàŋ zòn
\]
\[
ghò tà djà á bàŋ zòn
\]
\[
3S P3 go to bank yesterday
\]
‘He/She went to the bank yesterday.’

Comment: The ‘body-pronoun’ or ‘self-(pro)noun’ strategy can be used only if X has
been mentioned before otherwise X will be pointed to at that moment. For example, if we have been talking about Mary's misdeeds, it would be possible to say something like 'the elders criticized Agr-BODY AM Pron' where the reflexive refers to Mary? It is also possible to point to Mary if the speakers had not been talking about her but now wish to refer to her.

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

B6a) Bill insulted X. (X = speaker, X = addressee)

\[
\begin{align*}
\text{bíl} & \quad \text{yì télá mò} \\
\text{bíl} & \quad \text{yì télá mò} \\
\text{Bill} & \quad \text{P2 insult 1ps}
\end{align*}
\]

‘Bill insulted me.’

b) Many people do not like anchovies, but X likes them.

\[
\begin{align*}
\text{nghó?ĩ vĩ?i kò kọj mòndé?ndé? mò shúsó áli wù kù} \\
\text{nghó?ĩ vĩ?i kò kọj mòndé?ndé? mò shúsó áli wù kù} \\
\text{many c2.person NEG like c6-tiny AM fish-c10 but 2ps like}
\end{align*}
\]

‘Many people do not like anchovies, but you like them.’

Comment: Only a noun or pronoun that has been mentioned in the sentence can be used in place of X. In this contrastive context, the direct object of kù can be dropped.

Comment: Is there really supposed to be a high tone on the “h”?

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

B7a) I don't like the way he speaks to one.

\[
\begin{align*}
\text{mà kò kọj dʒí á għò gàʔà à wí?} \\
\text{mà kò kọj dʒí á għò gàʔà à wí?} \\
\text{1S NEG like way that 3S speak to c1.person}
\end{align*}
\]

‘I don't like the way he speaks to one.’

b) One cannot be too careful

\[
\begin{align*}
\text{wí? kò zì għè tú?mò djú mè} \\
\text{wí? kò zì għè tú?mò djú mè}
\end{align*}
\]
c1.person NEG can 3S care go end

‘One cannot be too careful.’

c) Bill insults one before one can say a word.

bíl á télá wí? múmbú wí? só gà? kà-nyù

bíl ó télá wí? múmbú wí? só gà? kà-nyù

Bill PRES insult c1.person before c1.person do speak c7-thing

‘Bill insults one before one can say a word.’

Comment: The form cannot be used. Rather wí? ‘person’ is used.

3.7.6 Focus.

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

B15) Who did the farmers see?

ví?í àsím vyí yèn ndó

ví?í àsím vyí yèn ndó

c2.person c5-farm c2.the P2 see who

‘Who did the farmers see?’

They saw *him*.

vòwé yì yènó wéñ

vòwé yì yènó wéñ

3pp P2 see 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) The farmers didn’t see Mary. They saw *him*.

ví?í àsím vyí kò yì yèn mèrí. vòwé yì yènó wéñ

ví?í àsím vyí kò yì yèn mèrí. vòwé yì yènó wéñ

èc2.person èc5-farm èc2.the NEG P2 see who. 3pp P2 see 3SG

‘The farmers didn’t see Mary. They saw *him*.’

Comment: B15 and B16 are correct if the addressee knows that John is the one referred to. Otherwise, John must be stated clearly.

3.7.7 Other. Are there other ways to use the strategy that do not express coreference (or reciprocal coreference) between two arguments? If so, give examples and a brief explanation here.

Comment: I can't think of any right now.
3.8 Proxy readings

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

B8a) Castro admired himself in the wax museum. (himself = statue of Castro)
   b) Grisham has not read himself in Swahili, though he has read himself in Spanish. (himself = Grisham's writings)

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) Castro washed himself carefully, so as not to damage the wax.
   b) Castro washed carefully, so as not to damage the wax.
   c) The movie star dressed herself carefully, so as not to damage the wax.
   d) The movie star dressed carefully, so as not to damage the wax.
   e) Castro saw himself in the show, but he didn't like what he saw.

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) Grisham says he sounds better in Swahili. (where he = Grisham's writings)
   grŕshàm gà? lá yì nyɔ?ɔ á ɲkàn á swàhílì
   Grisham PRES say that him write well in Swahili
   ‘Grisham says he sounds better in Swahili’

   b) Castro thought that he looked handsome. (he = statue of Castro)
   kástrò ɲkwò lá ɲntyif kó wèn ɔ wèn kɔ mbù
   Castro P4-think that c7-statue AM body of himself AM nice
   ‘Castro thought that he looked handsome’
Proxy readings are also possible for reciprocals in many languages. For (B11a), once again the antecedents are the authors and each other describes the works these authors have written, such that Mark Twain did not read Victor Hugo's novels in Swahili and Victor Hugo did not read Mark Twain's novels in Berber. For (B11b), imagine a show where there are actors masquerading as our two protagonists. The first each other refers to the person Marlene and Castro, but the second each other refers to the actors (or statues) representing them on the stage or in the show.

B11a) Mark Twain and Victor Hugo did not read each other in Berber.
   b) Marlene and Castro did not see each other in the audience, but they did see each other on the stage/in the show.

Comment: The strategies are not used for proxy readings in Babanki. Instead there is overt mention of the proxy element referred to, as can be seen in the following sentences. Notice that (a) is not acceptable (although it could mean that Abong called himself, which is unusual).

a) Abong read his book.
   àbòŋ yì dzàŋ ówèná ṣèn
   àbòŋ yì dzàŋ ò-wèn ò ṣèn
   Abong P2 call c5-body AM 3SG
   *‘Abong read his book’

b) Abong read his book.
   àbòŋ yì dzàŋ ñwàʔlò ṣèn
   àbòŋ yì dzàŋ ñwàʔlò ò ṣèn
   Abong P2 call c1.book AM 3SG
   ‘Abong read his book (Abong = author)’

3.9 Ellipsis

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

B12a) SHerman likes/praises himself more than Bill
   b) SHerman likes/praises himself more than Bill does

Comment: B12b is not possible in Kejom
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’)

i. SHerman likes/praises himself more than *Sherman likes* Bill.
ii. SHerman likes/praises himself more than Bill *likes him* (= SHerman).
iii. SHerman likes/praises himself more than Bill *likes himself*.

B12ai) Abong likes himself more than Ase.
\[ \text{àbòŋ à kù òwènò wén tʃò àse} \]
`Abong PRES like c5-body AM 3SG pass Ase`
‘Abong likes himself more than Ase’
aii) Abong cares for himself more than Ase.
\[ \text{àbòŋ à tùʔmò nà òwènò wén tʃò àse} \]
`Abong PRES care with c5-body AM 3SG pass Ase`
‘Abong cares for himself more than Ase’
aiii) Abong protects himself more than Ase.
\[ \text{àbòŋ á tʃíʔtə òwènò wén tʃò àse} \]
`Abong PRES like c5-body AM 3SG pass Ase`
‘Abong protects himself more than Ase’
aiv) Abong feeds himself more than Ase.
\[ \text{àbòŋ á zìsá òwènò wén tʃò àse} \]
`Abong PRES feed c5-body AM 3SG pass Ase`
‘Abong feeds himself more than Ase’

Comment: These ellipsis sentences are interpretable with all the readings i-iii.

PART 4 Exploration of syntactic domains

4.1 Clausemate coconstrual
The following questions will provide a broad outline of the types of predicates that allow the use of each strategy.

### 4.1.1 Verb class restrictions

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

C1a) Bob saw X.

\[ \text{bɔ̂b yî yèn tɔ̌m} \]

\[ \text{bɔ̂b} \quad \text{yî} \quad \text{yèn} \quad \text{tɔ̌m} \]

Bob P2 see Tom

‘Bob saw Tom.’

b) The women described X.

\[ \text{kyǐ vyí yî shə̀Ɂtə̀ byì nyàm yì} \]

\[ \text{kyǐ} \quad \text{vyí} \quad \text{yî} \quad \text{shə̀Ɂtə̀} \quad \text{byì} \quad \text{nyàm} \quad \text{yì} \]

c2.woman c2.the P2 tell about animal c9.the

‘The women described the animal.’

c) You(pl.) kicked X.

\[ \text{ghə̀ŋ yî tʃə̀ tɔ̌m} \]

\[ \text{ghə̀ŋ} \quad \text{yî} \quad \text{tʃə̀} \quad \text{tɔ̌m} \]

2P P2 kick Tom

‘You(pl.) kicked Tom.’

d) They praised X

\[ \text{vəwó yî kù?sό fɔ̀n} \]

\[ \text{vəwó} \quad \text{yî} \quad \text{kù?sό} \quad \text{fɔ̀n} \quad \text{ə} \quad \text{vəwé} \]

3P P2 raise Fon AM their

‘They praised their Fon.’

#### 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.

C3a) Donna washed X. (X = Donna)

\[ \text{dόnà yî shù òwɛ́nò wέn} \]
dònà yî shù ə-wén ə̀ wén
Donna P2 wash c5-body AM her
‘Donna washed herself.’
b) Don cut X’s hair. (X = Don).

dòn yî fà? kɔ-tú kɔ wén
don yî fà? kɔ-tú kɔ wén
Don P2 shave c7-head AM his
‘Don cut his hair.’
c) The girl cut X [unintentionally] (X = the girl)

wàn wù-wi yî yî shò ə-wén wén
wàn wù-wi yî yî shò ə-wén wén
P2 cut P2 cut c5-body c5-body AM AM her her
‘The girl cut herself [unintentionally].’
d) The dog saw X. (X = dog).

Bú yî tò yèn ə-wén wén
Bú yî tò yèn ə-wén wén
P3 see P3 see c5-body c5-body AM AM it
‘The dog saw itself.’
e) Sam helped X. (X = Sam).

sàm tò gyàmtò ə-wén wén
sàm tò gyàmtò ə-wén wén
P3 help P3 help c5-body c5-body AM AM his
‘Sam helped himself.’

KS: I would like these examples tested with pronoun-pronoun where the pronoun is singular please. I would like to know if singular pronoun-pronoun is possible, and if possible, is it favored or disfavored where singular body-pronoun is also available.

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 hates/fears X

dʒo placeholder
}
dʒo placeholder
}{
John PRES hate/fear c6-juju
‘John hates/fears jujus.’

b) John is ashamed of X

dʒọyn ñ dʒì?sɔ̀ ƙàtụ byì mà-kùm

‘John is ashamed of jujus.’

c) John is worried about X

dʒọyn ñ kwọtọ byì vạtsọ́ŋ

‘John is worried about thieves.’

d) John is proud of X

dʒọyn ñ sànlọ̀ byì mà-kùm

‘John is proud of jujus.’

e) John worries/troubles/pleases X

dʒọyn ñ kú ŋgọ́? à vị́ŋ

‘John worries/troubles.’

f) John pleases X

dʒọyn ñ nè wàn sànlọ̀

‘John pleases the child.’

KS: My mistake. I wanted these with X = John and I would like you to try them with pronoun-pronoun and body-pronoun (but don’t erase these examples).

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) The women will destroy X

kyi vyi ne byípsó wàn yì
kyĩ vyí né byípsó wán yì
kyĩ vyí né zhwí wán yì
kyĩ vyí né lyèsó wán yì
kyĩ vyí né shitō mánhšiŋ ñà vòwó vòwó
kyĩ vyí né shitō mánhšiŋ ñà vòwó vòwó

‘The women will destroy the child.’

b) The women will kill X

‘The women will kill the child.’

c) The women will make disappear X

‘The women will make the child to disappear.’

d) The machines built X (X = themselves)

‘The machines built themselves.’

e) The children formed lines X (X = themselves)

‘The children formed lines themselves.’

KS: Is body-pronoun possible here? Pronoun-pronoun?

f) The women will make oil for X (X = themselves)

‘The women will make oil for themselves.’

KS: Is body-pronoun possible here? Simple pronoun?

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) The boys represented X.
vwú lúmá vyí yì ŋímkó à vòwé àzhí?
vwú lúmá vyí yì ŋímkó à vòwé àzhí?
c2.child male c2.the P2 stand for 3p c5-name
‘The boys represented themselves.’

b) John spoke for X.

dʒǒyn yì gâʔ á zhíʔ ṣkà wén
dʒǒyn yì gâʔ á ə-žhíʔ ṣkà wén
John P2 speak for c5-name self 3s
‘John spoke for 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 gave the gift to X (X = Mary)

mèrí tò kù kâfó kyi à ŋwèn ə wén
mèrí tò kù kâ-fó kyi à ə-wén ə wén
Mary P3 give c7-thing c7.the to c5-body AM her
‘Mary gave the gift to herself.’

b) John showed the house to X (X = John)

dʒǒyn tò dʒìʔ əŋən yì à ŋwèn ə wén
dʒǒyn tò dʒìʔ əŋən yì à ə-wén ə wén
John P3 show c9.house c9.the to c5-body AM her
‘John showed the house to himself.’

For comparison, also provide judgements for the following:

C8a) Mary gave X the gift (X = Mary)

mèrí tò kù kâfó kyi à ŋwèn ə wén
mèrí tò kù kâ-fó kyi à ə-wén ə wén
Mary P3 give c7-thing c7.the to c5-body AM her
‘Mary gave the gift to herself.’
b) John showed X to the children (X = John)

\[ \text{dʒɔyn tə dʒi? ðwɛn ð wɛn ñ wvún vyi} \]

John P3 show c5-body AM her to c2.child c2.the

‘John showed himself to the children.’

Comment: the same strategy is used to express coreference between a subject and an indirect object.

4.1.2.2 Oblique arguments - Give some examples with oblique arguments, in whatever forms your language allows.

C9a) Dan talked to X.

\[ \text{dán tə gà? á mɛrɪ} \]

Dan P3 speak to c1.mary

‘Dan talked to Mary.’

b) Dan told Mary about X (X = Dan)

\[ \text{Dán tə gà? á mɛrɪ byì ðwɛnɔ wɛn} \]

Dan P3 speak to c1.mary because.of c5-body AM his

‘Dan told Mary about himself’

c) Dan gave X a book.

\[ \text{dán tə kù ŋwà?lɔ á mɛrì} \]

Dan P3 give c1.book to c1.mary

‘Dan gave Mary a book.’

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 saw a snake behind X (X = Mary)

\[ \text{mɛrì tə yɛn zhù á băm ð ŋkà wɛn} \]

Mary P3 see c1.snake LOC back of EMPH her

Comment: The morpheme ŋkà does not have an independent meaning. It is used before subjects
or objects to emphasize that it is specifically that subject or object referred to. In the examples above, it makes reference to the subject as opposed to the object.

‘Mary saw a snake behind herself.’
b) Mary called me because of an article about X (X = Mary)

mèrítô dzàng mò byì kà-nyù byì ŋkà wèn
mèrítô dzàng mò byì kà-nyù byì ŋkà wèn
mary P3 call me because.of c7-thing because.of EMPH her

‘Mary called me because of an article about herself.’
a) John offended Mary because of X (X = John)

dʒɔyn tô nè tyín á mèrít fwí byì ŋkà dzɔn
dzɔyn tô nè tyín ó mèrít fwí byì ŋkà dzɔn
John P3 do inside of Mary burn because.of EMPH John

‘John offended Mary because of himself.’
d) We laughed because of X

yèssà yì tʃɔʔ byì kàŋkɔn
yèssà yì tʃɔʔ byì kàŋkɔn
we P2 laugh because.of c7-foolish

‘We laughed because of foolishness.’

Comment: The EMPH-(pro)noun strategy is required to specify whether X refers to the subject or the direct object.

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), Bill gave Hal himself, which is admittedly pragmatically awkward, but imagine for (C11a) that Mary is showing Hal his image in the mirror - imagine Hal had never seen a mirror before.

C11a) Mary showed Hal to X.

mèrítô yì dzìʔ hál á áwèná wèn
mèrítô yì dzìʔ hál á áwèná ó wèn
Mary P2 show Hal to c5-body AM him

‘Mary showed Hal to himself.’
Comment: To clarify, in this sentence, the body-pronoun construction can have the direct object as its antecedent.

b) Mary showed X to Hal.
   mèrí yì dʒiʔ ṣwénó wén à hál
   Mary P2 show c5-body AM her to Hal
   ‘Mary showed herself to Hal.’

c) Bill gave Hal X.
   bíl yì kù hál á ṣwénó wén
   Bill P2 give Hal to c5-body AM him
   ‘Bill gave Hal to himself.’

d) Bill gave X Hal.
   bíl yì kù hál á ṣ-wén ó wén
   Bill P2 give Hal to c5-body AM him
   ‘Bill gave Hal to himself.’

e) Mary told/asked the boys about themselves.
   mèrí yì shəʔtə̱/bə̱m á vwú lyúmá vyí byi tə̱wəntə̱ vəwó
   Mary P2 tell/ask to c2.child c2.male c2.the because of c13-body AM them
   ‘Mary told/asked the boys about themselves.’

f) Mary told/asked the boys about each other.
   mèrí yì shəʔtə̱/bə̱m á vwú lyúmá vyí byi vəwó vəwó
   Mary P2 tell/ask to c2.child c2.male c2.the because.of them them
   ‘Mary told/asked the boys about each other.’

g) Mary showed/introduced/presented the boys to each other.
   mèrí yì dʒiʔ vwú lyúmá vyí à vəwó vəwó
   Mary P2 show/introduce c2.child c2.male c2.the to them them
   ‘Mary showed/introduced the boys to each other.’
Comment: It looks like the pronoun-pronoun strategy has a more reciprocal than reflexive reading. Therefore (g) would not be ok with the body-pronoun strategy.

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 talked about Hal to X.
   \[bil \ yì \ gà? \ byì\ á \ ŋkà \ wèn\]
   \[bil \ yì \ gà? \ byì \ hál \ á \ ŋkà \ wèn\]
   Bill P2 talk about Hal to EMPH 3s
   ‘Bill talked about Hal to himself (Bill or Hal).’

b) Mary talked about X to Hal.
   \[mèrí \ yì \ gà? \ byì \ ŋkà \ wèn\ á \ hál\]
   \[mèrí \ yì \ gà? \ byì \ ŋkà \ wèn\ á \ hál\]
   Mary P2 talk about EMPH 3s to Hal
   ‘Mary talked about himself/herself to Hal.’

c) Mary talked to Hal about X
   \[mèrí \ yì \ gà? \ á \ hál \ byì \ wèn\]
   \[mèrí \ yì \ gà? \ á \ hál \ byì \ wèn\]
   Bill P2 talk to Hal about 3s
   ‘Mary talked to Hal about him (Hal or some other person).’

d) Mary talked to X about Hal.
   \[mèrí \ yì \ gà? \ á \ wèn \ byì \ hál\]
   \[mèrí \ yì \ gà? \ á \ wèn \ byì \ hál\]
   Mary P2 talk to 3s about Hal
   ‘Mary talked to him (Hal or some other person) about Hal.’

Comment: It is not possible for X to refer solely to Hal in the above constructions. X can refer either to the subject or the direct object or to someone else.

KS: Your comment is a little confusing. Do you mean to say that the pronoun can refer to Hal,
to Mary, or to some third person, equally well?

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

C13a) Nick telephoned X's mother.

\[
\text{nǐk} \; \text{yì} \; \text{li} \; \text{ŋkà} \; \text{wén}\]
\[
\text{nǐk} \; \text{yì} \; \text{dzàŋ} \; \text{li} \; \text{ŋkà} \; \text{wén}\]
Nick P2 call mother EMPH him

‘Nick telephoned his own mother.’

b) Nick combed X's hair.

\[
\text{nǐk} \; \text{yì} \; \text{sàs} \; \text{kòtú} \; \text{kó} \; \text{ŋkà} \; \text{wén}\]
\[
\text{nǐk} \; \text{yì} \; \text{sàs} \; \text{kòtú} \; \text{kó} \; \text{ŋkà} \; \text{wén}\]
Nick P2 comb c7-head AM EMPH him

‘Nick combed his own hair.’

c) Nick spoke to X's boss.

\[
\text{nǐk} \; \text{yì} \; \text{gà} \; \text{ti} \; \text{à-shù} \; \text{ŋkà} \; \text{wén}\]
\[
\text{nǐk} \; \text{yì} \; \text{gà} \; \text{ti} \; \text{à-shù} \; \text{ŋkà} \; \text{wén}\]
Nick P2 speak to owner c-5work EMPH him

‘Nick spoke to his own boss.’

d) Nick put X's book on the table.

\[
\text{nǐk} \; \text{yì} \; \text{wù} \; \text{ηwà?lb} \; \text{ŋkà} \; \text{wén} \; \text{á} \; \text{táblò}\]
\[
\text{nǐk} \; \text{yì} \; \text{wù} \; \text{ηwà?lb} \; \text{ŋkà} \; \text{wén} \; \text{á} \; \text{táblò}\]
Nick P2 keep c1.book EMPH him LOC table

‘Nick put his own book on the table.’

e) The king gave Nick a prize in X's village.

\[
\text{fòn} \; \text{yì} \; \text{kù} \; \text{ntá?} \; \text{á} \; \text{nǐk} \; \text{á} \; \text{àlò?} \; \text{ŋkà} \; \text{ník}\]
\[
\text{fòn} \; \text{yì} \; \text{kù} \; \text{ntá?} \; \text{á} \; \text{nǐk} \; \text{á} \; \text{àlò?} \; \text{ŋkà} \; \text{ník}\]
Fon P2 give prize to Nick LOC c5.village EMPH Nick

‘The king gave Nick a prize in Nick's village.’

f) The boys washed X's face.

\[
\text{vwú} \; \text{lyúmò} \; \text{yì} \; \text{shù} \; \text{à-kà?} \; \text{ník}\]
\[
\text{vwú} \; \text{lyúmò} \; \text{yì} \; \text{shù} \; \text{à-kà?} \; \text{ník}\]

C14a) Nick's father admires X.

\[\text{tí ník ó kù ník}\]

\[\text{tì nìk ó kù nìk nìk} \text{c1.father Nick PRES admire Nick} \]

‘Nick’s father admires Nick.’

b) Nick's ambition destroyed X.

\[\text{kú?sò wèn ó ník tò byìpsò ñkà wèn}\]

\[\text{kú?ísò wèn ó ník tò byìpsò ñkà wèn lift body of Nick P3 destroy EMPH him}\]

‘Nick's ambition destroyed Nick himself.’

c) Nick's mother sold X's car.

\[\text{lì ník tò bà?lò màntù mà ník}\]

\[\text{lì nìk tò bà?lò màntù mà nìk c1.mother Nick P3 sell c6-car AM Nick} \]

‘Nick’s mother sold Nick's car.’

Comment: The EMPH-(pro)noun strategy is necessary to specify that X refers to either the subject or the direct object.

KS: I am not sure which sentences this comment applies to. Please clarify. Also, for (C14c), please add sentences that replace the second ‘Nick’ with a pronoun, with EMPH-pronoun, body-pronoun, and pronoun-pronoun, and tell me which ones work, please.

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

X20a) The boys saw pictures of themselves/each other/them

\[\text{vwú lyúmọ vyí yì yèn òndéndé mọ ñkà vòwé}\]

\[\text{vwú lyúmọ vyí yì yèn òndéndé mọ ñkà vòwé c2.child c2.male c2.the P2 see c8-picture AM EMPH them}\]

‘The boys saw pictures of themselves/each other/them.’

Comment: In (X20a), the EMPH-(pro)noun strategy refers to the subject.

KS: Is this sentence OK with pronoun-pronoun or body-pronoun (with reflexive interpretation) in place of EMPH-pronoun? It would be useful to have those sentences as well. Same for X20b.

b) Mary told the boys about pictures of themselves/each other/them
mèrì yì shòtò á vvú lyúmà vyí byi ə̀ndéndém mó ŋkà və́wé
mèrì yì shòtò á vvú lyúmà vyí yì yèn ə̀ndéndém mó ŋkà və́wé
Mary P2 tell to c2.child c2.male c2.the P2 see c8-picture AM EMPH them
‘Mary told the boys about pictures of themselves/each other/ them.’

c) The politicians planned attacks against each other.
vi?í pólitìk vyí yì wà tásón tà və́wé və́wé
vi?í pólitìk vyí yì wà tó-són tà və́wé və́wé
c2.person politics c2.the P2 keep c13-fight with them them
‘The politicians planned attacks against each other’

d) The politicians faked/simulated attacks against themselves/them.
vi?í pólitìk vyí yì wù nlóptò tásón tà və́wé və́wé
vi?í pólitìk vyí yì wù nlóptò tó-són tà və́wé və́wé
c2.person politics c2.the P2 keep fake c13-fight with them them
‘The politicians faked/simulated attacks against themselves/them’

Comment: The ‘pronoun-pronoun’ strategy is restricted to reciprocal meaning. Both the ‘pronoun-pronoun’ strategy and the EMPH-pronoun strategy are acceptable for reciprocal readings but if there is need for emphasis then the EMPH-pronoun strategy is employed.

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.

C15a) Polly was killed by herself.
pólí yì zhwì ə́wɛ́nə́ wɛ́n tà wɛ́n
pólí yì zhwì ə́wɛ́nə́ wɛ́n tà wɛ́n
Polly P2 kill C5-body AM 3SG by 3SG
‘Polly was killed by herself.’

Comment: There is really no emphasis implied here. It simply says that the action was done on the subject by the subject itself. If there were need for emphasis then ŋkà will be added.

b) Polly killed herself.
pólí yì zhwì ə́wɛ́nə́ wɛ́n
pólí yì zhwì ə́wɛ́nə́ wɛ́n
Polly P2 kill C5-body AM her
‘Polly killed herself.’
c) Polly was helped by herself.
pólí yì gyàmtò ñwènò wèn tà wèn
pólí yì gyàmtò-ñwèn ó wèn tà wèn
Polly P2 help C5-body AM her by her
‘Polly was helped by herself.’
d) Polly helped herself.
pólí yì gyàmtò ñwènò wèn
pólí yì gyàmtò ó-wèn ó wèn
Polly P2 kill C5-body AM her
‘Polly helped herself.’

Comment: The argument structure of the verb is not affected.

4.1.3 Properties of antecedents

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

C16a) I saw X.
    mà yì yên wù
    mà yì yên wù
    1s P2 see 2ps
    ‘I saw you.’
b) I saw X.
    mà yì yên vòwè
    mà yì yên vòwè
    1s P2 see 3p
‘I saw them.’

c) You saw X.
   wù yì yèn mó
   wù yì yèn mó
   2s P2 see 1ps
   ‘You saw me.’

d) You saw X.
   wù yì yèn yés
   wù yì yèn yés
   2s P2 see 1pp
   ‘You saw us.’

e) It saw X.
   ghə̀ yì yèn mó
   wù yì yèn mó
   3s P2 see 1ps
   ‘It saw me.’

f) It saw X.
   ghə̀ yì yèn yés
   wù yì yèn yés
   3s P2 see 1pp
   ‘It saw them.’

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

C17a) I washed X
    mà yì shù ghə̀ŋ
    mà yì shù ghə̀ŋ
    1S P2 wash 2pp
    ‘I saw you.’

b) I hate X.
    mà bànə̀ wɛ́n
    mà bànə̀ wɛ́n
    1S hate PRES 3SG
    ‘I hate her.’

c) I told John about X
mà yì shàʔtò byì wù à dʒǒyn
mà yì shàʔtò byì wù à dʒǒyn
1S P2 tell about 2s to John
‘I told John about you.’

d) I saw a snake near X
mà yì yèn zhù à ghə̀(ŋə́) bén
mà yì yèn zhù à ghə̀(ŋə́) bén
1s P2 see c9.snake LOC 2p side
‘I saw a snake near you.’

e) I am liked by X.
ghò kù mò
ghò kù mò
3s.PRES like me
‘SHe likes me.’
Comment: The passive reading in C17e is not possible.

f) I telephoned X's mother
mà yì dzàŋ lì və̀wê
mà yì dzàŋ lì və̀wê
1s P2 call c1.mother 3p
‘I telephoned their mother.’

g) My father admires X
tî ghóma kù yès
tî ghóma ś shímtò yès
c1.father my PRES admire 1p
‘My father admires us.’
Comment: There are restrictions on the person/number combinations.

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
fə̀tɪfɪ fə̀ bwɪnsə̀ ə̀ wə̀ nə̀ wə̀ n
fə̀-tɪfɪ fə̀ bwɪnsə̀ ə̀-wə̀ nə̀ wə̀ n
c19-story AM repeat c5-body AM it
‘History repeats itself.’

b) This type of fish cannibalizes X
kà shù yèn ọ pfì 珑wénò wên
type C9.fish c9.this PRES eat c5-body AM it
‘This type of fish cannibalizes itself.’

c) This machine destroys X (e.g., after you use it)
mànshīnj mēn ş byìpsā 珑wénò wên
c1.machine c1.this PRES destroy c5-body AM it
‘This machine destroys itself.’

Comment: There is no distinction between animacy and humanity.

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.

Comment: Not 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) Every woman saw X.
nō kyǐ vòtsèmā yì yèn tòwèntò vòwè
nō kyǐ vò-tsèmā yì yèn tòwèn tò vòwè
all c2.woman c2-all P2 see c13-body AM them
‘Every woman saw themselves.’

b) Every child washed X.
nō vvíun vòtsèmā yì shù tòwèntò vòwè
nō vvíun vò-tsèmā yì shù tòwèn tò vòwè
all c2.child c2-all P2 wash c13-body AM them
‘Every child washed themselves.’

c) Every student hates X.
nō vvíündī ĕwá́lọ̀ vòtsèmā bàǹò tòwèntò vòwè
nō vvíundī ĕwá́lọ̀ vò-tsèmā bà̀ tòwèn tò vòwè
Every student hates themselves.

Every child saw a snake near their side.

Every child called their own mother.

Every child's father admires their children.

No woman saw herself.

No child washed himself.

No student hates himself.
No child saw a snake near herself.

k) No child telephoned X's mother.

No child telephoned her mother.

l) No child's father admires X.

No child’s father admires his child.

Comment: The quantifiers seem to behave in an identical manner. The body-self strategy dominates and the EMPH-(pro)noun strategy is necessary to specify that the ‘mother’ referred to in (e) and (k) is strictly that of the child(ren).

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) Who saw X?

Who saw who?

b) Who washed X?

Who washed who?

c) Who saw a snake near X?

Who saw who?
Who saw a snake near who?

Who telephoned X's mother?

Who telephoned whose mother?

Whose father admires X?

Whose father admires who?

Comment: Question words are fronted. (PST = general past tense and QUES = question mark.)

KS: Actually, what I wanted were examples like “who saw himself”, not a second wh-word. These are interesting and we will keep the sentences, but what I would like to know is whether all the strategies are unaffected by questioning of the antecedent. I would be interested to know also how “Whose parents saw each other” or “Which boys saw each other”, tested with both pronoun-pronoun and body-pronoun turn out.

KS: It is not necessary for our project, but the distribution of question words is of interest to me. It looks like questions leave the questioned constituent in place and the sentence is marked as a question by the particle á. Is this correct?

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

C21a) X saw Fred.

*ə̀wɛ̀nə́ wén yì yèn fréd
 ámb-wén  ámb wén yì yèn fréd
 c-5 body AM his P2 see Fred
 *‘himself saw Fred’

b) X saw us. (X = us)

*ə̀wɛ̀nə́ yésə́ yì yèn yés
 tə-wénə́ tyésə́ yì yèn yés
c-5 body AM his P2 see Fred
*‘ourselves saw us’
c) X saw a snake behind Fred.
*ɔ̀wɛ̃nò wèn ɣi yèn zhù á bàmò frèd
ɔ̀-wèn ɔ̀ wèn ɣi yèn zhù á bàmò frèd
c-5 body AM his P2 see snake LOC back Fred
*‘himself saw a snake behind Fred’
d) X impressed Fred
*ɔ̀wɛ̃nò wèn ɣi kùʔsò frèd
ɔ̀-wèn ɔ̀ wèn ɣi kùʔsò frèd
c-5 body AM his P2 raise Fred
*‘himself impressed Fred’
e) Bill spoke to X about Fred.
bìl ɣì gàʔ á ɔ̀wɛ̃nò wèn byì frèd
bìl ɣì gàʔ á ɔ̀-wèn ɔ̀ wèn byì frèd
Bill P2 speak to c-5 body AM his about Fred
‘Bill spoke to himself about Fred’
Comment: The reflexive refers to the subject, not the direct object.
f) Bill told X about Fred
bìl ɣì gàʔ á ɔ̀wɛ̃nò wèn byì frèd
bìl ɣì gàʔ á ɔ̀-wèn ɔ̀ wèn byì frèd
Bill P2 speak to c-5 body AM his about Fred
‘Bill told himself about Fred’
Comment: The reflexive refers to the subject, not the direct object.
g) X was praised by Fred.
frèd ɣi kùʔsò ɔ̀wɛ̃nò wèn
frèd ɣì kùʔsò ɔ̀-wèn ɔ̀ wèn
Fred P2 raise c-5 body AM his
‘Fred praised himself’
Comment: Passivisation is not possible in Kejôm.
h) X is liked by you. (X = you)
wù kù ɔ̀wɛ̃nò wù
wù kù ɔ̀-wèn ɔ̀ wù
you like c-5 body AM you
‘You like yourself’
Comment: Passivisation is not possible in Kejom.

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) X telephoned George's mother.

You P2 call c1.mother George

‘You telephoned George's mother’
KS: What I wanted here was “He telephoned George’s mother” where he = George. Could you provide that please? If it is not possible, it is useful for us to know.

b) X's mother wanted to improve George.

Your mother wanted to improve George

‘Your mother wanted to improve George’
KS: What I wanted here was “His mother wanted to improve George” where his = George. Could you provide that please?

c) X's mother worried/impressed George.

Your mother worried/impressed George

‘Your mother worried/impressed George.’
KS: What I wanted here was “His mother worried/impressed George” where his = George. Could you provide that please?

d) Mary told X's mother about George.

Mary P2 speak to c1.mother his about George

‘Mary told his mother about George.’

e) A picture of X's mother fell on George.
A picture of his mother fell on George.

Comment: The possessive position refers to the direct object of the sentence, which is neither George nor mother. KS: Can you say why it is necessary to have 'body' in (e) and why is it even optional in (f)? Is it because one is a physical event and one is a psychological event?
ANS: You are right. It is surely optional in (f) because it is a psychological event.

In some languages, it is possible to scramble the positions of argument nominals so that objects can precede subjects, or perhaps the order of arguments in the VP is less fixed.
Comment: The word order is quite fixed and it is not common to scramble arguments.

4.1.4 Some matters of interpretation

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

C23) The women help X.

kyí vyí ñ gyamtò tòwéntò vòwè
kyí vyí ñ gyamtò tò-wén tò vòwè

c2.woman c2.the PRES help c13-body AM them

‘The women help each other/themselves.’

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

C24a) Each woman helps all (or almost all) of the women, excluding herself.
   b) Each woman helps all of the women, including herself.
c) Each woman helps at least some of the other women.

d) Each woman helps herself.

e) The women together as a group help the women together as a group.

f) Each woman helps one of the women other than herself, such that all of the women are helped by one of the others.

Comment: With either tə̀-wén tó vówê in place of X, (C24b, c, e) are possible. I have checked again but still think C24d is not possible.

KS: With the them-them strategy, if it is possible for C23, are all the same interpretations possible? (Please provide a translation of (C23) with 'them-them' and if it is ungrammatical altogether, please just mark it so)

C23b) The women help X.

* kyǐ vyí ᵇ gyamtə̀ tə̀wéntə́ və́wé və́wé
kyǐ vyí ᵇ gyamtə̀ tɔ-wén tó və́wé və́wé
c2.woman c2.the PRES help c13-body AM them them
‘The women help each other/themselves.’

KS: What I meant was, is it possible to have kyǐ vyí ᵇ gyamtə̀ və́wé və́wé with an appropriate reciprocal interpretation? If so, which of the scenarios in C24 are compatible?

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

C25a) The women praised X.

kyǐ vyí tɔ kůsó tə̀wéntə́ və́wē
kyǐ vyí tɔ kůsó tɔ-wén tó və́wé

c2.woman c2.the PRES raise c13-body AM them
‘The women praised each other/themselves.’

b) The women will support X.

kyǐ vyí né tə́msə́ tə̀wéntə́ və́wē
kyǐ vyí tɔ tə́msə́ tɔ-wén tó və́wé

c2.woman c2.the PRES support c13-body AM them
‘The women will support each other/themselves.’

c) The women photographed X.

kyǐ vyí tɔ fə́ tə̀wéntə́ və́wē
kyǐ vyí tɔ fə́ tɔ-wén tó və́wé

c2.woman c2.the PRES snap c13-body AM them
‘The women photographed each other/themselves.’

d) The women betrayed X.

kyĩ vyí tò bâ?lô tâwêntô vâwê
kyĩ vyí tò bâ?lô tâ-wén tó vâwê

c2.woman c2.the PRES sell c13-body AM them

‘The women betrayed each other/themselves.’

Comment: The body-self strategy permits both reciprocal and reflexive meanings.

KS: I would like to have all of these with the pronoun-pronoun strategy.

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

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

KS: Since we noticed earlier that 'argue' can be understood reciprocally in the absence of a direct object, I was wondering if there are any other verbs for which this is possible.

i) They met with each other.

vâwô yî bwùmtô (vâwô vâwô)

vâwô yî bwùmtô (vâwô vâwô)

3P P2 meet (them them)

‘They met with each other.’

ii) They fought with each other.

vâwô yî sôn (vâwô vâwô)

vâwô yî sôn (vâwô vâwô)

3P P2 argue (them them)

‘They fought with each other.’

Comment: 'kiss' is not possible.

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 and Mary praised X.
dʒoy nə mərį yì kùʔsó tɔwɛntó vɔwɛ
John and Mary P2 praise c13-body AM them
‘John and Mary praised each other.’

C28b) John and Mary praised X.

*dʒoy nə mərį yì kùʔsó tɔwɛntó vɔwɔ vɔwɔ
John and Mary P2 praise c13-body AM them them
‘John and Mary praised each other.’

b) The women praised X.

kyi vyi yì kùʔsó tɔwɛntó vɔwɛ
kyi vyi yì kùʔsó tɔ-wɛn tɔ vɔwɛ c2.woman c2.the P2 praise c13-body AM them
‘The women praised each other.’

C28b) John and Mary praised X.

*kyi vyi yì kùʔsó tɔwɛntó vɔwɛ
kyi vyi yì kùʔsó tɔ-wɛn tɔ vɔwɛ c2.woman c2.the P2 praise c13-body AM them
‘The women praised each other.’

KS: Please translate (C28a,b) with pronoun-pronoun and see if there is any preference vs. body-pronoun. Even a negative answer is useful.

Remarks: In some languages, a different reciprocal is favored or required when the antecedent phrase refers to pairs (or perhaps distributed groups) rather than large pluralities.

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

C29a) John and Mary spoke to X.

*dʒoy nə mɛrį yì ɣà? (a tɔwɛntó vɔwɛ)
John and Mary P2 speak to c13-body AM them
‘John and Mary spoke to each other.’

b) John and Mary met with X.

*dʒoy nə mɛrί yì bwùmtà (tɔwɛntó vɔwɛ)
John and Mary P2 meet with c13-body AM them
‘John and Mary met with each other.’
John and Mary P2 meet c13-body AM them
‘John and Mary met each other.’
c) John and Mary gave this book to X.

dʒoyn nə mərí yi kù əwà?lə yən à təwèntó vəwè
dʒoyn nə mərí yi kù əwà?lə yən à tə-wén tò vəwè
John and Mary P2 give c1.book c1.this to c13-body AM them
‘John and Mary gave this book to each other.’

KS: Please give the pronoun-pronoun version of (C29c), whether it is good or bad.

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 and Mary think that they like X.
 bìl nə mərí kwò?tó lá vəwè kù təwèntó vəwè
 bìl nə mərí kwò?tó lá vəwè kù tə-wén tò vəwè
Bill and Mary think.PRES that they love c13-body AM they
‘Bill and Mary think that they like themselves.’
Comment: It is possible with the body-pronoun The other strategies, such as pronoun-pronoun, cannot be used.

4.1.4.3 Sociative readings

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

C31a) The baboons left together
ətšìm vyí yi lù á múʔò
ə-tšìm vyí yi lù ámúʔò
c8-baboon c8.the P2 leave together
‘The baboons left together.’
b) The baboons ate fish together
ətšìm vyí yi mpfìʔ shùsá á múʔò
ə-tšìm vyí yi mpfìʔ shú-sá ámúʔò
c8-baboon c8.the P2 eat fish-c10 together
‘The baboons ate fish together.’
Comment: The sentences can be said only in the above ways. The body-self strategy cannot be used to achieve the above readings.

4.1.4.4 Antipassive readings

C32a) That animal bites people.
   nyàm yí límá vǐ?í
   nyàm yí lím ṣ vǐ?í
c9.animal that bite PRES c2.person
   ‘That animal bites people.’

b) The government arrests people.
gúmnà ḍ gá?á vǐ?í
gúmnà ḍ gá?á vǐ?í
c1.government PRES hold c2.person
   ‘The government arrests people.’

c) Bill praises people
   bíl ḍ kúṣá vǐ?í
   bíl ḍ kúṣá vǐ?í
Bill PRES raise c2.person
   ‘Bill praises people.’

4.2 Cross-clausal binding

X4) John expects himself to win.
   dʒo̤yn ḍ kwò?tò lá ŋkà yì á zhí
   dʒo̤yn ḍ kwò?tò lá ŋkà yì né zhí
John PRES think that self him F1 win
   ‘John expects himself to win.’

KS: I still need an example with body-pronoun in the subject position. I realize that it is not acceptable (or at least I expect it is not), but, once again, we need sentences that show what is not possible.

KS: Throughout section 4.2, I would like you to consider whether the position of X can be Agr-BODY AM Pron, self-pron, or 'them-them' as well as a simple pronoun. I suspect that Agr-BODY AM Pron and 'them-them' are subject to locality restrictions, but I don't know for sure unless I have sentences showing that they are unacceptable when they are too far from their
antecedents. So if you can show that they are unacceptable for D1a-c (replacing Jack with the men so we have a plural antecedent) and for D3a-c (replacing Jeff with the men so we have a plural antecedent), then we can see if these forms, Agr-BODY AM Pron and 'them-them', are then local and you do not have to test all the other long distance cases in this section, especially if it looks to you like they will always be bad when anteceded from too far away.

I don't know how this will turn out for self-pron, however. My guess would be that it might not be subject to the same locality restrictions. If it is, then proceed in the same was as for
Agr-BODY AM Pron and 'them-them', but if not, and self-pron can be anteceded at a distance, then I need for you to fill in section xx as instructed below

4.2.1 Coreference relations across typical tensed clausal complement

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

D1a) Jack said that X is smart.
   ják yì gà? lá yì liftò
   ják yì gà? lá yì liftò
   Jack P2 say that himself smart
   ‘Jack said that he is smart.’

b) Jack knows that George likes X.
   ják ó kílí lá jós kù ò wén
   ják ó kílí lá jós kù ò wén
   Jack PRES know that George like PRES him
   ‘Jack knows that George likes him.’

c) Jack knows that Bill said that X is smart.
   ják ó kílí lá bìl yì gà? lá yì liftò
   ják ó kílí lá bìl yì gà? lá yì liftò
   Jack PRES know that Bill P2 say that himself smart
   ‘Jack knows that Bill said that he is smart.’

d) Jack thinks that Lisa knows that Wendy likes X.
   ják ó kwòtò lá lízà ó kílí lá wëndì ó kù ò wén
   ják ó kwòtò lá lízà ó kílí lá wëndì ó kù ò wén
   Jack PRES think that Lisa PRES know that WendyPRES like PRES him
‘Jack thinks that Lisa knows that Wendy likes him.’

e) Jack thinks that Lisa knows that X likes Alice.

f) Sarah told Jack that Lisa loves X.

g) Sarah told Jack that X loves Wendy.

Comment: (wén) in (D1b, d, f and e) can be Jack or someone else.

h) The men said that X are smart.

i) The men know that George likes X.

j) The men know that Bill said that X are smart.

D2a) Jack admitted that Mary loved X.
Jack P4-accept that Mary P4-like him
‘Jack admitted that Mary loved him.’
b) Jack admitted that Mary loved X.
ják ñkilí lá mèrí ñkù wén

ják ñ-kì-lí lá mèrí ñ-kù wén

Jack P4-know-P4 that Mary P4-like him
‘Jack knew that Mary loved him.’
c) Jack suspected that Mary loved X.
ják ñkwò?mò lá mèrí ñkù wén

ják ñ-kwò?mò lá mèrí ñ-kù wén

Jack P4-suspect that Mary P4-like him
‘Jack suspected that Mary loved him.’
c) Jack thought that Mary loved X.
ják ñkwò lá mèrí ñkù wén

ják ñ-kwò lá mèrí ñ-kù wén

Jack P4-think that Mary P4-like him
‘Jack thought that Mary loved him.’

Comment: wén = Jack or someone else. The distinction in the suppositions is determined by the verb used.

KS: Just to be clear, would body-pronoun be possible in any of the positions you have rendered with pronouns (where the antecedent is ‘Jack’)?

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

D3a) Jeff complained about Mary when Ella blamed X
jóf ñkwùló byì mèrí òndó èlà ñghá?á wén

jóf ñ-kwùló byì mèrí òndó èlà ñghá?á wén

Jeff P4-complain about Mary when Ella P4-blame him
‘Jeff complained about Mary when Ella blamed him.’
b) Jeff returned home when/before/after X became tired.
jóf mbwìnà pfwó mímbù bwá?
jóf m-bwìnà pfwó mímbù bwá?

Jeff P4-return home before weak
‘Jeff returned home before he became tired.’
c) When/before/after Mary wrote to X, Jeff returned home.
mímbù mèrí sà nyà? á jóf mú ghó mbwìnà pfwó
mímbú mèrí só nyɔ? á jôf mú ghó m-bwinò pfwó
before Mary do write to Jeff while he P4-return home
‘Before Mary wrote to Jeff, he returned home.’
d) Jeff left without Mary seeing X.
jôf nlũ kà mèrì n-yén-lí wèn
jôf n-lũ kà mèrì n-yén-lí wèn
Jeff P4-leave NEG Mary P4-see-P4 him
‘Jeff left without Mary seeing him.’
e) Mary condemned Jeff without meeting X.
mèrí mbyífsá ázhì? ó jôf kà ghó mbúmtòlí wèn
mèrí m-byífsá á-zhì? ó jôf kà ghó m-búmtò-li wèn
Mary P4-spoil c5-name of Jeff NEG she P4-see-P4 him
‘Mary condemned Jeff without meeting him.’
f) The men complained about Mary when Ella blamed X
lyúmá vyí njwàlò byì mèrì àndò élà əghá?á vòwé
lyúmá vyí nj-kwàlò byì mèrì àndò élà əghá?á vòwé
c2.man c2.the P4-complain about Mary when Ella P4-blame they
‘The men complained about Mary when Ella blamed them.’
g) The men returned home when/before/after X became tired.
lyúmá vyí mbwìnò pfwó mímbú bwá?
lyúmá vyí m-bwìnò pfwó mímbú bwá?
c2.man c2.the P4-return home before weak
‘The men returned home before they became tired.’
h) When/before/after Mary wrote to X, the men returned home.
mímbú mèrì só nyɔ? á lyúmá vyí mú vòwé mbwìnò pfwó
mímbú mèrì só nyɔ? á lyúmá vyí mú vòwé m-bwìnò
pfwó
before Mary do write to c2.man c2.the while they P4-return home
‘Before Mary wrote to the men, they returned home.’
Comment: When adverbs of time are used (wèn) is omitted, as in (D3b).
KS: Once again, is body-pronoun bad in all the places where you have used a pronoun to achieve the coreference in D3a-g. If any cases are good, please provide example sentences for them.

We are naturally interested if there is any difference in the way that complements and adjuncts
behave.

Please do not forget to test reciprocal strategies in these long distance contexts (adjusting for plural antecedents), but if none of them work, it is not necessary to provide examples for all of them. Just let us know. However, if any of the distinctions above reveal contrasts such that some permit reciprocals and others don't please let us know and we will probably be interested in some follow-up questions.

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

Comment: Different antecedents, involving gender, plurality or person only induce change in agreement, not strategy.

KS: In particular, I would like to know if the 'them-them' strategy would work at a distance (across clause boundaries) with a reciprocal interpretation, such that a sentence like 'The two men think that Mary loves them-them' could mean 'Each man believes that Mary loves the other man'. If this is not possible with a simple plural pronoun, or 'them-them' or Agr-BODY AM Pron as an interpretation, please let me know that too.

h) The two men think that Mary loves them.

lyúmá vyí və̀bò ə̀ kwò?tò lá mèrí kù ə̀ və̀wé
lyúmá vyí və̀-bò ə̀ kwò?tò lá mèrí kù ə̀ və̀wé

The two men think that Mary love them.

i) The two men think that Mary loves only them.

lyúmá vyí və̀bò ə̀ kwò?tò lá mèrí kù ə̀ tə̀ və̀wé
lyúmá vyí və̀-bò ə̀ kwò?tò lá mèrí kù ə̀ tə̀ və̀wé

The two men think that Mary love only them.

j) The two men think that Mary loves them.

*lyúmá vyí və̀bò ə̀ kwò?tò lá mèrí kù ə̀ və̀wé və̀wé
lyúmá vyí və̀-bò ə̀ kwò?tò lá mèrí kù ə̀ və̀wé və̀wé

The two men think that Mary loves them.

KS: Thanks. This shows that the pronoun-pronoun strategy is restricted as to how far pronoun-pronoun can be from its antecedent. One more such case: ‘The two men think that each other is smart’. Is it possible with either pronoun-pronoun in the position of each other, or body
pronoun? Please provide sentences (starred, if necessary) for both.

4.2.1.2 Climbing from tensed complements - This test applies particularly to reflexives in close association with a verb, either as affixes or clitic pronouns, but there are some languages where a form of focus movement can place a more an argument-marked anaphor in a higher clause.
Comment: Not evident

4.2.2 Long distance relations and the variety of clausal embedding types

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

\[
\begin{align*}
\text{X12a) I hope [to leave]} \\
\text{I hope [for Bill to leave]} \\
\text{I expect [Bill to be unpleasant]} \\
\text{I persuaded Bill [to leave]} \\
b) \text{I made [Bill leave]} \\
c) \text{I saw [someone leaving]} \\
d) \text{I require [that he speak softly]} \\
e) \text{I consider [Bill unpleasant]}
\end{align*}
\]

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 = \text{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).

D4a) Edgar asked Bill to trust X.

étgà yì gà? á bíl lá ghò chọ?sọ wén
étgà yì gà? á bíl lá ghò chọ?sọ wén
Edgar P2 speak to Bill that 3s trust 3SG
‘Edgar asked Bill to trust him.’

b) Edgar asked Bill to give a book to X.

étgà yì gà? á bíl lá ghò kú ñwà?lò á wén
étgà yì gà? á bíl lá ghò kú ñwà?lò á wén
Edgar P2 speak to Bill that 3s give c1.book to 3SG
‘Edgar asked Bill to give a book to him.’

c) Edgar asked Bill to talk to X.

étgà yì gà? á bíl lá ghà gá? á wén
étgà yì gà? á bíl lá ghà gá? á wén
Edgar P2 speak to Bill that 3s speak to 3SG
‘Edgar asked Bill to talk to him.’

d) Edgar asked Bill to talk about X.

étgà yì gà? á bíl lá ghà gá? byì wén
étgà yì gà? á bíl lá ghà gá? byì wén
Edgar P2 speak to Bill that 3s speak about 3SG
‘Edgar asked Bill to talk about him.’

e) Edgar expected Bill to trust X.

étgà yì ñkwò?tò lá bíl chọ?sọ wén
étgà yì ñkwò?tò lá bíl chọ?sọ wén
Edgar P2 expect that Bill trust 3SG
‘Edgar expected Bill to trust him.’

f) Edgar ordered Bill to pay X.

étgà yì kú sọ? lá bíl lọ? wén
étgà yì kú sọ? lá bíl lọ? wén
Edgar P2 give order that Bill pay 3SG
‘Edgar ordered Bill to pay him.’
g) Edgar ordered Bill to say that X was smart.

Edgar P2 give order that Bill speak that him PST-smart
‘Edgar ordered Bill to say that he was smart’

h) Edgar ordered Bill to say that Mary loved X.

Edgar P2 give order that Bill speak that Mary PST-love him
‘Edgar ordered Bill to say that Mary loved him’

Comment: wén refers to Edgar in the above sentences. It can also refer to another person other than Bill who is known to the speaker and listener. yì in (D4g) refers to Edgar only.

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

D5a) Edgar expects X to win.

Edgar PRES expect that self 3SG be win
‘Edgar expects himself to win.’

b) Edgar expects Bill to defeat X.

Edgar PRES expect that Bill win self 3SG
‘Edgar expects Bill to defeat him.’

D6a) Edgar hopes for X to win.

Edgar PRES hope that self 3SG be win
‘Edgar hopes for himself to win.’

b) Edgar hopes for Bill to defeat X.

Edgar PRES hope that Bill win self 3SG
‘Edgar hopes for Bill to defeat him.’
Comment: (ŋkà) wèn in the sentences above can either refer to Edgar or somebody known to the speaker and listener.

D7a) Edgar expects Bill to defeat X's brother.
étgà ṣ kwòtò lá bíl zhí lèmò wèn
Edgar PRES expect that Bill win c1.brother 3SG
‘Edgar expects Bill to defeat his brother.’
b) Edgar hopes for Bill to defeat X's brother.
étgà ṣ kàtò lá bíl zhí lèmò wèn
Edgar PRES hope that Bill win brother 3SG
‘Edgar hopes for Bill to defeat his brother.’
c) Edgar expects X's brother to defeat him.
étgà ṣ kwòtò lá lèmò wèn zhí wèn
Edgar PRES expect that c1.brother 3SG win 3SG
‘Edgar expects his brother to defeat him.’
d) Edgar hopes for X's brother to defeat him.
étgà ṣ kàtò lá lèmò wèn zhí wèn
Edgar PRES hope that c1.brother 3SG win 3SG
‘Edgar expects his brother to defeat him.’
Comment: wèn in (D7a-d) can refer to Edgar, Bill or any other person known to the speaker and listener.

D5c) Edgar X-expects to win.
d) Edgar X-expects Bill to defeat.

D6c) Edgar X-hopes for to win.
d) Edgar X-hopes for Bill to defeat.
Comment: Not possible
If your language permits small clauses, such as English John considers Mary intelligent, where intelligent is thus predicated of Mary, then try the following tests, where X = Tom.
D8a) Tom considers X intelligent.

Tom PRES consider that him intelligent PRES
‘Tom considers himself intelligent.’

KS: Is this * with body-pronoun?

b) Tom considers Mary fond of X.

Tom PRES consider that Mary like 3SG
‘Tom considers Mary fond of him.’

KS: Is this * with body-pronoun?

c) Tom considers Mary angry at X.

Tom PRES consider that Mary burn heart for 3SG
‘Tom considers Mary fond of him.’

KS: Is this * with body-pronoun?

Comment: wén can be Tom or someone else known to speaker and listener.

Remember to test all strategies, reciprocal and reflexive, for all of the clause types you provide evidence for. Be alert to differences in the person of the antecedent, but save your evidence about such cases for section 4.4. Finally, provide paradigms like the Jack, Edgar or Jeff paradigms for any form of embedding that we have not discussed up to now.

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

Comment: Verb serialization is possible

a) Alice cook eat the meat.

Alice cook eat c9.meat c9.the
‘Alice cook and eat the meat.’

b) Bill bought the meat. Alice cook eat the meat.
bíl yì zèn nyàm. àlîs m-pfè pfi?
bíl yì zèn nyàm. àlîs m-pfè pfi?
Bill P2 buy c9.animal, Alice P4-cook eat
‘Bill bought meat and Alice cooked it and ate.’
a) Alice praises and promotes herself.
àlîs ə́ bwɔ̀msə́ kú?sò ə̀wén ə̀ wén
àlîs ə́ bwɔ̀msə́ kú?sò ə̀-wén ə̀ wén
Alice PRES praise raise c5-body AM 3SG
‘Alice praises and promotes herself.’
In (a) it is more natural to have the object between the two verbs.

4.2.3 Backwards anaphora
succeeds where X is a pronoun or anaphor coconstrued with Oliver. Your language may not have a verb like implicate, but if so, try a verb that seems close, if possible. If your language does not permit clauses to be subjects without head nouns, then try something like “the fact that X was late upset Oliver.” English permits the independent pronouns strategy to be used for such cases, but not all speakers like every example.

D9a) That X was late upset Oliver.
kə́ yî zàf ólívà lá ghò yì vi á zhù chóghə́
kó yì zàf ólívà lá ghò yì vi á zhù chóghə́
it P2 pain Oliver that 3SG P2 come at time passpfi
‘It upset Oliver that he came late.’
b) That X was late suggested that Oliver was guilty.
àndə́ ghò yì vi á zhù chóghə́ kó yì nè ólívà ə̀kə́?
lá yì bvè lí
àndə́ ghò yì vi á zhù chóghə́ kó yì nè ólívà ə̀kə́? lá yì bvè lí
because 3SG P2 come at time pass it P2 make Oliver look that 3SG fail P1
‘That he was late suggested that Oliver was guilty.’
c) That X was late made Oliver look guilty.
àndə́ ghò yì vi á zhù chóghə́ kó yì nè ólívà ə̀kə́?
sò ghè á bvè
àndə́ ghò yì vi á zhù chóghə́ kó yì nè ólívà ə̀kə́? sò ghè á bvè
because 3SG P2 come at time pass it P2 make Oliver look as 3SG be fail
‘That he was late made Oliver look guilty.’
d) That X was late implicated Oliver.
because 3s P2 come at time pass it P2 make Oliver PST-enter into trouble
‘That he was late implicated Oliver.’

Comment: yi can refer to Oliver or the speaker.

KS: I do not understand the comment – do I have the right gloss for ‘yi’. It looks like a tense marker here.

Section 4.3 Principle C-type effects

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

E1a) He criticized Malik.
   b) He said Mariam criticized Malik.
   c) He criticized the boy.
   d) He said Mariam criticized the boy.

E2a) His mother criticized Malik.
   b) His mother said Mariam criticized Malik.
   c) His mother criticized the boy.
   d) His mother said Mariam criticized the boy.

E3a) The man who he liked criticized Malik
   b) The man who he liked criticized the boy.
   c) The man who liked him criticized the boy.

Comment: It is not possible for the pronoun to be either Malik or the boy.

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

màlik yì ghà?á àwénó wèn
màlik yì ghà?á ò-wèn ò wèn
Malik P2 criticise c5-body AM 3SG

‘Malik criticized himself.’

b) Malik said Mariam criticized Malik.

màlik yì gà? lá míriàm yì ghà? yì
màlik yì gà? lá míriàm yì ghà? yì
Malik P2 say that Miriam P2 criticise him

‘Malik said that Miriam criticized him.’

c) The boy criticized the boy.

wàn wùlìm yì yì ghà?á àwénó wèn
wàn wùlìm yi yì ghà?á ò-wèn ò wèn
C1.child C1-male C1.the P2 criticise c5-body AM 3SG

‘The boy criticized himself.’

d) The boy said Mariam criticized the boy.

wàn wùlìm yì yì gà? lá míriàm yì ghà? yì
wàn wùlìm yi yì gà? lá míriàm yì ghà? yì
C1.child C1-male C1.the P2 say that Miriam P2 criticise him

‘The boy said that Miriam criticized him.’

E5a) Malik’s mother criticized Malik.

lì màlik yì ghà?á wèn
lì màlik yì ghà?á wèn
C1.mother Malik P2 criticise 3SG

‘Malik’s mother criticized him.’

b) Malik’s mother said Mariam criticized Malik.

lì màlik yì gà? lá míriàm yì ghà?á wèn
lì màlik yì gà? lá míriàm yì ghà?á wèn
C1.mother Malik P2 say that Miriam P2 criticise 3SG

‘Malik’s mother said Mariam criticized him.’

c) The boy’s mother criticized the boy.

lì wàn wùlìm yì yì ghà?á wèn
The boy’s mother criticized him.

d) The boy’s mother said Mariam criticized the boy.

The boy’s mother said Mariam criticized him.

The man who Malik liked criticized Malik.

The man who the boy liked criticized the boy.

The man who liked the boy criticized the boy.

Now consider whether the boy = Malik for the following examples

The boy criticized Malik.

The boy said that Miriam criticized him.

Malik criticized the boy.
Malik criticized himself.
d) Malik said Mariam criticized the boy.
Malik said that Miriam criticized him.

E8a) The boy’s mother criticized Malik.

The boy’s mother said Mariam criticized him.

c) Malik’s mother criticized the boy.

Malik’s mother criticized him.
d) Malik’s mother said Mariam criticized the boy.

The man who the boy liked criticized Malik.

The man who the boy liked said Mariam criticized him.

E9a) The man who the boy liked criticized Malik.

The man who the boy liked said Mariam criticized him.
b) The man who Malik liked criticized the boy.

wi? yì á màlik yî kù yì ghà?á wén
wi? yì á màlik yî kù yì ghà?á wén
c1.person c1.the who Malik P2 like P2 criticise 3SG
‘The man who Malik liked criticized him.’

c) The man who liked Malik criticized the boy.

wi? yì á ghə́ yî kù màlik yî ghà?á wén
wi? yì á ghə́ yî kù màlik yî ghà?á wén
c1.person c1.the who 3s P2 like Malik P2 criticise 3SG
‘The man who liked the boy criticized the boy him.’

d) The man who liked the boy criticized Malik

wi? yì á ghə́ yî kù wàn wùlim yî yì ghà?á wén
wi? yì á ghə́ yî kù wàn wùlim yî yì ghà?á wén
c1.person c1.the who 3s P2 like c1.child c1-male c1.the P2 criticise 3SG
‘The man who liked the boy criticized the boy him.’

Comment: The pronouns in (E4) and (E7) refer only to either Malik or the boy. In (E5, E8) and (E6, E9) they can mean Malik or the boy but can also refer to someone else.

4.4 More on long distance anaphor strategies

Strategies that allow coreference across tensed clause boundaries, but where the marked argument is one that is not a typical pronoun, we will call "long distance anaphor strategies", hereafter, LDA strategies. In some languages, the LDA form is the same form that is used in clausemate anaphora, while in some cases, the LDA form is that of a pronoun of a special type or else it is an anaphor of a type that may be used in a more local strategy as well (to form reflexives, for example). In many other languages, such as English, there is no long distance anaphor, and the independent pronoun strategy is used.

If your language uses a special pronoun for LDA, it may be that the special pronoun has other uses. In some languages a special pronoun of this type is particularly required when referring back to the reported speaker or believer (a logophoric antecedent), as in D10.

D10) John believes he is guilty.

In other words, a language with this strategy would have a special morphological form for he just in case he refers to John (but not if it refers to someone else). We will call this a
"logophoric" pronoun strategy, and in some languages, this form of pronoun has only this use. English does not have such a form, but if your language does, then we will eventually ask you more questions than those that are found in this section.

Comment: There is no special form.

4.4.1 Position of the antecedent - Long-distance coreference is often constrained in ways that local coreference is not (especially: subject-orientation). Which possible syntactic positions can be occupied by a long-distance antecedent of the current strategy? Construct examples and give judgments where X = Zeke. In English, the independent pronoun strategy is all that works for these (i.e., where X = he or him). If your language is like English, then the reflexive form does not work in the position of X where X = Zeke.

D11a) Larry told Zeke that Mike does not like X.

láří yì gáʔ á zèkè lá máík ó kò kõŋà wén
láří yì gáʔ á zèkè lá máík ó kò kù wén
Larry P2 tell to Zeke that Mike PRES NEG like 3SG
‘Larry told Zeke that Mike does not like him.’

b) Zeke told Larry that Mike does not like X.

zèkè yì gáʔ á láří lá máík ó kò kõŋà wén
zèkè yì gáʔ á láří lá máík ó kò kù wén
Zeke P2 tell to Larry that Mike PRES NEG like 3SG
‘Zeke told Larry that Mike does not like him.’

c) Zeke told Larry that X does not like Mike.

zèkè yì gáʔ á láří lá ghə̀ ó kò kõŋ máík
zèkè yì gáʔ á láří lá ghə̀ ó kò kõŋ máík
Zeke P2 tell to Larry that 3s PRES NEG like Mike
‘Zeke told Larry that he does not like Mike.’

d) Larry told Zeke that X does not like Mike.

láří yì gáʔ á zèkè lá ghə̀ ó kò kõŋ máík
láří yì gáʔ á zèkè lá ghə̀ ó kò kõŋ máík
Larry P2 tell to Zeke that 3s PRES NEG like Mike
‘Zeke told Larry that he does not like Mike.’

e) Larry knows that Zeke thinks that Mike does not like X.

láří ó kíli lá zèkè ó kwɔʔtò lá máík ó kò kú wén
láří ó kíli lá zèkè ó kwɔʔtò lá máík ó kò kú wén
Larry PRES know that Zeke PRES think that Mike PRES NEG like 3SG
‘Larry knows that Zeke thinks that Mike does not like him.’
f) Zeke knows that Larry thinks that Mike does not like X.
zèkè ò kílí lá lárí ò kwò?tò lá màík ó kò kù wén
Zeke PRES know that Larry PRES think that Mike PRES NEG like 3SG
‘Zeke knows that Larry thinks that Mike does not like him.’

D12a) Zeke's mother thinks that Mike does not like X.
lì zèkè ò kwò?tò lá màík ó kò kù wén
lì zèkè ò kwò?tò lá màík ó kò kù wén
c1.mother Zeke PRES know that Mike PRES NEG like 3SG
‘Zeke's mother thinks that Mike does not like him.’
b) Zeke's mother thinks that X does not like Mike.
lì zèkè ò kwò?tò lá ghò ó kò kù màík
lì zèkè ò kwò?tò lá ghò ó kò kù màík
c1.mother Zeke PRES know that 3s PRES NEG like Mike
‘Zeke's mother thinks that he does not like Mike’
c) Zeke thinks that Mike does not like X.
zèkè ò kwò?tò lá ghò ó kò kù màík
zèkè ò kwò?tò lá màík ó kò kù wén
Zeke PRES know that Mike PRES NEG like 3SG
‘Zeke thinks that Mike does not like him.’
d) Zeke's letter said that Mike does not like X.
ŋwà?lò zèkè yì gà? lá màík ó kò kù wén
ŋwà?lò zèkè yì gà? lá màík ó kò kù wén
c1.book Zeke P2 say that Mike PRES NEG like 3SG
‘Zeke's letter said that Mike does not like him.’
e) Zeke heard that Mary did not like X.
zèkè yì zhù lá mèrì kò yì kòŋ wén
Zeke P2 hear that Mary NEG P2 like 3SG
‘Zeke heard that Mary did not like him.’
f) Zeke was told that Mary did not like X. (if your language permits passive)
D13a) Zeke said that X had dressed X.
zèkè yì gà? lá yì yì láfsò əwéná yí
Zeke said that he had dressed himself.

b) Zeke said that X had wounded X.

Zeke said that he had wounded himself.

c) Zeke said that X had tattooed X.

Zeke said that he had tattooed himself.

Comment: *wèn* refers to Zeke but may also refer to someone else. The EMPH-pron strategy would be ok with the same interpretation in all of D11.

KS: I have lately been noticing that *yì* is used for coreference with the matrix subject when the matrix verb is ‘say’. Is this why *wèn* is not used in these cases?

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

Comment: In all such cases *wèn* still refers to either Bill or someone else and the EMPH-pron is also possible with the same interpretation.

### 4.4.2 Antecedent properties

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

Comment: They pattern as third person case do as the (D13) paradigm shows:

D13a) I said that X had dressed X.

*I* said that I had dressed myself.
b) You said that X had wounded X.

\[\text{You said that you had wounded yourself.}\]

c) We said that X had tattooed X.

\[\text{We said that we had tattooed ourselves.}\]

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". Report all examples that differ in acceptability from the examples you have already provided for those paradigms. If there are no differences, just provide a few representative examples.

a) Every child admitted that Mary loved X.

\[\text{Every child admitted that Mary loved them.}\]

b) Every child thought that Bill trusted X.

\[\text{Every child thought that Bill trusted them.}\]

c) Every child said that Mike does not like X.

\[\text{Every child said that Mike does not like them.}\]

Comment: The pattern seems to be the same.

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 them would be Ozzie and Harriet.

D14a) Ozzie talked about Harriet to X.
òziè yì gà? byì hårìèt à vòwè
òziè yì gà? byì hårìèt à vòwè
Ozzie P2 talk about Harriet to them
‘Ozzie talked about Harriet to them.’
KS: Does this work with pronoun-pronoun (for reciprocal) or body-pronoun (reflexive)?

b) Ozzie talked about X to Harriet.
òziè yì gà? byì vòwè à hårìèt
òziè yì gà? byì vòwè à hårìèt
Ozzie P2 talk about 3pp to Harriet
‘Ozzie talked about them to Harriet.’
KS: Does this work with pronoun-pronoun (for reciprocal) or body-pronoun (reflexive)?

c) Ozzie told Harriet that X should leave.
òziè yì gà? á hårìèt lá vòwè lù
òziè yì gà? á hårìèt lá vòwè lù
Ozzie P2 talk to Harriet that 3pp leave.HOR
‘Ozzie told Harriet that they should leave.’

d) Ozzie told Harriet that Bill dislikes X.
òziè yì gà? á hårìèt lá bíl ó kò kɔŋ vòwè
òziè yì gà? á hårìèt lá bíl ó kò kɔŋ vòwè
Ozzie P2 talk to Harriet that Bill PRES NEG like 3pp
‘Ozzie told Harriet that Bill dislikes them.’

e) Ozzie said that Harriet thinks that Bill dislikes X.
òziè yì gà? lá hårìèt ó kwɔʔtɔ lá bíl ó kò kɔŋ vòwè
òziè yì gà? lá hårìèt ó kwɔʔtɔ lá bíl ó kò kɔŋ vòwè
Ozzie P2 talk that Harriet PRES think that Bill PRES NEG like 3pp
‘Ozzie said that Harriet thinks that Bill dislikes them.’

Comment: vòwè in these examples can refer to Ozzie and Harriet as well as to others including the listener and excluding the speaker. ñkà can be added to lay emphasis on the (pro)noun without altering the interpretation.
4.4.2.4 Discourse antecedents - Sometimes, LDA strategies do not have to have antecedents in the same sentence if the discourse connections between sentences is strong. Please translate the following scenarios using only the acceptable strategies that permit the corresponding English pronouns all to refer to Mark (English allows only the independent pronoun strategy). Then give please tell us which strategies do not work, providing a translation and gloss, if it is significantly different from your acceptable translations of (D15) and (D16) (save time by setting aside cases where a given strategy could not ever work in the relevant grammatical position, e.g., English *himself* can never be the subject of a tensed sentence). Suppose that in the following scenarios we are being told what was going on in Mark's mind.

D15) Mark feared that his son was not safe. He was ashamed that he could not protect his closest relative. What would his cousins think of him?

Mark P2 fear that c1.child 3SG P2 be LOC c9.trouble c7-head

Mark P2

Mark P2 fear that c1.child 3SG P2 be LOC c9.trouble c7-head
kó wén kó sò dì? lá ghò kò zi ghò tu?mò nò AM 3SG CON be heavy that 3s NEG fit 3s protect with wì? ngaŋ wén. vò-lòmò vò wén á kwò?tò lá AM 3SG CON be heavy that 3s NEG fit 3s protect with

It P2 pass Mark that 3s P2 see c1.picture AM 3SG LOC
pépà. ví?í á vò tòmso wén á nyín ó wén. ghò lá shò?tò álé à lì wén á?

It P2 pass Mark that 3s P2 see c1.picture AM 3SG LOC
pépà. ví?í á vò tòmso wén á nyín ó wén. ghò lá shò?tò álé à lì wén á?

Mark P2 fear that c1.child 3SG P2 be LOC c9.trouble c7-head
kó wén kó sò dì? lá ghò kò zi ghò tu?mò nò wì? ngaŋ wén. vò-lòmò vò wén á kwò?tò lá AM 3SG CON be heavy that 3s NEG fit 3s protect with wì? ngaŋ wén. vò-lòmò vò wén á kwò?tò lá AM 3SG CON be heavy that 3s NEG fit 3s protect with

Mark P2 fear that c1.child 3SG P2 be LOC c9.trouble c7-head
kó wén kó sò dì? lá ghò kò zi ghò tu?mò nò wì? ngaŋ wén. vò-lòmò vò wén á kwò?tò lá AM 3SG CON be heavy that 3s NEG fit 3s protect with wì? ngaŋ wén. vò-lòmò vò wén á kwò?tò lá AM 3SG CON be heavy that 3s NEG fit 3s protect with

Mark P2 fear that c1.child 3SG P2 be LOC c9.trouble c7-head
kó wén kó sò dì? lá ghò kò zi ghò tu?mò nò wì? ngaŋ wén. vò-lòmò vò wén á kwò?tò lá AM 3SG CON be heavy that 3s NEG fit 3s protect with wì? ngaŋ wén. vò-lòmò vò wén á kwò?tò lá AM 3SG CON be heavy that 3s NEG fit 3s protect with

Mark P2 fear that c1.child 3SG P2 be LOC c9.trouble c7-head
kó wén kó sò dì? lá ghò kò zi ghò tu?mò nò wì? ngaŋ wén. vò-lòmò vò wén á kwò?tò lá AM 3SG CON be heavy that 3s NEG fit 3s protect with wì? ngaŋ wén. vò-lòmò vò wén á kwò?tò lá AM 3SG CON be heavy that 3s NEG fit 3s protect with

‘Mark feared that his son was not safe. He was ashamed that he could not protect his closest relative. What would his cousins think of him?’
3s CON tell how to c1.mother 3SG QUES

‘Mark was shocked to see his picture in the paper. All of his supporters would abandon him. How would he tell his mother?’

Comment: CON = concord marker. Only the independent pronoun strategy is allowed.

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

D17) Morris said it was a difficult day for Mark. First, Morris told him that his car had been stolen. Then he had to hire a taxi to take him to work. Morris thought he might be angry.


morris P2 say that it P2 PST-be c7-day AM bad for Mark.

mòrís yì gà? á wén lá vò yi tsònğ mòntù mò wén.

Morris P2 say to 3SG that someone P2 steal c1.car AM 3SG.

ghò n-lí? mòntù mò mpfwó nò wén à wén gó. mòrís 3s PST-pay c1.car AM return with 3SG LOC 3SG home. Morris

yì kwò?tò lá tyí wén fwílí.

P2 think that inside 3SG burn

‘Morris said it was a difficult day for Mark. First, Morris told him that his car had been stolen. Then he had to hire a taxi to take him to work. Morris thought he might be angry’

Comment: ñkà can be added to lay emphasis without altering the interpretation.

KS: Please remember to test self-pron referring back to Mark in these contexts.

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

D18) A: Look, there's Mark!
    yén mák á
    see Mark EXCL
    ‘Look, there's Mark!’

B: He is so handsome.
    ghò dì? nò ṣé ṣe wi?
    3s be very nice person
    ‘He is so handsome.’

A: I would not want to be his wife though. All the women are chasing him.
    mà kò zi mà kọj ò ndì? wà́ yi wèn bwèń. nò kyí vòtsèm ṣó kò wèn.
    1s NEG want 1s like PRES PST-be wife 3SG NEG every
    c1.woman c2-all PRES chase 3SG
    ‘I would not want to be his wife though. All the women are chasing him.’

B: Also, I think he praises himself too much.
    àli mà kwò lá ghò küsò ìwènò wèn nà ntó.
    also I think that 3s praise c5-body AM 3SG too much
    ‘Also, I think he praises himself too much.’

In considering your responses to this subsection, are there any generalizations that you think would be of interest to us in understanding the circumstances or nuances of meaning that a given choice of coreference strategy might reflect?

Comment: wèn refers to the person spoken about but also may refer to any other person known to the speaker and listener.

KS: Is body-pronoun generally possible or impossible in place of wèn in these cases? You can just answer this with a list of sentence numbers where replacing the pronoun with body-pronoun would produce the same judgment.
4.4.3 Blocking Effects

The agreement features of nominals intervening between an anaphor and its antecedent can sometimes affect the grammaticality of coconstituent in some languages.

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

D19a) Larry thinks that John respects X.

lárì kwò lá dʒōyn ŋ fwà wén.
lárì kwò lá dʒōyn ŋ fwà wén.
Larry think that John PRES respect 3SG
‘Larry thinks that John respects him.’

b) Larry thinks that I respect X.

lárì kwò lá mà fwà wén.
lárì kwò lá mà fwà wén.
Larry think that Is respect 3SG
‘Larry thinks that I respect him.’

c) Larry thinks that Mary respects X.

lárì kwò lá mèrí ŋ fwà wén.
lárì kwò lá mèrí ŋ fwà wén.
Larry think that Mary PRES respect 3SG
‘Larry thinks that Mary respects him.’

d) Larry thinks that the boys respect X.

lárì kwò lá vwú lyúmọ v'yí fwà wén.
lárì kwò lá vwú lyúmọ v'yí fwà wén.
Larry think that c2.child c2.male c2.the respect 3SG
‘Larry thinks that the boys respect him.’

e) The men think that the boys respect X. (X = the men)

lyúmọ v'yí kwò lá vwú lyúmọ v'yí fwà vòwò.
lyúmọ v'yí kwò lá vwú lyúmọ v'yí fwà vòwò.
c2.male c2.the think that c2.child c2.male c2.the respect 3pp
‘The men think that the boys respect them.’

Comment: The examples are acceptable only with the independent pronoun strategy. If ñkà is added it does not change the interpretation. It just plays an emphatic role.

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

D20a) Larry thinks that Bill knows that Dave respects X.
   lárí kwò lá bíl ó kilí lá dév ó fwà wén.
   Larry think that Bill PRES know that Dave PRES respect 3SG
   ‘Larry thinks that Bill knows that Dave respects him.’

b) Larry thinks that I know that Dave respects X.
   lárí kwò lá mā kilí lá dév ó fwà wén.
   Larry think that 1s know that Dave PRES respect 3SG
   ‘Larry thinks that I know that Dave respects him.’

c) Larry thinks that Mary knows that Dave respects X.
   lárí kwò lá mérì ó kilí lá dév ó fwà wén.
   Larry think that Mary PRES know that Dave PRES respect 3SG
   ‘Larry thinks that Mary knows that Dave respects him.’

d) Larry thinks that the boys know that Dave respects X.
   lárí kwò lá vvú lyúmó vyí kilí lá dév ó fwà wén.
   Larry think that c2.child c2.male c2.the know that Dave PRES respect 3SG
   ‘Larry thinks that the boys know that Dave respects him.’

e) The men think that the boys know that Dave respects. (the men = X)
   lyúmó vyí kwò lá vvú lyúmó vyí kilí lá dév ó fwà vòwà.
   c2.male c2.the think that c2.child c2.male c2.the know that Dave PRES respect 3pp
   ‘The men think that the boys know that Dave respects them.’

4.4.3.2 Positions of the intervener - The above interveners were subjects (the most common case). We now look for interveners in other positions.

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

Comment: There are no gender mismatches. The examples are only acceptable with the independent pronoun strategy.

D21a) Walter thinks that Bill told Harry that Dave respects X.

Walter think PRES that Bill P2 say to Harry that Dave PRES respect 3SG 'Walter thinks that Bill told Harry that Dave respects him.'

b) Walter thinks that Bill told me that Dave respects X.

Walter think PRES that Bill P2 say to 1ps that Dave PRES respect 3SG 'Walter thinks that Bill told me that Dave respects him.'

c) Walter told me that Dave respects X.

Walter P2 say to 1ps that Dave PRES respect 3SG 'Walter told me that Dave respects him.'

Comment: The third person pronoun in (D21c) can only be yì, not wén.

KS: I suspect I have been missing something about the distribution of yì as opposed to wén. Why do you think that yì must be used here?

d) Walter said that Dave gave me a book about X.

Walter P2 say that Dave P2 give c1.book to 1ps about 3SG 'Walter said that Dave gave me a book about him.'

KS: Is this possible with yì in place of wén referring to Walter?

4.4.4 Islands

Do syntactic islands affect the acceptability of the current strategy? For all the examples in this section, Ira = X. As in 4.3, if the independent pronoun strategy is all that works, please say so, translate, and move on, but if more than one strategy works, please let us know which
ones do. Also, if your language permits more than one type of pronoun, be sure to test both kinds (including null arguments interpreted pronominally).

D22a) Ira resents the fact that Mary hates X.

íra ə́ bà kə̀nyú kə̀n kə́ á mə́ris bà wə̀n lə̀
Ira PRES resent c7-thing DEM AM which Mary hate 3SG CON

‘Ira resents the fact that Mary hates him.’

b) Ira respects the man who likes X.

íra ə́ fwà wə̀ yə̀n á ghə̀ kù wɛ̀n lə̀
Ira PRES respect c1.person DEM who 3s like PRES 3SG CON

‘Ira respects the fact that Mary hates him.’

c) Ira says that the man who likes X is intelligent.

íra gà́ lá wə̀ 3SG PRES say that c1.person DEM who 3s like 3SG PRES intelligent

‘Ira says that the man who likes him is intelligent.’

d) Ira asked whether Bill saw X.

íra yì bèm lá bíl yə̀n yí múl̄?ə́
Ira P2 ask that Bill P2 see him whether

‘Ira asked whether Bill saw him.’

e) Ira asked when Bill saw X.

íra yì bèm lá bíl yə̀n yí zə́l̄?ə́
Ira P2 ask that Bill P2 see him when

‘Ira asked when Bill saw him.’

f) Ira did not realize that George followed X.

íra kə́ yə̀n lá jə̀s̄o yí dzə́m̄tə̀ wə̀n bwə̀n.
Ira NEG P2 see that George P2 follow 3SG NEG

‘Ira did not realize that George followed him.’

g) Ira said that Mary was pretty and that she would marry X.

íra yì gà́ lá mə́ris yí bù?í ghə̀ à lə́m yí.
Ira yì gà? lá mèrí yì bù dì?í ghò à làm yí.
Ira P2 say that Mary P2 pretty be 3s SM marry 3SG
‘Ira said that Mary was pretty and that she would marry him.’

4.4.5 De se reading

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

D23a) Oedipus thinks/says his mother is nice.
   b) Oedipus thinks/says his mother is mean.

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

Comment: There is no morphological distinction between the pronouns in (D23a, b).

KS: I am wondering if I was looking at the wrong contrast when I was trying to find the relevant distinction. Is there a distinction like this depending on whether yi or wèn? I don’t know if yi can be a possessor or if it can be a subject. Is there a contrast like that between yi
and wén for two different versions of a subject pronoun? The difference between yi and wén appears to show up when the main verb is a verb of saying, maybe only the verb meaning ‘say’, and the pronoun coreferring with the matrix subject is in the clause immediately below. Tell me if you think any of this is plausible and we will explore it further. It could be that we will have to introduce a yi strategy, which I suspect is a limited logophoric pronoun. Of course I could be completely wrong. Let me know what you think.

However, other languages have such a morphological distinction (often it is like the logophoric distinction, discussed above, but not always). For example, Adésolá (2004) reports that Yoruba permits a non-logophoric pronoun (a weak pronoun) to be coconstrued with the matrix subject, but the logophoric marked one (the strong pronoun) is still distinguished insofar as it must be de se. The verb meaning ‘believe' selects for the logophoric complementizer pé and the pronouns are distinguished as weak (w) and strong (s).

D24a) Olú gbàgbó pé ilé rè ti wó.
   Olu believe that house he(w) ASP fall
b) Olú gbàgbó pé ilé òun ti wó.
   Olu believe that house he(s) ASP fall
   Both: "Olu believes that his house has collapsed."

As Adésolá remarks, "...a strong pronoun [òun] is used when self-reference is intended by the reported speaker (or believer) [15b], while a weak pronoun [rè] is used when the reported speaker (or believer) does not know that he was in fact referring to his own house [15a]." The weak pronoun does not have to refer to Olu, but the strong one must.

If there is such a distinction in your language, then translate the examples indicating the difference in pronouns and we will ask you more about it after we get the questionnaire responses. If you don't understand what is asked for in this section, skip it or ask for assistance.