Anaphora in the African Languages - Questionnaire

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LANGUAGE: Basàá (Bantu (ɓasaá as pronounced by native speakers))

Part 3   General details about the strategies

3.1 Marking

3.1.1
As a follow-up to PART ONE and TWO of the present questionnaire, we can deduce that there are at least four marking strategies for construed interpretations as can be illustrated below:

Basa'a Marking Strategies for coconstrued interpretations

Ma) **Marking on a coconstrued argument or adjunct.** (E.g., English *himself*)
Ma1) **maaŋgɛ́ᵢ** a- ń- jɛ́ **nyɛ́-mɛdɛ́ᵢ**
     child   SM-Pres-eat   PRN.c1-REFL
  'The/A child eats him/herself'

Mb**) Marking on the verb or an auxiliary**. (French clitic *se*, the Bantu reflexive marker)
Mb1) maaŋgɛ́ a- ḿ- pɔ́t- **ɓa**
    child   SM-Pres-speak/talk-RFM
   'A/The child soliloquizes' Literally: 'The child speaks alone (s/he speaks to him/herself)'
Note that the verbal extension **-ɓa** which is suffixed to the verbal root *pɔ́t* 'speak/talk' conveys a reflexive interpretation; that is why I glossed it either as RFM or as *ɓa.*
Mb2) mawándá má-ń- nɔl- **ná**
    friends   SM-Pres-laugh-RCM
   'Friends laugh at each other/one another' i.e. they are mocking at each other/one another'
One thing we have to clear up is whether **ɓa** and **ná** are allomorphs or if they are distinct affixes. If they are separate, then the RCM strategy is another verb-marking strategy like the RFM strategy. As seen below, the affix when it means 'reciprocal' can combine with the *mɔ́ ni mɔ́* strategy.

Idiomatic V-RFM - The following examples with verbs of grooming (verbs which deal with care of the body like 'rub' 'dress' 'shave' etc.). Keep in mind that when used separately in another context, the verbal root *sas-* means 'clean' or 'sweep' etc. But when associated with the reflexive *-ɓa* the whole verbal complex (root+reflexive) means 'rub'.
 Mb2) maaŋgɛ́ a- ń- sas- **ɓa**
     child   SM-Prs-clean-REFL
  'A/The child rubs him/herself'/s/he applies lotion to his/her body'
Another instance of such category changing is attested in Mb3 below whereby the sole verbal

root   hɔ̂mb means 'scratch' but changes when associated with the reflexive morpheme -ɓa to form a new lexical verb namely hɔ̂mb-ɓa 'shave onself'.
Mb3) hilɔ́ɣá hí- bí-   hɔ̂mb-ɓá́   yáání
      boy   SM-PST2-shave-REFL yesterday
    'The boy shaved himself yesterday'
NB: PST2 stands for *past tense two* i.e. a past tense starting from yesterday up to a remote time in the past.

c) **Coconstrual is marked by dropping an argument.** (as in English *John washed*)
Note that in Basàá one has to choose either a 'drop' strategy or a full NP (reflexive pronoun). This is explained by the optionality of the reflexive 'him/herself'.
Mc1) **maaŋgɛ́**ᵢ a- ń-   nɔ́ɣɔ̂p (**nyɛ́-mɛdɛ́**ᵢ)
      child   SM-Pres-wash   (PRN.3ps+mɛdɛ́)
      'A/The child washes (him/herself)'
Mc2 **maaŋgɛ́**ᵢ a- ń-   jɛ́ (**nyɛ́-mɛdɛ́**ᵢ)
     child   SM-Pres-eat (PRN.3ps+mɛdɛ́)
    'A/The child eats him/herself'

Md) **Coconstrual is signaled by a specialized adjunct**. (Such as *l'un l'autre* in (Y1)).
    This strategy resembles the French one i.e. the one which makes use of the adjunct 'l'un l'autre'. As the reader can see the 'adjunct –like' expression *mɔ́ ni mɔ́* 'literally each other or one another' is used along with special verb morphology (here the use of the marker –*na* at the right of the verbal root *nɔl* 'laugh'. When the verbal extension –*na* is dropped, the sequence conveys a different interpretation illicit as in Md2 below where there is no reciprocal meaning. Note that CONN for 'connective'.
Md1) mawándá má-ń- nɔl- **ná**   (mɔ́ ni   **mɔ́)**
      friends   SM-Pres-laugh-RCM them CONN them
      'Friends laugh at each other/one another' i.e. they are mocking at each other/one another'
Md2) mawándá má-ń- nɔl- (mɔ́   ni   **mɔ́)**
      friends   SM-Pres-laugh them CONN them
    Intended: 'Friends laugh among themselves'/the friends laugh together' Or 'Les amis rient entre eux' (French translation).
Ken: We need to distinguish three possibilities, namely, RCM alone, *mɔ́ ni mɔ́* and RCM, and *mɔ́ ni mɔ́* alone. It seems like *mɔ́ ni mɔ́* alone is not inherently reciprocal, but is sociative, i.e., activities done together. If so, it is RCM that provides the reciprocal meaning. Then, of course, we still need to answer whether the RFM/RCM are really different.

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*.
The four strategies listed above are given here in turn:

Ma) Marking on a coconstrued argument or adjunct. (E.g., English *himself*)
Ma1) **maaŋgɛ́**ᵢ a- ń- jɛ́   **nyɛ́-mɛdɛ́**ᵢ
      child   SM-Pres-eat   him+mɛdɛ́

'The/A child eats him/herself'
It appears to be the case that the strategy **PRONOUN (accusative)+mɛdɛ́ (**PRONOUN-REFL)is more productive than the other ones in the sense that it 'nearly applies to every verb in the language. Some verbs include the following:
jowa 'wash', *áŋ* 'read', *tila* 'write' *kɛ* 'go/leave/walk', *jɛ́* 'eat', *ɲɔ́* 'drink', *pɔ̂t* 'speak/talk, *sáʔ* 'work', *lámb* 'cook', *ɛ́mblɛ* 'hear/listen', *níƔîl* 'learn', hjôm 'stroll/strand',*kwaayɛ* 'crawl', *yen* 'sit down', *tɛ́lɛ̂β* 'stand up', *lɔ̂β, gwéem* 'hunt', *sɔ̂mb* 'buy', *níîƔa* 'teach' *ot* 'draw' etc.

Mb) Marking on the verb or an auxiliary. (French clitic *se*, the Bantu reflexive marker)
Mb1) maaŋgɛ́ a-   ḿ-   pɔ́t-   ɓa
       child   SM-Pres-speak/talk-REFL(ɓa)
       'A/The child soliloquizes'/speaks alone'
The strategy which makes use of a reflexive suffix (Mb1) is very limited to specific predicates, such as 'bathe, wash, dress and the like' and some other predicate types which have to do with the body as illustrated below:
(4) a. maaŋgɛ́ a- n-   **hɔ́ɔ́-ɓá**   láŋ
      child   SM-PST1-put-REFL   lotion made up of palm nuts
      The/A child put on lotion/cream on his/her body'
   b. maaŋgɛ́ a- n-   **séŋ- ɓá**   móó
      child   SM-PST1-rub-REFL   oil
   'A/The child has rubbed his body with oil'
   c. maaŋgɛ́ a- ŋ-   **koo- ɓá**   málêp
      child   SM-PST-pour-REFL   water
 'A/The child poured water on him/herself'
   d. hiŋgɔnda hí- ŋ-   **kɛ́Ɣ-ɓa**
      girl   SM- PST1-hurt-REFL
       'The girl hurt herself'

Mc1) **maaŋgɛ́**ᵢ a-   ń-   nɔ́Ɣɔ̂p (**nyɛ́-mɛdɛ́**ᵢ)
       child   SM-Pres-wash   (him/her-REFL)
       'A/The child washes (him/herself)
The null object strategy i.e. Mc1) is also productive but not as the first strategy. For instance, the null object strategy can be used with verbs of motion (1), of grooming (such as wash', bathe, 'dress' etc. (2) as well as other verbs denoting activities (3), to name only these few.
       1) a. maaŋgɛ́ a- ý- *kwaayɛ*
              child   SM-Pres-crawl
              'The/A child crawls(him/herself)'
          b. maaŋgɛ́ a- ý- *kɛ*
              child   SM-Pres-walk
              'The/A child walks (him/herself)'
      (2 a. maaŋgɛ́ a- ń- nɔ́Ɣɔ̂β
         child   SM-Pres-bathe
        'A/The child bathes (him/herself)'
         b. maaŋgɛ́ a- ń- jowa
        child   SM-Pres-wash
         'A/The child washes (him/herself)'

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3) a. maaŋgɛ́ a- ń- tila
     child   SM-Pres-write
    'A/The child writes (him/herself)
  b. maaŋgɛ́ a- ń- lámb
     child   SM-Pres-cook
 'The/A child cooks (him/herself)'

Md1) mawándá má-ń- nɔl- **ná** (mɔ́ ni **mɔ́)**,
     friends   SM-Pres-laugh-RCM them CONN them
     'Friends laugh at each other/one another' i.e. they are mocking at each other/one another'
The reciprocal strategy seems to be the second most productive one after the **PRONOUN** (accusative)+**mɛdɛ́** (PRONOUN-REFL) one because it can be used with a wide range of verbs involving relationship such as 'greet, love/like', 'insult', 'hate' etc. For instance, the following examples illustrate the reciprocal strategy.
5) a. Malêt   ni   ɓaúdú   ɓá- ń- **nóɣl-**   **a**
     teacher CONN students SM-PRS-get along/on-RCM
  'The teacher and the students get along/on well'
 b.mudaá   ni   munlóm ɓá- ń- **sɔl-** **na**
   woman   CONN man   SM-PRS-insult-RCM
  'The woman and man insult each other.'
 c. hilɔ́ɣá ni   hiŋgɔnda ɓá ń- **gwés-na**
   boy   CONN girl   SM-PRS-love-RCM
    'The boy and girl love each other.'
 d. hilɔ́ɣá ni   nsáŋ   ɓá- ḿ- **yeɣ-na**
   boy   CONN father SM-Pres-greet-RCM
    'The boy and his father resemble each other.'

3.2.2 Is the use of this strategy lexically restricted to certain verb classes, or is it unrestricted (applies across all verb classes)?
As the reader can see, it appears that the reciprocal strategy is restricted to a specific class of predicates namely the ones which have to do with interpersonal relationship. As for the first strategy i.e. PRONOUN (accusative)-REFL, it seems to be extended to virtually every class of predicate. The null object strategy in most cases involves a wide range of verbs. The reflexive strategy, that is, the one which makes use of specific morphemes encoding reciprocity also covers a specific class of verb namely verbs with a direct relation with the body.
3.3 Context of Use

3.3.1 How marked or natural is this strategy
In most, if not all cases, none of the strategies delineated above is restricted to specific contexts. Each of them can be used in every discourse situation with neither stylistic nor pragmatic effects. However, it is important to mention that the first strategy i.e. PRN (accusative)-REFL can be used to express emphasis or to mark an element in the discourse as being more prominent or salient. In this way the marked element (the reflexive) appears to express contrastiveness/contrastivity or exclusivity.
e.g. *Consider the following context whereby speaker B contradicts speaker A by showing that nobody washed the child, rather, the child washed him/herSELF*

Speaker A: Mɛ n-   nɔ̂ɣ lɛ́ mudaá a- n-   núɣ-ûs   mááŋgɛ́
       I   PST1-hear that woman SM-PST1-wash-CAUS child
       'I heard that the woman washed the child.'

Speaker B: Tɔ̂, **maaŋgɛ́**ᵢ a- n-   nɔ́ɣɔ̂p **nyɛ́-mɛdɛ́**ᵢ
        no child   SM-PST1-wash him/her-REFL
       'No, a/the child washes (him/herSELF)' Intended: Nobody washed the child, HE (child) washed him/herSELF'

As can be seen above, the reflexive can be used as a focus operator with a contrastive focus interpretation.
Can the PRN-REFL be fronted for focus or topic? I think we have such an example.

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). For example, English has adverbial reflexives which look like object reflexives except they don't apply to arguments of the verb, e.g. *John did it himSELF*, where upper case indicates stress.

3.3.3 Is a particular discourse context (e.g., contradicting) necessary? For example, it is possible to get coconstrual of subject and object in English with an object pronoun in special circumstances, as in B1.
  B1a) If Marsha admires just one person, then I suspect that she admires just HER.
   b) Marsha thinks I should trust no one but herSELF.

The following context can be considered for Basaá:
  B2a) liwandá jêm lí- ŋ́- kǎl lɛ́ mɛ gwês   ɓâŋ mut númpê ndígí **nyɛ́támá**
     friend   my SM-Pres-say that I   SUBJ.love NEG man other   only him/her alone
      'My friend told me to love nobody else but HIM/HER'
Note that in a context such as B2a above, the reflexive *nyɛ́-mɛdɛ́*(him/her-REFL) canbe perfectly ruled in place of the form *nyɛ́+támá* (him/her+ *támá)*. This latter form (PRONOUN (accusative+ *támá*) is interpreted as 'alone' in English with an exclusive focus reading.

3.4 Morphology

3.4.1 Does the reflexive element, in its entirety, have a stateable lexical translation? Not applicable to Basaá.

3.4.2 If the term used as a reflexive or reciprocal can be used for a non-reflexive/non-reciprocal meaning, is it an ordinary noun that can be possessed by other pronouns? Is it some form of prepositional phrase or adjective? Is there anything further to say about its meaning in such cases? Not applicable
What about *mɔ́ ni mɔ́* construction? That seems to have a sociative meaning, no?

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.
  (b) Does this morpheme have a lexical meaning? Is it clearly or plausibly related to a lexically

contentful word or morpheme? Give details as necessary.

Not applicable =? none of the reflexive or reciprocal morphemes have any independent use or meaning?

3.5   The agreement paradigm

3.5.1 Give the morphological paradigm of each reflexive strategy.

3.5.2   For each morphological feature, what determines its value? (e.g,, agreement with the antecedent, or agreement, in the case of possessives in some languages, with the possessed N)

The agreement paradigm in Basaá is gender-specific i.e. reflexive pronoun formation appeals to noun class agreement in the language so much so that there exists a variable apart which is made up of a pronoun of the accusative form, and an invariable part which is made up of the *mɛdɛ́* literally translated as 'SELF'. Given that Basaá is a noun class language, to each noun class corresponds a specific accusative pronoun which combines with the reflexive *mɛdɛ́* 'SELF' to form the reflexive pronoun.

The following table recapitulates the number of reflexives depending on the noun class.

NOUN CLASS	ACCUSATIVE PRONOUN	PRONOUN+'REFL'
1	nyɛ́ 'him/her' (+human)	nyɛ+mɛdɛ́ 'him/her+ REFL
2	ɓɔ́ 'them' (+human)	ɓɔ́+mɛdɛ́ 'them+ REFL'
3	wɔ́ 'it' (-human)	wɔ́+ mɛdɛ́ 'it+ REFL'
4	mɔ́ 'them' (-human)	mɔ́+mɛdɛ́ 'them+ REFL'
5	jɔ́ 'it' (±human)	jɔ́+mɛdɛ́ 'it+ REFL'
6	mɔ́ 'them' (±human)	mɔ́+mɛdɛ́ 'them+ REFL'
7	yɔ 'it' (±human)	yɔ+mɛdɛ́ 'it+ REFL'
8	gwɔ́ 'them' (±human)	gwɔ́+mɛdɛ́ 'them+ REFL'
9	yɔ 'it' (-human)	yɔ+mɛdɛ́ 'it+ REFL'
10	yɔ́ 'them' (-human)	yɔ́+mɛdɛ́ 'them+ REFL
12	tʃɔ́ 'them' (±human)	tʃɔ́+mɛdɛ́ 'them+ REFL'
14	wɔ́ 'it' (-human)	wɔ́+mɛdɛ́ 'it+ REFL'
19	hyɔ́ 'it' (±human)	hyɔ́+mɛdɛ́ 'it+ REFL'

Note also that apart from the reflexives obtained from noun classes, one also has reflexives formed from the six accusative personal pronouns used in the conjugation and which denote only humans as illustrated below. Note also that from the first person plural one has to use the form *ɓɔ́* which is indeed homophonous with the third person accusative *ɓɔ́* 'them' followed by the SELF'part. In the third person plural since the same *ɓɔ́* cannot be repeated in reflexives formation. In this case we can say that the morpheme *ɓɔ́* denotes plurality.

mɛ 'Me'	mɛ+mɛdɛ́ 'myself'
wɛ 'you'	wɛ+mɛdɛ́ 'yourself'
nyɛ́ 'him/her'	nyɛ́-mɛdɛ́ 'him/herself'
ɓɛ̌s 'us'	ɓɛ̌s ɓɔ́+mɛdɛ́ 'ourself'
ɓɛ̌ 'you' 2.PL	ɓɛ̌ ɓɔ́+mɛdɛ́ 'yourselves'
ɓɔ́ 'them'	ɓɔ́+mɛdɛ́ 'themselves'

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 The four strategies already examined do not exhibit any incompatibility to the best of my knowledge. The following examples show that each of the strategies can be used irrespective of tense, aspect, mood and the like.

B3a') maaŋgɛ́ a-   n-   **nɔ́ɣɓ- áɣ**   (**nyɛ́+ mɛdɛ́**)
    child   SM-PST1-wash-PROG him/her-REFL
      'A/the child was washing (him/herself)'

  b. maaŋgɛ́ a-   ń-   lámá   **nɔ́ɣɔ̂ɓ** (**nyɛ́+ mɛdɛ́**)
  child   SM-Pres-should wash   him/her-REFL
    'A/The child should wash (him/herself)'

  c. maaŋgɛ́ á-   **sâs- ɓá**   (**nyɛ́+ mɛdɛ́**)!!
  child   SM.IMP-rub-REFL   him/herself
    'Let A/The child rub him/herself)

  d. mawandá má- bí- **sɔl- ná**   (mɔ́   ni   mɔ́)
   friends   SM- PST2-insult-RCM   them CONN them
  'The friends insulted each other/one another'

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.

Like in many Bantu languages, there exists in Basaá a good number of verbal extensions, which, when associated with a verbal root, change the argument structure of the verb. Consider for instance the paradigm below with the verbs *pɔ́t* 'speak/talk', *nɔ́l* 'kill' and *gwɛl* 'catch/arrest/hold/do'.

    a) 'to kill'

Base
nɔ́l   'kill'
nɔ́l-â   'kill'

Reflexivity
nɔ́l-ɓa   'to kill oneself or to commit suicide' (reflexive)
Reciprocity nɔ́l-na 'to kill one another/each other'
Causativity
nól-ha   'cause/make sth/sb be killed' OR nól-ôs 'to cause/make sth/sb be killed'
Applicative
nól-ôl   'kill sb/sth on somebody/something' or kill sb/sth for some reasons'
Benefactive
nól-ôl 'kill to the advantage of'

  A. **strategy one:**   *PRONOUN (accusative)+mɛdɛ́*
This strategy can be applied to all verbal extensions exhibited above
1a) **mudaá**   a- ń- nɔ́l *(**nyɛ́-mɛdɛ́**)
  woman SM-Pres-kill   her-REFL
 'A/The woman kills herself'
 b) **mudaá**   a- ń- nɔ́l-ɓá   (**nyɛ́-mɛdɛ́**)
  woman   SM-Pres-kill-RFM her-REFL
  'The woman kills herself'
 c) **mudaá** a- ń- nól-ôs *(**nyɛ́-mɛdɛ́**)
  woman SM-Pres-kill-CAUS   her-REFL

'The woman makes causes herself kill'

d) **mudaá** a- ń- nól-há   (**nyɛ́-mɛdɛ́**)
  woman SM-Pres-kill-CAUS   her-REFL
  'The woman makes/causes herself kill'

Note that in (d) if the reflexive *nyɛ́-mɛdɛ́* 'herself' is dropped we obtain a causative interpretation namely 'the woman causes/makes people/things kill' which can felicitously include 'herself'(woman). So here, the meaning is extended to other entities, which is different if the reflexive is used.

e) **mudaá** a- ń- nól-ól   *(**nyɛ́-mɛdɛ́**) ŋgɔβɔɣ
  woman SM-Pres-kill-CAUS   her-REFL   blackmail
  'The woman makes/causes herself kill because of blackmail'

B. Strategy two: Reciprocal strategy
This strategy is limited to the sole reciprocal morpheme i.e. other verbal extension do not allow reciprocity.

(2) a. ɓajɔ   gwĕt ɓá- ń- **nɔl- ná**   (ɓɔ́   ni   ɓɔ́)
    fighters war   SM-Pres-kill-RCM   them CONN them
      'Warriors kill one another/each other'

C. Strategy three: Reflexive strategy
This involves a reflexive morpheme which is preceded by a verbal root. Other verbal extensions cannot be used in this strategy.

(3)a. **mudaá**   a- ń- nɔl-**ɓá**
    woman   SM-Pres-kill-RFM
  'The woman kills herself'

D. Strategy four: null object
In this context we can use (3a) repeated as (4a), a causative strategy (4b) or a strategy which consists in using the verbal base in its simple (4c) or extended form (4d).

(4) a. **mudaá**   a- ń- nɔl-**ɓa**
    woman   SM-Pres-kill-REFL
  'The woman kills herself'

The null object strategy is only so called if the verb is unaffixed.

   b. **mudaá**   a- ń- nól-**ha**
    woman SM-Pres-kill-CAUS
    Literally: 'The woman makes/causes kill'

This is not a reflexive strategy

   c. **mudaá**   a- ń- **nɔl**
   woman   SM-Pres-kill
    'The woman kills'

Also not a reflexive strategy (also possible in English)

   d. **mudaá**   a- ń- **nɔl-â**
   woman   SM-Pres-kill
    'The woman kills'

Note that both (4c-d) have the same meaning, they only differ in the realization of the final verbal extension (which is absent in 4c and explicit in 4d).

'to speak/talk'
  A. **Base**
  B. pɔ́t 'speak/talk
  C. **Dative**
  D. pód-ôs 'speak/talk to sb'
  E. **Causative**
  F. pód-ha make/cause someone speak'
  G. **Oblique**
  H. pód-ôl 'talk about'
  I. **Benefactive**
  J. pód-hɛ ' talk to someone for somebody'
  K. **Reciprocal**
  L. pód-ha 'talk to each other/one another'
  M. **Causative**
  N. pód-ha 'to make/cause someone speak'
  O. **Reflexive**
  P. pɔ́t-ɓá 'soliloquize/talk to oneself'
  Q. Strategy one: PRONOUN+mɛdɛ́ 'Pronoun-REFL'
This can apply to all extensions exhibited above.

(5) a. **Maaŋgɛ́** a- ḿ- pɔ́t   **nyɛ́-mɛdɛ́**
      child   SM-Pres-speak/talk him/her-REFL
      'The child speaks him/herself'

   b. **Maaŋgɛ́** a-   ḿ- pód-ós   **nyɛ-mɛdɛ́**
      child   SM-Pres-speak/talk-DAT him/her-REFL
      'The child talks to him/herself'

   c. **Maaŋgɛ́** a- ḿ- pód-há   **nyɛ́-mɛdɛ́**
      child   SM- Pres-speak/talk-CAUS him/her-REFL
      'The child makes/causes him/herself speak'

   d. **Maaŋgɛ́** a- ḿ- pód-ól   **nyɛ́-mɛdɛ́**
      child   SM-Pres-speak/talk-OBL him/her-REFL
     'The child speaks about him/herself'

   e. **Maaŋgɛ́**ᵢ a- ḿ- pód-hɛ́   mawandá mê malêtⱼ   **nyɛ́-mɛdɛ́**ᵢ/ⱼ
      child   SM-Pres-speak/talk-OBL friends his/her teacher   him/her-REFL
       'The child talks for his friends to the teacher him/herself'

As can be seen from the glosses in (5e), coreference can be felicitously attested either between the subject NP *maaŋgɛ́*ᵢ 'child' and the reflexive or between the indirect object NP *malêt*ⱼ 'teacher' and the reflexive.

f. ɓaúdú   ɓá- ḿ- **pód- há   ɓɔ-mɛdɛ́**
   students   SM-Pres-speak-RCM them+selves
 'The students talk to each other/one another'

g. ɓaúdú   ɓá- ḿ- **pód- há   ɓɔ-mɛdɛ́**
   students   SM-Pres-speak-RCM them+selves
 'The students make/cause themselves talk/cause each other/one another talk'

Note that (5f-g) make use of the same verbal extension *–ha* but with two different interpretations namely reciprocity and causativity.

h. maaŋgɛ́ a- ḿ- **pɔ́t-** **ɓa** (**nyɛ́mɛdɛ́/** **nyɛ́-támá**)

  child   SM-Pres-speak/talk-REFL PRN.c1-REFL   him/her+alone

   'The child speaks alone/soliloquizes/soliloquizes him/herself"

    R. Strategy two: Reciprocal morpheme

This is limited to the sole reciprocal morpheme i.e. other verbal extensions are not licensed.

(6) ɓɔɔŋgɛ́ ɓá- ḿ- **pód- há**   (ɓɔ́ ni   ɓɔ́)

   children SM-Pres-speak-RCM (them CONN them)

   'The children talk to each other/one another'

   S. Strategy three: REFLEXIVITY

This is limited to the reflexive morpheme as can be seen below.

(7) maaŋgɛ́ a- ḿ- **pɔ́t- ɓá**

   child   SM-Pres-speak-REFL

 'The child soliloquizes'/talks to him/herself'

   T. Strategy four: Null object

   This can be used in the following contexts

(8) a. maaŋgɛ́ a- ḿ- **pɔ́t**   *Simple verbal base*

    child   SM-Pres-speak/talk

  'The child talks/speaks (himself)'

  b. ɓaúdú   ɓá- ḿ- **pód-**   **há**   *Causativity*

    students SM-Pres-speak/talk-CAUS

  'The students make/cause (people) talk'

  c. mawándá má-ḿ- **pód-**   **ha**   *Reciprocity*

   friends   SM-Pres-speak/talk-RCM

   'Friends talk to each other/one another'

  The following ungrammatical sentences show that dative, oblique, and benefactive constructions do not allow the null object strategy.

(9) a.* mawándá má-ḿ- **pód-ôs**   *Oblique*

     friends SM-Pres-speak/talk-OBL

   b. *mawándá má-ḿ- **pód-ôl**   *Dative*

    friends   SM- Pres-speak/talk-DAT

   c.*mawándá má- ḿ- **pód-**   **hɛ**   *Benefactive*

    friends   SM- Pres-speak/talk-Ben

3.6.3 (formerly 3.6.1) If you are aware of operations or morphemes that cannot co-occur with this strategy, then list them here, providing an example and a brief statement of what the incompatible morphemes or constructions are. So for example, if your language distinguishes accusative case from dative case, is one or the other case exclusively compatible or incompatible with a particular strategy?

In other words, oblique, dative and benefactive constructions are incompatible with the null object strategy as the ungrammaticality in (9) show it.

3.7 Uses that are not quite coreference

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

It is important to note that in Basaá there is a class of verbs which inherently denote reflexivity. These verbs may use locative adjuncts or expressions as illustrated below.

(10)a. maaŋgέ a- m- **ɓômla** (í ŋɔɣ)

    child   SM-PST1-stumble   LOC stone/stone)

    'The child stumbled against a rock/stone'

  b. maaŋgέ a- n- **lêɣ-ɓa** (í wɔɔ́)

    child   SM-PST1-burn-RFM? LOC hand

    'The child burns him/herself'

  c. maaŋgέ a- ŋ- **kɔɔɣ-a** (hílêmb)

    child   SM- PST1-bite-RFM? tongue

    'The child bite himself on the tongue'

  d. mudaá a- n- **nít-ɓa**

    woman SM-PST1-commit suicide-RFM

      'The woman committed suicide'

Note also that apart from (10a) other verbs require a reflexive morpheme which can be either of the form CV (consonant-vowel) or V (vowel).

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

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

  B1c) John ate fish himself.

    d) 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)

In Basaá it is possible to translate (B1c,d) using the reflexive form PROUNOUN (accusative) +*mɛdέ* 'pronoun-REFL' the 'focus-sensitive particle PROUNOUN (accusative)+*támá* which can literally mean 'alone'

First of all (B1c,d) can be translated as follows. While only readings C and D are attested with the form PRONOUN-REFL i.e. B1e-f, one obtains A, B, C, and D altogether with the form PRONOUN+támá in B1g-h.

B1e) Yohánɛs a- bí- jέ hjɔ́βí **nyέ-mɛdέ**

    John   SM-PST2-eat fish   PRN.c1-REFL

      'John eats fish himself/John himself eats fish'

  f) Yohánɛs **nyέ-mɛdέ** a- bí- jέ hjɔ́βí

John   PRN.c1-REFL   SM-PST2-eat fish
'John eats fish himself'/John himself eats fish'

g) Yohánɛs   a- bí- jɛ́ hjɔ́βí **nyɛ́+támá**
    John   SM-PST2-eat fish   him+támá
    'John eats fish himself/John himself eats fish'

a) Yohánɛs **nyɛ́+támá** a- bí- jɛ́ hjɔ́βí
    John   him+támá   SM- PST2-eat fish
    'John eats fish himself/John himself eats fish'

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.

It is possible to get such structures in Basaá as the following examples show it. Note that in (1a) and (1c) the reflexive morpheme is realized while it is not so with (1b). As can be seen, the reflexive pronouns are optional. Considering that sentences below have only one participant agent, we consider them as involving reflexive passives in the sense that the agent itself can be considered as patient at the same time.

(1) a. Matʃɛɛ́ má-**kéɣ**   **-í**   **(mɔ́+mɛdɛ́)**
      eggs   SM-hatch/open out-ACAUS PRN.c2-REFL
   'Eggs hatch/open out themselves'
   b. tómblo í   ḿ- **ɓóo (yɔ+mɛdɛ́)**
     glass   SM-Pres-break it-REFL
    'The glass breaks itself'
   c. pôs   í- n-   **túβ- í**   **(yɔ+mɛdɛ́)**
    bottle SM-PST1-pierce-REFL it-REFL
    'The bottle pierced itself' ("sprang a leak")

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

   B5a) Bill did not see X
     b) Does Mary like X?
     c) X went to the bank yesterday.
Note applicable or better still is difficult to find out

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

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

(X = speaker, X = addressee)
Not applicable

Can the form in question be used in a sense like that of English generic <u>one</u> Or is there a meaning that means "arbitrary person". There are otherwise local anaphors in Hindi, for example, that can have the latter usage.

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

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?
       Njɛ́ɛ́ ɓasâl   hisí ɓá- n- tɛ́hɛ̂
       who   workers land   SM-PST1-see
       'Who did the farmers see?'
        They saw *him*.
      (ɓasâl   hisí)   ɓá-n-tɛ́hɛ́ **nyɛ́**
       workers land   SM-PST1-see him/her
       'They saw *him*/*her*

Note that Basaá is pro-drop and that is why the subject *ɓasâl hisí* 'farmers' can be dropped together since it can be semantically recovered by the subject marker (SM). The fact that the subject 'farmers' is known in the discourse is explained by the fact that it may be dropped altogether (see parentheses).

(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*.
In this case one obtains a contrastive focus reading as illustrated below.
   1) a. (ɓasâl   hisí) ɓá n- tɛ́hɛ́ ɓéé Máaríya, **nyɛ́-n**   ɓá- n- tɛ́hɛ̂
       workers land SM-PST1-see NEG Mary   HIM-FOC SM-PST-see
        'The farmers didn't see Mary, they saw HIM (referring to John)'
Note that since the pronoun *nyɛ́* corefers with both male and female, (1a) is correct if and only if 'John' has been mentioned in a previous discourse. Note that there is homophony between agreeing morphemes and accusative pronominal in Basaá so much so that instead of glossing the complex 'Nyɛ́-n' as HIM/HER-FOC(us), one can also gloss it as AGR(reement)-FOC(us) where AGR stands for noun class agreement.
In the following example, we see that we obtain a focus-drop construction if the focalized noun/element has known in the discourse.
 Context: Speaker A: mɛ n-   nɔɣ lɛ́   malêt   a- n-   tɛ́hɛ́ ɓáúdú
          I PST1-hear that teacher SM-PST1-see   students
       'I heard that the teacher saw the students'
        Speaker B: mɦm, (ɓáúdú) ɓɔ́-   n (malêt)   a- n- tɛ́hɛ́
             yes,   students AGR/THEM-FOC teacher SM-PST1-see

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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.

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., <u>Grisham</u>) and their work. Feel free to substitute your favorite national author for <u>Grisham</u>.

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

In Basaá it is possible to get proxy readings as can be seen below, where Um Nyɔβɛ́, a famous Cameroonian martyr went to the museum and had a look at his own picture. Here the reflexive 'himself' is optional.
 B8c) Um Nyɔβɛ́ a- bí-   ɓǐŋg- ɓá   (nyɛ́-mɛdɛ́)
      Um Nyɔβɛ́ SM-PST2-watch-REFL   PRN.c1-REFL
       'Um Nyɔβɛ́ watched himself'
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.

B10a) Grisham says he sounds better in Swahili. (where <u>he</u> = Grisham's writings)
      b) Castro thought that he looked handsome. (<u>he</u> = statue of Castro)
The following examples illustrate proxy readings in the language.
B11a) *Bikokóó a- bí-   joó- ɓa   nyɛ́-mɛdɛ́ lɔ́ŋgɛ́
      Bikokóó SM-PST2-wash-REFL PRN.c1-REFL   carefully
      Intended: Bikokóó washed himself carefully'
    b). Ntôβ tʃembí a- bí-   ɛŋg- ɓá   lɔ́ŋgɛ́   nyɛ́-mɛdɛ́
        singer   songs   SM-PST2-dress-REFL carefully   him/her-REFL

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'The singer dressed him/herself carefully'

c). Ntɔ̂β   tʃembí a- bí- ɛŋg nyɛ́-mɛdɛ́ lɔ́ŋgɛ́
   singer   songs   SM-PST2-dress him/her-REFL carefully
   'The singer dressed carefully'

d). Bikokɔ́ɔ́ a- bí-   téé-ɓá   (nyɛ́-mɛdɛ́) í   ŋkúú bítitíí
   Bikokɔ́ɔ́ SM-PST2-see-REFL   PRN.c1-REFL   LOC box   pictures
      'Bikokɔ́ɔ́ saw himself on TV'

 e). Bikokɔ́ɔ́ a- bí- téé nyɛ́-mɛdɛ́ í   ŋkúú bítitíí
    Bikokɔ́ɔ́ SM-PST2-see PRN.c1-REFL   LOC box   pictures
      'Bikokɔ́ɔ́ saw himself on TV'

Note that a proxy reading is not possible with a verb like *jowa* 'wash' in the language. However, as can be seen in (Bb-e), proxy readings are possible with verbs such as *ɛŋg* 'dress' and *tɛ́hɛ́* (inflected in B11as *téé*) 'see'. Note also that (B11b) does not convey a proxy reading per se. So the only reading possible here is that 'the singer dressed her own person, but not his statue'. In (B11c) the idea is that either 'the singer dressed his/her own person' or 'he/she dressed her statue'. In (B11d-) two readings are possible. First of all, 'Bikokɔ́ɔ́ saw himself (reflexivity)' or 'Bikokɔ́ɔ́ saw his statue'. Sentence (B11e) conveys the same interpretations as (B11d). The only difference is that in (B11d) there is a reflexive morpheme -*ɓá* and an optional reflexive pronoun namely 'himself' at the same time. Also, note that (B11d) can convey the interpretation according to which 'Bikokɔ́ɔ́ was seen by other people'. In this case we obtain a passive reading even if there is no explicit *by-phrase* containing an agent. A passive reading in this case will be introduced by the same verbal extension -*ɓá* which is right attached to the verbal root. So the idea is that there is a sort of homophony between the passive and reflexive morphemes.

Proxy readings do not require locality, so cases like B11a-b are also possible in Basaá.
B11a). **Tɔnyɛ́**ᵢ **a**ᵢ- ŋ́- kal lɛ́ **a**ᵢ- ḿ- pɔt   ndígí malíɣá
      Tonye SM-Pres-say that he/SM-Pres-speak/talk only   truth
       'Tɔnyɛ́ᵢ says that heᵢ tells only the truth (in his writing for instance)'

    b). **Ntɔɔ́ɣɛ**ᵢ **a**ᵢ- bí- hɔ́ŋɔ́l lɛ́ **a**ᵢ-   ye nlâm   ŋgandaɣ
      Ntɔɔ́ɣɛ SM-PST2-think   that SM/he-be nice/handsome   very
       'Ntɔɔ́ɣɛᵢ thought that heᵢ was very handsome'

Note that we gloss the morpheme a- either as a subject marker (SM) or a pronoun 'he' because of the homophony between the two in the language. This says, the SM bears person, gender and number features of the subject even in a long-distance relationship.
Provide both local and long distance examples with gloss and translation of proxy readings. If proxy readings seem difficult for you to get just say so, and if you find that you need to transform the examples in some way to get the right interpretation, feel free to do so, but then be extra careful about gloss and translation.

        Proxy readings are also possible for reciprocals in many languages. For (B11a), once again the antecedents are the authors and <u>each other</u> describes the works these authors have written, such that Mark Twain did not read Victor Hugo's novels in Swahili and Victor Hugo did

not read Mark Twain's novels in Berber. For (B11b), imagine a show where there are actors masquerading as our two protagonists. The first 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.

The following examples illustrate the two cases in Basaá. First in (B11c) both Yɛtná and Bíkûn are writers. The case in (B11c) shows that both authors did not read each other.

B11c) Yɛtná ni   Bíkûn ɓá- bí- **êŋ- ɓa**   ɓéé
    Y.   CONN B.   SM-PST2-read-RCM NEG
    'Yɛtná and Bíkûn did not read each other'
    c) Ewas ni   Hjɔl ɓá- bí- **tɛ́h-ná** ɓée í ŋgand,
    E.   CONN H.   SM-PST2-see-RCM NEG LOC party
    ndí ɓá-   bí- **téé-ɓá**   í   lemân
    but SM/they-PST2-see-PASS.RCM LOC screen/mirror

Ewas and *Hjɔl* not see each other at the party, but they did see each other on the screen TV.'
As the reader can see, the verbal root for 'see' is not stable i.e. it varies depending on the verbal extension attached to it. It is the reason why in B11c, it realizes as *tɛ́h* when attached to a reciprocal and as *téé* when it gets attached to a 'reciprocal passive'. By 'reciprocal passive' here it is meant the fact that Ewas was seen by Hyɔl and Hyɔl by Ewas. So I assumed that each of them is seen by the other in a reciprocal manner.

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

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*.

Please try to formulate sentences like those in (B12a) (an/or B12b, if that is possible) trying out each of the non-reciprocal strategies in the first clause and determining for each strategy which

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of the readings i-iii. are possible. If you have several strategies in your language, then we expect you will have many examples as translations of (12a,b) for whatever verb works with the strategy in question. Please adjust the examples to use appropriate verbs for the strategy you are testing, and if there are generalizations about which verbs go with which strategies more successfully, that would be very interesting to know. Remember to try both affixal and argument anaphor strategies, if your language has both.

Let us consider the following example and its different meanings.

B12c) Ewas a- ń́- gwês   nyɛ́mɛdɛ́ i   lɔɔ   Hjɔl
      E.   SM-Pres-love/like PRN.c1-REFL INF surpass H
      'Ewas likes himself more than Hjɔl'

The sentence in B12c is ambiguous in four ways and can have the following interpretations:

B12d). *Ewas*$_i$ likes *himself*$_i$ more *He*$_i$ (Ewas) likes **Hjɔl**$_j$

    e). *Ewas*$_i$ likes *himself*$_i$ more than **Hjɔl**$_j$ likes *him*$_i$ (Ewas)

    f). *Ewas*$_i$ likes *himself*$_i$ more than *he*$_i$ (Ewas) likes **Hjɔl**$_j$

    g). *Ewas*$_i$ likes *himself*$_i$ more than **Hjɔl**$_j$ likes **himself**$_j$

The affixal strategy does not trigger any ambiguity i.e. a sentence like B12h below has only one-way interpretation namely that '**Ewas**$_i$ likes **himself**$_i$ more than *Hjɔl*$_j$ likes *himself*$_j$'

B12h). Ewas a- ń́- **gwés-ɓa**   i   lɔɔ   Hjɔl
      E.   SM-Pres-like-REFL INF   surpass Hjɔl
      '**Ewas**$_i$ likes **himself**$_i$ more than *Hjɔl*$_j$ likes *himself*$_j$ '

NB: Note *INF* above stands for infinitive (the infinitive particle like the English 'to')

PART 4   Exploration of syntactic domains

This section is more exploratory than the preceding ones, and so we rely more on your linguistic expertise and your sense of what we are looking for in the pattern of anaphora in your language. Soliciting examples for all possible combinations of syntactic factors would be a prohibitive task. We present selected combinations of syntactic factors and ask you be on the lookout for any significant interactions between these factors and the strategies they allow, such as distance from the antecedent, type of antecedent, and some details of interpretation. Some of the information asked for here will be redundant with respect to earlier information, but please bear with us, as we are establishing broader paradigms of what is possible for each strategy. Please read these instructions carefully, and return to them if unclear about how to handle a question.

In this section you will be asked to construct a variety of sentence types and test their acceptability. In typical cases, an English sentence will be provided as a guide with one argument marked "X" and the X argument is to be construed as coreferent with some other designated argument (e.g., X = John). When you are asked to provide a reciprocal example, change <u>John</u> to some plural subject of the form <u>John and Bill</u> or <u>the boys</u> or <u>the girls</u>, but do not use other sorts of subjects unless you are instructed to do so (we are avoiding certain kinds of complications that arise with quantified subjects that we will ask about separately below).

To show how we would like you to proceed in this section, we begin with a relatively simple elicitation. Construct a relatively simple transitive sentence, such as <u>John hit Bill</u>, providing gloss and translation. Now use each coreference strategy in your list to change the

sentence you constructed into a reflexive. For example, for a sentence like <u>John hit X</u> where X is John, try each strategy and determine whether or not the outcome is successful for a reflexive or reciprocal reading. For English, we might describe four strategies as IMPLICIT, X-SELF, EACH-O and O-another (<u>one another</u>) as well as the pronominal strategy which, in English, does not normally work for coargument coreference. As a native English speaker, I might respond as follows.

    X1a)*John hit.
       b) John hit himself.
       c)*The boys hit.
       d) The boys hit each other.
       e) The boys hit one another.
       f)*John hit him

Remarks: *Example (X1c) is not possible with any interpretation, reciprocal or reflexive. The IMPLICIT strategy is limited to certain verb classes, as mentioned in section 2.1.3.*

The following cases are attested in Basaá.
        X1g) * Yɔhánɛs a-   bí-   ɓêβ
              John   SM-PST2-hit
                  '*John hit'

      h)   Yɔhánɛs a-   bí-   ɓêβ nyɛ́-mɛdɛ́
           John   SM-PST2-hit   PRN.c1-REFL
             'John hit himself'
      i) Yɔhánɛs a-   bí-   **ɓêβ-ɓa** (nyɛ́-mɛdɛ́) NB: *The anaphor is optional*
        John   SM-PST2-hit-REFL   PRN.c1-REFL
             'John hit himself'
      j) *ɓaúdú   ɓá- bí-   ɓêβ
          students SM-PST2-hit
           '*The students hit'
      k) ɓaúdú   ɓá- bí-   **ɓêβ-na** (ɓɔ́ ni   ɓɔ́) NB: *The anaphor is optional*
           students SM-PST2-hit-RCM them CONN them
           'The students hit each other/one another'
      l) ɓaúdú   ɓá- bí-   **ɓêβ-ɓa** (ɓɔ́+mɛdɛ́) NB: *The anaphor is optional*
           students SM-PST2-hit-REFL PRN.c2-REFL
           'The students hit themselves i.e. each student of the group hit himself'
     m) **Yɔhánɛs**ᵢ a-   bí-   ɓêβ **nyɛ́**ⱼ/*ᵢ
         John   SM-PST2-hit   him
           '**John**ᵢ hit **him**ⱼ/*ᵢ'

NB: Like in English, Coreference is not possible between **Yɔhánɛs**ᵢ 'John' and the pronoun **nyɛ́** 'him'
 Now suppose that the verb chosen had been <u>wash</u>. As a native English speaker, I might respond as follows.

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X2a) John washed.
X2a' **Yɔhánɛs** a- bí- nɔ́ɣɔ̂β
         John   SM-PST2-wash
         'John washed'

  b) John washed himself.
X2b' **Yɔhánɛs** a- bí- nɔ́ɣɔ̂β nyɛ́-mɛdɛ́
         John   SM-PST2-wash PRN.c1-REFL
         'John washed himself'

c) The boys washed.
X2c' **ɓaúdú** ɓá- bí- nɔ́ɣɔ̂β
       students SM-PST2-wash
       'The students washed'

  d) The boys washed each other.
Note that this interpretation is only possible in the presence of a reciprocal morpheme as attested X2d''.

X2d' **ɓaúdú** ɓá- bí- nɔ́ɣɔ̂β
       students SM-PST2-wash
       'The students washed themselves'
X2d'' **ɓaúdú** ɓá- bí- nûɣɓ-a- ha   NB: EPTH stands for epenthetic
         students SM-PST2-wash-EPTH-RCM
         'The students washed one another/each other'
   e) The boys washed one another. (see X2d'' above)
  f)*John washed him.
  X2f' **Yɔhánɛs**ᵢ a- bí- **núɣ-ús** nyɛ́ⱼ/*ᵢ
         John   SM-PST2-wash-CAUS
         'John washed him /made him clean'
Here again, coreference between *Yɔhánɛs* 'John and *nyɛ́* 'him' is not possible as the indexes show it.

Remarks: *Examples (X2a) and (X2b) contrast, although the difference is unclear to me. You could say <u>John washed himself clean</u>, but not *<u>John washed clean</u>. I am not sure why. Example (X2c) can have a reflexive interpretation like (X2a), but (X2a) is * if it is intended to have a reciprocal reading like (X2d) or (X2e). The implicit (null) strategy, as mentioned in section 2.1.3, is limited to verbs of grooming, etc., so I will not test it further with verbs it is not compatible with.*
        Now suppose the example is constructed as follows, where what we are seeking to test is whether or not the possessive of an argument of the main predicate (verb in this case) can be represented by one of the coreference strategies that we have identified as holding between coarguments.

 X3a)*John saw himself's mother.
 X3a' **Yɔhánɛs**ᵢ a- bí- tɛ́hɛ́ ɲâŋⱼ/ⱼ (wêᵢ) nyɛ́-mɛdɛ́ᵢ/ⱼ
      John   SM-PST2-see mother hisᵢ   him/her-REFL
'John himself saw his mother /John saw his own mother/John saw his *mother* (his mother in

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person) i.e. *herself*

person) i.e. *herself*

Note that in X3a' the possessive wê (his) is optional because we have an instance of inherent possession. Also, it is possible to get coreference between the possessive and another NP known in the discourse (see co-indexation).

When the pronoun is not present, is it still possible to have a discourse antecedent?

    b)*John washed mother,

X3b' **Yɔhánɛs**$_i$ a- bí- núɣ-ús ɲâŋ$_i$/$_j$
    John   SM-PST2-wash-CAUS mother
    'John$_i$ washed his$_i$/$_j$ mother'

c)?John and Bill saw each other's mother.

X3c' [**Yɔhánɛs** ni **Paáolo**]$_i$ ɓá- bí- téé-ná ɓáɲâŋ$_j$ (**ɓâɓ**$_i$)
    John   CONN Paul   SM-PST2-see-RCM mothers **their**
    'John and Paul saw each other's mother' *John and Paul saw one another's mother'

What do you take to be the difference between these two translations?

    d)?*John and Bill saw one another's mother. (see the illicit in red above in X3c')
    e) John and Bill saw their mother.

X3e' [**Yɔhánɛs** ni **Paáolo**]$_i$ ɓá- bí- téhé ɓáɲâŋ$_j$ (**ɓâɓ**$_i$)
    John   CONN Paul   SM-PST2-see mother their
    f) John washed/saw his mother.

X3f' **Yɔhánɛs**$_i$ a- bí- núɣ-ús ɲâŋ$_i$/$_j$ (see also X3b' above)
    John   SM-PST2-wash-CAUS mother
    'John$_i$ washed his$_i$/$_j$ mother'

4.1 Clausemate coconstrual
4.1.1 Verb class restrictions

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

If X stands for another name different from 'Bob' for instance, then the following sentences can be considered. But, if not, please let me know e.g. if X stands for an anaphor).

    C1a) Bob saw X.
    C1a' Bíkûn a- bí- téhé Hjɔ̂l
      B.   SM-PST2-see H
      'Bíkûn saw Hjɔ̂l'
    b) The women described X. (difficult to provide an equivalent for 'describe' in Basaá)

    c) You(pl.) kicked X.
    C1c') Ni   bí-**ɓêβ**   Hjɔ̂l **koo**
      you(pl.) PST2-hit   H.   foot
        'You kicked **Hjɔ̂l**'

NB: The verb 'kick' in Basaá is complex and is made up of three entities namely the verb *ɓêβ* 'hit' an indirect object (e.g someone/something (here **Hjɔ̂l**) and a direct object (here **koo** 'foot'). This is close to the French 'donner un coup de pied' 'to kick'.

    d) They praised X
    Cd' ɓá bí- ɓéɣês **Hjɔ̂l'**

they PST2-praise   H.

'They praised Hjɔ̂l'

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)

C3a'** Donna a- bí- núɣ-ûs   Donna

     Donna SM-PST2-wash-CAUS Donna

      ** 'Donna washed Donna'

  b) Don cut X's hair. (X = Don).

C3b' ** Donna a- bí- kít tʃóŋ tʃí   Donna   NB: GEN stands for genitive

       Donna SM-PST2-cut hair GEN Donna

     '**Donna cut Donna's hair'

  c) The girl cut X [unintentionally] (X = the girl)

C3c' **hiŋɔnda hí- kít híŋgɔnda

     girl   SM-cut girl

     '**The girl cut the girl'

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

C4a) John hates/fears X

C4a'**Yoháncs a- ń- ɔɔ   Yóháncs

     John   SM-Pres-hate John

     '**John hates John'

C4a'' Yoháncs a- ń- ɔɔ- (ɓá) (nyɛ́-mɛdɛ́)

     John   SM-Pres-hate-REFL PRN.c1-REFL

     'John hates himself'

C4a''' **Yoháncs$_i$ a- ń- ɔɔ   ɲúú yê$_i$/$_j$

     John   SM-Pres-hate body his$_i$/$_j$

   'John hates himself/Literally: John hates his body'

Note that in C4a'' the reflexive morpheme and the anaphor are optional without any change of the meaning of the sentence. Note also that the sentences above are licit (except C4a') because the verb is 'hate'. However if the verb is 'fear', only the equivalent of C4a''' is correct as can be seen in C4''''. Note that the verb 'fear'or 'be afraid' in Basaá is the complex *kɔn wɔŋí.*

C4a''' **Yoháncs$_i$ a- ń- kɔn   ɲúú yê$_i$/$_j$ wɔŋí

    John   SM-Pres-be sick body his$_i$/$_j$ fear (fear as a noun)

    'John is afraid of himself'

   b) John is ashamed of X

C4b' **Yoháncs$_i$ a- ń- wɔ́ ɲúú yê$_i$/$_j$ ɲuú   OR

    John   SM-Pres-die body his   body

    'John is ashamed of himself'Lit: 'John is ashamed of his own body'

C4b'' **Yohánɛs**ᵢ a- ŋ́- **wɔ** nyɛ́-mɛdɛ́ **ɲuú**

'John is ashamed of himself'

Note that 'to be ashamed' means *wɔ ɲuú but which means literally 'die body'*.

      c) John is worried about X

C4c' **Yohánɛs** a- ń- **toŋ- ɓa** OR

     John   SM-Pres-worry-REFL

'John is worried about himself'

C4c'' **Yohánɛs**ᵢ a- ń- **toŋ ɲúú yê**ᵢ/ⱼ (nyɛ́-mɛdɛ́ᵢ/ⱼ)

     John   SM-Pres-worry body his   him/her-REFL

       'John is worried about himself'

    d) John is proud of X

C4d' **Yohánɛs**ᵢ a ye-nɛ nyɛ́+ mɛdɛ́ᵢ/ⱼ maséé

       John   SM-be-OBL him/her-REFL   happiness

       'John is proud of himself'

C4d'' **Yohánɛs**ᵢ a ye maséé ni nyɛ́+ mɛdɛ́ᵢ/ⱼ

     John   SM-be happiness CONN him/her-REFL

       'John is proud of himself'

C4d''' **Yohánɛs**ᵢ a ye- nɛ ɲuú yêᵢ/ⱼ maséé

       John   SM-be-OBL body his/her happiness

        'John is proud of himself'

    e) John worries/troubles/pleases X

C4e' **Yohánɛs**ᵢ a- ń- teŋgá **nyɛ́-mɛdɛ́**ᵢ OR

      John   SM-Pres-trouble him/her-REFL

      'John troubles himself'

C4e'' **Yohánɛs**ᵢ a- ń- teŋgá ɲúú yêᵢ/ⱼ **nyɛ́-mɛdɛ́**ᵢ/ⱼ

      John   SM-Pres-trouble body his/her him/her-REFL

   'John troubles himself' Literally: Johnᵢ troubles hisᵢ/ⱼ body'

With the verb 'please' we have the following examples:

C4e''' **Yohánɛs**ᵢ a- ń- lémél **nyɛ́-mɛdɛ́**ᵢ/ⱼ OR

      John   SM-Pres-please him/her-REFL

       'John pleases himself'

C4e'''' **Yohánɛs**ᵢ a- ń- lémél ɲúú yêᵢ/ⱼ (**nyɛ́-mɛdɛ́**ᵢ/ⱼ)

      John   SM-Pres-please body his/her him/her-REFL

    'John pleases himself' Literally: John pleases his body'

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

  C5a' **ɓodaá**ᵢ ɓá- gá- tʃé- ná **ɓɔ́+mɛdɛ́**ᵢ

    women SM-FUT2-destroy-RCM   PRN.c2-REFL

    'The women will destroy each other/one another'

  C5a'' **ɓodaá**ᵢ ɓá- gá- tʃé **ɓɔ́+mɛdɛ́**ᵢ

    woman SM-FUT2-destroy PRN.c2-REFL

    'The women will destroy themselves'

   C5a''' **ɓodaá**ᵢ ɓá- gá- tʃí- βá **ɓɔ́+mɛdɛ́**ᵢ

     women SM-FUT2-destroy-PASS PRN.c2-REFL

'The women will make themselves destroy'

Note that the verb 'destroy' in Basaá is *tʲé* (see C5a' and C5a'') but when combined with a passive morpheme, it may change as in C5a''' where it is realized as *tʲí-*

    b) The machines built X (X = themselves)

    Cb') βikɛyᵢ   bí- ŋ́- **úú- ɓá**   ni   gwɔ́+mɛdɛ́ᵢ

         machines SM- Pres-make-PASS/REC/REFL CONN (by) PRN.c2-REFL

  'The machines make themselves/each other/one another' OR the machines are made by themselves'

Note that the verbal extension *-ɓá* in Cb' above is multifunctional in that it can convey passive, reciprocal and/or reflexive interpretation(s). This is what we are re-examining – the reciprocal reading in Cb' may be pragmatically available because machines of this kind can make other machines of this kind, but if we say "those two machines made each other' there is a logical difficulty if both of them start from nothing.

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.   This is difficult to find out

      b) John spoke for X

    C6b' **Yohánɛs**ᵢ a- mí- **pód- ól**   *(nyɛ́-mɛdɛ́ᵢ)   NB: The anaphor is mandatory

      John   SM-Pres-speak-OBL   PRN.c1-REFL

          'John spoke for himself'

At this point you might want to reconsider your answer to section 3.7.1, where we asked you about idiosyncratic or inherent reflexives - perhaps some of the ones you looked at earlier belong to some pattern that you might alert us to here.

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)

    C7a' ?? Maríya a- bí- tí- n- ɓá   líkebla   NB: Less acceptable.

         Mary   SM-PST2-give-EPTH-REFL gift

       'Mary gave herself a gift'

    C7'') Maríyaᵢ a- bí- tí- nyɛ́-mɛdɛ́ᵢ/ⱼ líkebla   NB: Correct

        Mary   SM-PST2-give him/her-REFL   gift

         'Maryᵢ gave herselfᵢ/ⱼ a gift'

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

    C7b' ok **Yohánɛs**ᵢ a- bí- und- ɓá   ndâβ (**nyɛ́-mɛdɛ́**ᵢ)   NB: Correct

         John   SM-PST2-show-REFL house   PRN.c1-REFL

       'John showed the house to himself'

C7c) ok **Yohánɛs**ᵢ a- bí- nîm- ɓá líkebla (**nyɛ́-mɛdɛ́**ᵢ) NB: Correct
John SM-PST2-refuse-REFL gift PRN.c1-REFL
'John refused himself a gift'

As can be seen, the verb 'give' marginally license reflexivity or coreference (C7a') but license coreference with an anaphor (C7a'').
For comparison, also provide judgements for the following:

C8a) Mary gave X the gift (X = Mary)
b) John showed X to the children (X = John)
NB: See C7 above. The result is the same.

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

C9a) Dan talked to X.
C9a') ??Danᵢ a- bí- pód-ós nyɛ́-mɛdɛ́ᵢ NB: Marginally acceptable
Dan SM-PST2-speak/talk-OBL PRN.c1-REFL
'Dan talked to himself'
C9a'') Dan a- bí- pɔ́t- ɓa
Dan SM- PST2-speak/talk-REFL
?? 'Dan talked to himself/ OK Dan soliloquized'
NB: Note that C9a'' above conveys more the meaning of 'self introspection' than that of talking to onself even though it is not easier to distinguish both meaning in my opinion. It is the reason why the second meaning (soliloquy) is more finer than the first.
b) Dan told Mary about X (X = Dan)
C9b') **Danᵢ** a- bí- pód- ól **nyɛ́-mɛdɛ́ᵢ** Maríya
Dan SM-PST2-speak/talk-OBL PRN.c1-REFL Mary
'Danᵢ talked to Mary about himselfᵢ'
NB: Note that the position of the anaphor is very instrumental to the interpretation of C9b' in the sense that if the anaphor follows Maríya 'Mary' we get a different interpretation as can be seen below:
C9b'') **Danᵢ** a- bí- pód- ól Maríya **nyɛ́-mɛdɛ́ᵢ/ⱼ**
Dan SM-PST2-speak/talk-OBL Mary PRN.c1-REFL
'Danᵢ talked to Mary himselfᵢ (Dan in person)' 'Dan talked about Mary him/her+selfᵢ/ⱼ'
Although I can't decide whether the English version is correct or not, note that in the second case i.e. in 'Dan talked about Mary him/her+selfᵢ/ⱼ' the idea is that either 'Dan talked to someone else about Maryᵢ herselfᵢ' or 'Danᵢ himselfᵢ talked to someone else about Mary'. With this in mind, one can understand why coreference is possible between *Dan* and the anaphor and *Mary* and the same anaphor.

c) Dan gave X a book.
If X stands for 'Dan' then the result is the following:

C9c') ?? Dan a- bí- tí- n- ɓá káat NB: Less acceptable.
Dan SM-PST2-give-EPTH-REFL book
'Danᵢ gave himselfᵢ a book'

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C7'') Dan$_i$ a- bí- tí- nyɛ́-mɛdɛ́$_i$/$_j$ káat   NB: Correct
         Dan   SM-PST2-give him/her-REFL book
         'Dan$_i$ gave him/her+self$_i$/$_j$ 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)
   C10a') **Maríya**$_i$ a- bí- tɛ́hɛ́ ɲɔ́ɔ́   í   mbús yê   **nyɛ́-mɛdɛ́**$_i$/$_j$
        Mary   SM-PST2-see snake LOC back her/his him/her-REFL
     'Mary saw a snake behind her/him' Literally: 'Mary saw a snake behind him/her+self'
NB: Note that the adjunct 'behind' in Basaá is a locative expression which can literally mean 'to the back'. Note also that coreference is possible between *Maríya* 'Mary' and the anaphor and the anaphor and another given $_{discourse}$ referent.

      b) Mary called me because of an article about X (X = Mary)
 C10b'). **Maríya**$_i$ a- bí- seβl-ɛ́   mɛ́ íɲúú kaat (i) i- ḿ- pód-ól **nyɛ́-mɛdɛ́**$_i$/$_j$
          Mary   SM-PST2-call-OBL me for   book REL.SM-Pres-talk-OBL him/her-REFL
        'Mary called me because of the book about her/him+self'
        'Mary called me because of the book about someone else'
NB: Note that two interpretations are possible in Cb'). Note also that REL stands for 'relative operator (which is optional).

      c) John offended Mary because of X (X = John)
 C10c). **Yóhánɛ́s**$_i$ a- bí- únβá-   há   **Maríya**$_j$ íɲúú yê$_i$/$_j$ **nyɛ́-medɛ́**$_i$/$_j$/$_k$
          John   SM-PST2-make angry-CAUS Mary   for   his/her$_i$/$_j$ PRN.c1-REFL
        'John$_i$ made Mary$_j$ angry because of him$_i$/$_j$/$_k$her$_i$/$_j$/$_k$+self'
Keep in mind that the anaphor **nyɛ́-mɛdɛ́**$_i$/$_j$/$_k$ can corefer with either with **Yóhánɛ́s**$_i$, **Maríya**$_j$ or any other presupposed/given discourse referent (see co-indexation).
      d) We laughed in spite of X (Difficult to find out 'in spite of')

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.
   C11a') Maríya$_i$ a- bí-   undá Hal$_j$ nyɛ́-mɛdɛ́$_i$/$_j$/$_k$
          Mary   SM-PST2-show Hal   PRN.c1-REFL
          'Mary showed Hal to himself'   NB: Mary is showing Hal his image in the mirror

      b) Mary showed X to Hal.

C11b') Maríya_i a- bí- undá Hal_j nyɛ́-mɛdɛ́_i/_j/_k

      Mary   SM-PST2-show Hal   PRN.c1-REFL

        'Mary showed Hal to himself'   NB: Mary is showing Hal his image in the mirror

C11b'' ** Maríya_i a- bí- undá Hal_j Hal_j

       Mary   SM-PST2-show Hal   PRN.c1-REFL

        'Mary showed Hal to himself'   NB: Mary is showing Hal his image in the mirror

  c) Bill gave Hal X.   NB: Not applicable

  d) Bill gave X Hal.   NB: Not applicable

  e) Mary told/asked the boys about themsleves/each other.

  C11e') Maríya a- bí- pód- ól díló𝜸á_i/_j íɲuu yáβ_i/_j ɓɔ́-mɛ́dɛ́_i/_j

      Mary   SM-PST2-speak-OBL boys   for   their   PRN.c2-REFL

        'Mary told the boys about themselves_i/_j'

NB: Not applicable with 'ask' in Basaá.

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

  C11f') Maríya a- bí- ɓɔŋ lɛ́ **díló𝜸á**_i dí- yí- ná **tʃɔ́ ni tʃɔ́**_i

      Mary   SM-PST2-do   that boys   SM-know-RCM them CONN them

     'Mary managed to introduce the boys to each other/one another'

Literally: 'Mary did that the boys should know each other/one another'

NBA: As can be seen, from C11f', it is not possible to get a licit sentence parallel to the English one (i.e. with verbs like 'intoduce' or present').

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. Consider X=Hal in (C12).

  C12a) Bill talked about Hal to X.

  C12a') Bill_i a- bí- pód- ól Hal_j (íɲuu yê_i/_j) (nyɛ́-mɛdɛ́_i/_j/_k)

       Bill   SM-PST2-speak-OBL Hal   for   his/her (Poss)   him/her-REFL

        'Bill_i talked to Hal_j about himself_i/_j/_k'

NB: The sentence is still grammatical if either the expression *íɲuu ye* or the anaphor *nyɛ́-mɛdɛ́* is dropped. In other words, only one of them can be dropped, but not two of them at a time. Also, the sentence cannot be correct in a structure such as 'Bill talked Hal about Hal' i.e. if the NP 'Hal' is repeated, the structure becomes illicit.

    b) Mary talked about X to Hal.

    c) Mary talked to Hal about X

    d) Mary talked to X about Hal.

NB: If X stands for 'Hal' then, we obtain C12a' as a translation for C12b, C12c, and C12d. Also, note that if the NP 'Hal' in C12a' occupies the sentence final position, the resulting sentence is ungrammatical as can be seen below:

    C12e) ** Bill_i a- bí- pód- ól (íɲuu yê_i/_j) (nyɛ́-mɛdɛ́_i/_j/_k) Hal_j

        Bill   SM-PST2-talk-OBL   for his/her (Poss)   him/her-REFL   Hal

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.
C13a') Nick a- bí- seβêl ɲâŋ$_i$/$_j$ í siŋga
      Nick SM-PST2-call mother LOC thread
   'Nick$_i$ called his$_i$/$_j$ mother on the phone'

Note that the noun *ɲâŋ* denotes inherent possession i.e. when the possessor is third person singular, there is no need for having a possessive adjective such as 'his/her'. Also, as showed in the co-indexation, coreference can hold between 'Nick' and 'mother' or between another given /known discourse referent and the NP 'mother'.

    b) Nick combed X's hair.
C13b') Nick$_i$ a- bí-   pɛ́hɛ́l tʃôŋ tʃê$_i$/$_j$
     Nick SM-PST2-comb hair his
    'Nick$_i$ combed his$_i$/$_j$ hair'
C13b'') Nick$_i$ a- bí-   pɛ́hɛ́l ŋɔ́ (wê$_i$/$_j$)
     Nick SM-PST2-comb head his/her
    'Nick$_i$ combed his$_i$/$_j$ hair'
NB: In C13b'' above, the possessive *wê* 'his/her is optional. But if dropped, coreference holds only between 'Nick' and 'head' (his head).

    c) Nick spoke to X's boss.
C13c') Nick$_i$ a- bí- pód- ós nsâŋ wê$_i$/$_j$ nsɔ́n
     Nick SM-PST2-speak-OBL father his work (noun)
    'Nick$_i$/$_j$ talked to his$_i$/$_j$ boss'
    d) Nick put X's book on the table.
C13d') Nick$_i$ a- bí-   kes   káat yê$_i$/$_j$ í   ŋgî   téble
     Nick SM-PST2-put on book his   LOC above table
    'Nick$_i$ put his$_i$/$_j$ book on the table'
    e) The king gave Nick a prize in X's village.
C13e') ŋanɛ$_i$ a- bí- tí Nick$_j$ likebla í   lɔŋ   yê$_i$/$_j$/$_k$ (nyɛ́-mɛdɛ́
     king SM-PST2-give Nick gift LOC village/country his   him/her-REFL
    'The king$_i$ gave Nick$_j$ a gift in his$_i$/$_j$/$_k$ village'
NB: It is not easy to find out the word 'prize'
    f) The boys washed X's face.
C13f') Dilɔ́ɣá dí- bí- jowá Nick sú
     boys   SM-PST2-wash Nick face
   'The boys washed Nick's face'
C14a) Nick's father admires X.
Note in what follows that C14a' is marginally acceptable under the reading that Nick and the pronoun *nyɛ́* 'his/her' corefer as the questions marks behind the index $_i$?? show it. Rather if it is the case that 'Nick's father admires someone else apart from *Nick* himself' then the sentence is correct. In order to get a good sentence where *Nick* corefers with the pronoun *nyɛ́* 'him', 'Nick' should be presupposed/known/familiar in the discourse. In this case, 'Nick' should be a topic (here the topic is followed by a comma which represents a prosodic break) as can be seen in

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   C14a') nsâŋ   Nick_i a-   ḿ-   mɛmlɛ́ nyɛ́ ??_i/_j

        father   Nick SM-Pres admire him/her

      'Nick_i'father admires him_i/_j'

   C14a") **Nick_i**, nsâŋ   a-   ḿ- mɛmlɛ́ **nyɛ́_i**

         Nick   father SM-Pres-admire him

     'Nick_i, his_i father admires him_i'

    b) Nick's ambition destroyed X.

All the same, in the context of C14b, two scenari come into play. First of all, if the possessor 'Nick' and the possessed NP 'ambiton precede the coreferent pronoun, we obtain a marginal sequence (see C14b'). However if 'Nick' is topicalized, the result is successful whether the coreferent is a pronoun or a reflexive (see C14b''). Note that it is difficult to find out the word 'ambition' presently. In C14b''', it is shown that topicalization of 'Nick' and the anaphor *nyɛ́-mɛdɛ́* 'himself' (reflexive) at the same time is correct and resumption in the sentence final position is required (see that each topicalized element is followed by a comma). Another strategy consists in topicalizing the anaphor and the NP 'Nick' as a whole (here the comma follows the complex anaphor-Nick) in the order 'anaphor-Nick in C14b'''' (compare with C14b'' where the order Nick-anaphor is used). Finally C14b'''' shows that we can have topicalization in the order 'Nick-anaphor' and resumption in the sentence final position. But note that in terms of interpretation C14''' lays emphasis on 'Nick_i' and then on the anaphor **nyɛ́-mɛdɛ́_i** 'himself'. But in C14b'''' and C14b'''' we obtain the same interpretation i.e. focus is on the 'Nick himself' as a whole.

  C14b') Mahɔ́ŋɔ̂l má **Nick_i** má- bí-   tʃé   **nyɛ́** ??_i/_j

      thought   GEN Nick SM- PST2-destroy him

    'Bill's thoughts destroyed himself' Or Bill's thoughts destroyed someone else (known in the context).

C14b'') **Nick_i**, mahɔ́ŋɔ̂l mê má- bí- tʃé   **nyɛ́_i** / **nyɛ́-mɛdɛ́_i**

      Nick   thoughts his SM-PST2-destroy him /PRN.c1-REFL

      'Nick_i, his_i thoughts destroyed him_i/himself_i'

C14b''') **Nick_i**, **nyɛ́-mɛdɛ́_i**, mahɔ́ŋɔ̂l   mê_i má- bí- tʃé   **nyɛ́_i**

      Nick PRN.c1-REFL   thoughts his SM-PST2-destroy him

    'Literally: Nick himself_i, his thoughts destroyed him_i'

C14b'''') **nyɛ́-mɛdɛ́_i Nick_i**, mahɔ́ŋɔ̂l mê_i má- bí- tʃé   **nyɛ́_i**

      PRN.c1-REFL   Nick thoughts his   SM-PST2-destroy him

'Nick himself$_i$, his$_i$ thoughts destroyed him$_i$' Literally: Himself$_i$ Nick$_i$, his$_i$ thoughts destroyed him$_i$'

C14b''''') **Nick$_i$** **nyɛ́-mɛdɛ́$_i$**, mahɔ́ŋɔ̂l   mê$_i$ má- bí-   tʃé   **nyɛ́$_i$**

        Nick PRN.c1-REFL   thoughts his SM- PST2-destroy him

        'Nick himself$_i$, his thoughts destroyed him$_i$'

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

As can be seen below, in a sentence like C14c' three interpretations are possible.

C14c') [ɲâŋ   Nick$_i$]$_j$ a- bí- nuŋûl litowá jê$_i$/$_j$/$_k$

     mother Nick SM-PST2-sell   car   his/her

    'Nick's mother sold Nick's car Or 'Nick's mother sold his (Nick's mother) own car' Or 'Nick's mother sold someone else car'

Another possibility consists in topicalizing 'Nick' and in this case a wide range of interpretations are possible as can be seen in C14c'' below. In C14b''' below *Nick* and the anaphor ***nyɛ́-mɛdɛ́$_i$*** 'himself' are topicalized separately (see the commas following each of them) because focus is on each of them separately. Both C14b'''' and C14b''''' have the same meaning. As can be seen C14b'''' and C14''''' involve topicalization of the whole anaphor-Nick or Nick-anaphor.

C14c'') **Nick$_i$**, ɲâŋ$_i$ a- bí- nuŋûl litowá jê$_i$/$_j$/$_k$

     Nick   mother SM- PST2-sell   car   his/her

   'Nick$_i$, his$_i$ mother sold his$_i$ car' Or 'Nick$_i$, his$_i$ mother sold someone else car'

C14c''') **Nick$_i$**, **nyɛ́-mɛdɛ́$_i$**, ɲâŋ$_i$ a- bí- nuŋûl litowá jê$_i$/$_j$/$_k$

     Nick   PRN.c1-REFL   mother SM-PST2-sell   car   his/her

  'Nick$_i$ himself$_i$, his$_i$ mother sold his$_i$ car' Or 'Nick himself, [his$_i$ mother]$_j$ sold her$_j$ (Nick's mother) own car'

C14b'''') **Nick$_i$** **nyɛ́-mɛdɛ́$_i$**, ɲâŋ$_i$ a- bí- nuŋûl litowá jê$_i$/$_j$/$_k$

      Nick   PRN.c1-REFL   mother SM-PST2-sell   car   his/her

  'Nick$_i$ himself$_i$, his$_i$ mother sold his$_i$ car (Nick's car)' Or 'Nick$_i$ himself$_i$, [his$_i$ mother]$_j$ sold her$_j$ own car' Or 'Nick himself, his mother sold someone else car'

  C14b''''') **nyɛ́-mɛdɛ́$_i$** **Nick$_i$**, ɲâŋ$_i$ a- bí- nuŋûl litowá jê$_i$/$_j$/$_k$

        PRN.c1-REFL   Nick   mother SM-PST2-sell   car   his/her

  'Nick$_i$ himself$_i$, his$_i$ mother sold his$_i$ car (Nick's car)' Or 'Nick$_i$ himself$_i$, [his$_i$ mother]$_j$ sold her$_j$ own car' Or 'Nick himself, his mother sold someone else car' 'Literally: Himself$_i$ Nick$_i$, [his$_i$ mother]$_j$ sold his$_i$/$_k$/her$_j$ car'

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

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

  X20a' dilɔ́ɣá dí- bí-   téé-ná   βítitî

     boys   SM-PST2-see-RCM pictures

    'The boys saw pictures of each other/one another'

    b) Mary told the boys about pictures of themselves/each other/them

  X20b' Maríya a- bí-   pód- ól   dilɔ́ɣá$_i$ βítitî   gwâβ$_i$/$_j$ ɓɔ́+mɛdɛ́$_i$/$_j$

     Mary   SM-PST2-speak-OBL boys   pictures their   them+selves

'Mary told the boys about pictures of themselves/each other/one another'
     c) The politicians planned attacks against each other.

X20c' [ɓôt   ɓá mɓâŋ]ᵢ (ɓɔ́ ni   ɓɔ́)ᵢ ɓá- bí- nâŋ- ná βísaŋ (ɓɔ́ ni   ɓɔ́)ᵢ
    people GEN politics them CONN them SM-PST2-invite-RCM fights them CONN them
   Literally: 'The politicians invited each other/one another to battles'

Note that the string (*ɓɔ́ ni ɓɔ́*)ₗ which can literally translated as 'among them' can be preceded by the compound NP *ɓôt ɓá mɓâŋ* 'politicians' or can be sentence final.
    d) The politicians faked/simulated attacks against themselves/them.
NB: Difficult to find out the equivalent of 'fake' or 'simulate'

4.1.2.7 Demoted arguments -
Example: (C15a-c) have been passivized. If your language has passive, construct reflexive and non-reflexive versions of each one as above. For English, the <u>by</u>-phrases in (C15a,b) are not interpretable as "alone" (see 3.6) and are not generally regarded as acceptable with <u>by herself</u>.

   C15a) Polly was praised by X
   C15a' Pollyᵢ a- bí- ɓéɣês nyɛ́-mɛdɛ́ᵢ
       Polly SM-PST2-praise PRN.c1-REFL
     'Pollyᵢ praised himselfᵢ'
Note that only a reflexive reading can be obtained from C15a, a passive construction is not possible with the *ɓéɣês* 'praise'.
    b) Polly was helped by X
  C15b' Pollyᵢ a- bí- hól- ɓá (nyɛ́-mɛdɛ́ᵢ)
      Polly SM-PST2-help-PASS PRN.c1-REFL
     'Pollyᵢ was helped by herselfᵢ'
    c) Little is known by Polly about X (X = Polly)
  C15b'' ndeɣ i- ń- yí- βá ni Pollyᵢ íɲuú yêᵢ (nyɛ́-mɛdɛ́ᵢ)
      little SM-Pres-know-PASS by Polly for her PRN.c1-REFL
    'Little is known by Pollyᵢ about herselfᵢ'

C15b '' ndeɣ yɔ̌-n i- ń- yí- βá ni Pollyᵢ íɲuú yêᵢ (nyɛ́-mɛdɛ́ᵢ)
    little it-FOC SM-Pres-know-PASS by Polly for his PRN.c1-REFL
   'Little is known by Pollyᵢ about herselfᵢ' Literally: 'What is known by Polly about himself is little OR 'It is little which is known by Polly about himself'
Note that C15b can have two different structures, but the difference is that the second one i.e. C15b'' is focused (the adjective 'little is focused in the language) as the literal translation shows it.
  d) The wax melted itself
C15d' [βihómbôl βí máɓâm]ᵢ bí- bí- suɣi (gwɔ́+mɛdɛ́ᵢ)
    wax   SM-PST2-melt.PASS them+selves
     'The wax melted itself'
Note that the verb *suɣi* 'melt' is inherently focused in Basaá although the passive morpheme remains implicit.

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.

    C16a) I saw X.

Unless my understanding is wrong, let us consider the following examples.

    C16a' Mɛ$_i$ bí- tɛ́hɛ́ mɛ+mɛdɛ́
          I   PST2-see me-REFL
        'I saw myself (I in person saw)'

      b) You saw X. (etc.)

    C16a'' U$_i$ bí-   tɛ́hɛ́ wɛ+mɛdɛ́$_i$
          you PST2-see   you-REFL
          'You saw yourself (you in person saw)'

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

If X stands 'I' or 'Me' in the context, let us consider the following examples.

    C17a) I washed X.

    C17a' Mɛ$_i$ bí-   nɔ́ɣɔ̂β (mɛ+mɛdɛ́$_i$)
          I   PST2-wash   me-REFL
      'I washed (myself)'

      b) I hate X.

    C17b' Mɛ$_i$ ŋ́- ɔɔ́- ɓá   (mɛ+mɛdɛ́$_i$)
          I   Pres-hate-REFL me-REFL
       'I hate (myself)'

      c) I told John about X

    C17c' Mɛ bí- pód-   ôl (mɛ+mɛdɛ́$_i$) Yóhanɛs (mɛ+mɛdɛ́$_i$)
          I   PST2-speak/talk-OBL me-REFL   John   me-REFL
       'I told John about myself'

NB: Here the anaphor can precede or follow Yóhanɛs 'John' but it is not optional.

      d) I saw a snake near X

    C17d' Mɛ$_i$ bí- tɛ́hɛ́ ɲɔɔ́   í   pâŋ yêm$_i$
          I   PST2-see   snake LOC side my
       'I saw a snake near me' Literally: 'I saw a snake on my side'

      e) I am liked by X.

    C17e' Mɛ$_i$ ŋ́- gwɛ́s-ɓá   (mɛ+mɛdɛ́$_i$)
          I   Pres-like-REFL.PASS me-REFL
        'I am liked by myself'

Note that in C17e' above the morpheme -ɓa encodes reflexivity and passive at the same time.

      f) I telephoned X's mother

    C17d' Mɛ$_i$ bí- séβêl ńní$_i$ í   siŋga
          I   PST2-call   mother LOC   thread
       'I call my mother on the phone'

NB: As already mentioned in the preceding sections, the item 'mother' in Basaá is has an inherent possession i.e. it changes depending on the possessor. For instance if the possessor is the first person singular ME, the item should be *ńní* as in C17d' above (the same item is used if the possessor is the first person plural US). If the possessor is the second person singular or the second person plural 'YOU' the item should be *ɲŭŋ*. Finally, if the possessor is third person singular HIM/HER or third person plural 'THEM' the item is *ɲâŋ*. As a result, the items *ńní, ɲŭŋ*

and *ɲâŋ* denote the same entity namely 'mother' depending on the possessor.

      g) My father admires X

C17g' (ta)tá$_i$ a- ḿ- mɛmlɛ́ mɛ̂$_i$
    father SM-Pres-admire me
      'My father admires me'

In the same vein the item 'father' in Basaá varies depending on the possessor. So, *(ta)ta'* is used if the possessor is first person singular ME or first person plural 'US' *nsɔ́ŋ* is used for second person singular 'YOU' and second person plural 'YOU' while *nsâŋ* when the possessor is third person singular or plural namely 'HIM/HER and 'THEM'.

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

In order to have an approximate sentence to C18a, I will use 'life' instead of 'history' because it is easier to convey the message appropriately with the former than with the latter. The word for 'history' is more complex and might not convey the meaning appropriately. Note also that the presence of the anaphor (reflexive) leads to marginal acceptability.

    C18a' **Niŋ**$_i$ í ń- timba (?? **yɔ́+mɛdɛ́**$_i$)
      Life SM-Pres-repeat it-REFL
        'Life repeats itself'
      b) This type of fish cannibalizes X

  C18b' míntén mí tʃɔ́βí míní mí- ń- **jɛ́-ná** (mɔ́ ni mɔ́)
      types GEN fish these (DEM) SM-Pres-eat-RCM them CONN them
      This kind of fish cannibalizes' Literally: 'These kinds of fish eat each other/one another'

Note that DEM stands for 'demonstrative'. As can be seen, the verb *timba* 'repeat' is inherently reflexive.

      c) This machine destroys X (e.g., after you use it)
        í kɛɣ$_i$ íní í- ń́- oβi (yɔ́+mɛdɛ́$_i$)
  C18c' DEF machine this (DEM) SM-Pres-destroy (one-REFL)
      'This machine destroys itself' OR
  C18c" í kɛɣ$_i$ íní í- ń tímbá (yɔ́+mɛdɛ́$_i$)
      DEF machine this (DEM) SM-Pres-destroy (one-REFL)
      'This machine destroys itself'

In C18c' and C18c" both *oβi* and *tímbá* are synonymous. All the same, these verbs are inherently reflexive and this can be clearly understood by the fact that they optionally select anaphors.

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

a) *Personal pronouns subject*   b) *Personal pronouns object*
 Mɛ 'I'   Mɛ 'Me'
 U 'you'   wɛ 'you'

A 'He/she'	nyɛ́ 'her/him'
Di 'we'	ɓɛ̌s 'us'
Ni 'you (pl.)'	ɓɛ̌ 'you (pl.)'
ɓá 'they'	ɓɔ́ 'them'

c) *Possessive pronouns*

w-ɛ̀m 'mine'	w-ɔ̌ŋ ,yours (2. Pers. Sing)
w-ě 'his/her'	w-ěs 'ours'
nân 'yours (2.pers. pl)	w-ǎp 'theirs'

Note that since ɓasàá is a noun class language like many African languages, there is always morphological agreement between the head noun and its satellites (adjectives, possessives, demonstratives, numerals etc.) within the noun phrase/Determiner phrase. For instance, in a noun phase like *malet̚ w-ɛ̂m* "my teacher", the agreement morpheme *w-* corresponds to class one in this language and is invariable in person and number (apart from *nân* "yours" whereas the possessive adjective marker *–ɛ̂m* varies depending on the noun class, person and number. Keep also in mind that possessive adjectives and possessive pronouns in this language are homophonous. For instance:

    (i)   mǎn **w-**   **w-ɔ̂ŋ-** a   ye hɛ́ɛ́

    child Agreement Marker-possessive- SM   be   where

         "Where is your child?"

    (ii)   **w-**   **w-ɔ̂ŋ-** a ye hɛ́ɛ́ ?

     Agreement Marker-Possessive SM be   where

    "Where is yours?"

    There are about 13-24 noun classes in ɓasàá in such a way thatto each noun class corresponds a specific agreement marker.

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.

  C19a' híkií   mudaá$_i$ a-bí-tɛ́hɛ́   nyɛ́-mɛdɛ́$_i$

    each/every woman SM-PST2-see her/him+self

 'Every woman$_i$ saw herself$_i$' OR 'Every woman$_i$ saw him$_j$/herself$_j$'   OR

  C19a'' híkií   mudaá$_i$ a- bí- **téé-ɓa** (nyɛ́-mɛdɛ́$_i$)   NB: Optional reflexive

     each/every woman SM-PST2-see-REFL

    b) Every child washed X.

  C19b' híkií   mààŋgé$_i$ a- bí- nɔ́ɣɔ̂β (nyɛ́-mɛdɛ́$_i$)

    each/every child   SM-PST2-wash   PRN.c1-REFL

      'Each/every child$_i$ washed (himself$_i$)

  c) Every student hates X.

  C19c' híkií   ŋúdú a- ŋ́- ɔɔ- ɓa

    each/every student SM-Pres-hate-REFL

    'Every students hates himself'

  C19c'' híkií   ŋúdú$_i$ a- ŋ́- ɔɔ ɲú yê$_i$ nyɛ́-mɛdɛ́$_i$

     each/every student SM-Pres-hate body his/her him/her-REFL

'Every student hates himself' OR Literally: 'Every student hates his/her own body'

C19c''' híkií ŋúdúᵢ a- ŋ́- ɔɔ ɲú yêᵢ
   each/every student SM-Pres-hate body his/her

'Every student hates himself' OR Literally: 'Every student hates his/her own body'

C19c'''' híkií ŋúdúᵢ a- ŋ́- ɔɔ nyɛ́-mɛdɛ́ᵢ/ⱼ
   each/every student SM-Pres-hate him/her-REFL

    'Every student hates himself'

NB: Note that in C19c'' there is a simultaneous use of the expression *ɲú yê* (literally 'his own body') and the reflexive *nyɛ́-mɛdɛ́* 'him/herself', but in C19c''' and C19c'''' each expression is used separately. However, the meaning is the same even if at the level of interpretation C19'''' the reflexive *nyɛ́-mɛdɛ́ᵢ/ⱼ* 'his/herself' can corefer either with the subject 'student' or with some other referent in the discourse.

   d) Every child saw a snake near X.

C19d' híkií màaŋgɛ́ᵢ a- bí- tɛ́hɛ́ ɲɔɔ í pâŋ yêᵢ/ⱼ (nyɛ́-mɛdɛ́ᵢ/ⱼ)
   each child SM-PST2-see snake LOC side his/her him/her-REFL
   'Every childᵢ saw a snake near himᵢ/ⱼ'

C19d'' híkií màaŋgɛ́ᵢ a- bí- téé ɲɔɔ í pâŋ yêᵢ/ⱼ (nyɛ́-mɛdɛ́ᵢ/ⱼ)
   each child SM-PST2-see+OBL snake LOC side his/her him/her-REFL
   'Every childᵢ saw a snake near himᵢ/ⱼ'

C19d''' híkií màaŋgɛ́ᵢ a- bí- téh-él ɲɔɔ í pâŋ yêᵢ/ⱼ (nyɛ́-mɛdɛ́ᵢ/ⱼ)
   each child SM-PST2-see-OBL snake LOC side his/her him/her-REFL
   'Every childᵢ saw a snake near himᵢ/ⱼ'

NB: Keep in mind that although we have three different sentences for C19d, one obtains the same interpretation. The difference is at the level of the morphology of the verb tɛ́hɛ́ 'see'which can be realized differently. In C19d'' the oblique morpheme is implicit but explicit in C19d'''.

   e) Every child telephoned X's mother.

C19e' híkií màaŋgɛ́ᵢ nyɛ́-mɛdɛ́ᵢ a- bí- seβêl ɲâŋᵢ í siŋga
   each/every child him/her-REFL SM-PST2-call mother LOC thread
   'Every child telephoned his own mother'

NB: Remember that the item *ɲâŋ* 'mother bear inherent possession and varies according to the possessor (the same as the item 'father'in the language).

   e) Every child's father admires X.

C19e' híkií màaŋgɛ́ᵢ, nsâŋ a- ḿ- mɛmlɛ́ nyɛ́ᵢ
   each/every child father SM-Pres-admire him/her
   'Every childᵢ's father admires himᵢ' Literally: Every childᵢ, hisᵢ father admires himᵢ'

As can be seen in C19e' above the quantified nominal *híkií màaŋgɛ́* 'every child' has to be topicalized.

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

C19f) mudaáᵢ tɔ- wa-dá a- bí- tɛ́hɛ́ ɓéé nyɛ́-mɛdɛ́ᵢ/ⱼ
   woman no-AGR-dá SM-PST2-see NEG him/her-REFL
   'No woman saw herself'

C19f') mudaáᵢ tɔ- wa- dá a- bí- téé-ɓá ɓéé (nyɛ́-mɛdɛ́ᵢ/ⱼ)
   woman no-AGR-dá SM-PST2-see-REFL NEG him/her-REFL

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'No woman saw herself'

C19g) maaŋgέᵢ tɔ- wa-dá   a- bí- nɔɣɔ̂β ɓéé (nyέ-mɛdέᵢ/ⱼ)
      child   no-AGR-dá SM-PST2-wash   NEG   him/her-REFL
        'No child washed himself?'

C19h) ɲúdúᵢ   tɔ- wa-dá a- ŋ́- ɔɔ   ɓéé   (nyέ-mɛdέᵢ/ⱼ)
      student no-AGR-dá SM-Pres-hate NEG   him/her-REFL
      'No student hates himself'

C19h') ɲúdúᵢ   tɔ- wa-dá a- ŋ́- ɔɔ- ɓa   ɓéé   (nyέ-mɛdέᵢ/ⱼ)
       student no-AGR-dá SM-Pres-hate-REFL NEG   him/her-REFL
       'No student hates himself'

C19i) maaŋgέᵢ tɔ-wa- dá a- bí- tέhέ ɓéé ɲɔɔ   í   pâŋ yêᵢ/ⱼ (nyέ-mɛdέᵢ/ⱼ)
      child   no-AGR-dá SM-PST2-see NEG snake LOC side his/her him/her-REFL
        ' No child saw a snake near him/herself'

C19i')
maaŋgέᵢ tɔ-wa- dá a- bí- téé   ɓéé ɲɔɔ   í   pâŋ yêᵢ/ⱼ (nyέ-mɛdέᵢ/ⱼ)
 child   no-AGR-dá SM-PST2-see.OBL NEG snake LOC side his/her him/her-REFL
        ' No child saw a snake near him/herself'

As illustrated above, the negative quantifier 'no' in Basaá is a complex word made up of a negative morpheme *tɔ*'no' an agreement morpheme (AGR-) which varies depending on the noun class of the negated noun and the morpheme *dá* (whose real meaning is unspecified here). Also since all negated noun above are from class one in the Basaá noun class system (they denote kinship) the agreement morpheme occurring in-between the negative morpheme *tɔ* 'no' and the morpheme *dá* is *-wa-*. Also, note that the reflexive (anaphor) is optional. Two examples are provided for 'no woman washed' because of two available strategies namely one without a reflexive morpheme (C19f) and the other one with a reflexive (C19f'). In like manner, the same two strategies are used for 'no child hates himself' (see C19h and C19h')
NB: NEG stands for 'NEGATION' and as can be observed, the complex negative item *tɔ-wa-dá*, which I considered as an NPI by default always co-occurs with the negative marker *ɓéé* like any other negative polarity item such as *tɔmut* 'nobody' *tɔyɔ̆m* 'nothing' *tɔkíí 'anything'* etc. In C19i'the oblique marker is implicit.
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?
 C20a' njέέᵢ a- bí- tέhέ nyέmɛdέᵢ
        who SM-PST2-see   him/her-REFL
        'Whoᵢ saw him/herselfᵢ?'
 C20a'' njέέᵢ a- bí- téé-ɓa
      who SM-PST2-see-REFL
      'Whoᵢ saw him/herselfᵢ?'
      b) Who washed X?
 C20b' njέέᵢ a- bí-   nɔɣɔ̂β (nyέ-mɛdέᵢ
        who SM-PST2-wash   him/her-REFL

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'Who_i washed himself_i?'

       c) Who saw a snake near X?

C20c' njɛ́ɛ́_i a- bí- tɛ́hɛ́ ɲɔ́ɔ́ í pâŋ yê_l (nyɛ́-mɛdɛ́_i)
     who SM-PST2-see snake LOC side his/her him/her-REFL

  'Who saw a snake near himself?' Literally: 'Who saw a snake beside himself?'

C20c'' njɛ́ɛ́_i a- bí- téé ɲɔ́ɔ́ í pâŋ yê_l (nyɛ́-mɛdɛ́_i)
     who SM-PST2-see+OBL snake LOC side his/her him/her-REFL

     'Who saw a snake near himself/' Literally: 'Who saw a snake beside himself?'

C20c''' njɛ́ɛ́_i a- bí- téé-nɛ́ ɲɔ́ɔ́ í pâŋ yê_l (nyɛ́-mɛdɛ́_i)
     who SM-PST2-see-OBL snake LOC side his/her him/her-REFL

     'Who saw a snake near himself/' Literally: 'Who saw a snake beside himself?'

NB: All sentences in C20 above convey the same meaning. Please see comments below C19 above.

       d) Who telephoned X's mother?

C20c'''' njɛ́ɛ́_i a- bí- seβêl ɲâŋ_i í siŋga
      who SM-PST2-call mother LOC thread

      'Who telephoned his mother' Literally: 'Who called his/her mother on the phone?'

       e) Whose father admires X?

C20e' njɛ́ɛ́_i nsâŋ_i/_j nyɛ́-mɛdɛ́_i/_j a- ḿ- mɛmlɛ
     who father him/her-REFL SM-Pres-admire

     'Whose father admires him/herself?' OR literally 'Who_i does his_i/_j father admires?'

Note that in C20e' coreference can holh between the wh-phrase *njɛ́ɛ́* 'who'the NP *nsâŋ* 'father and the reflexive *nyɛ́-mɛdɛ́* ' him/herself' or between the reflexive, and another discourse entity and 'father'. The same holds for C20e'' below.

C20e'' njɛ́ɛ́_i nyɛ́-mɛdɛ́_i/_j nsâŋ_i/_j a- ḿ- mɛmlɛ
     who him/her-REFL father SM-Pres-admire

     'Whose father admires him/herself?'

4.1.3.6 Reverse binding - In the following examples, the full NP ('antecedent') appears in the lower (prototypically, object) position. Try to translate these into your language. It is expected that many sentences constructed in this section, possibly all, will be unacceptable in many languages (as *<u>Himself saw Fred</u> is in English). Naturally, any examples which are not ungrammatical are of particular interest.

  C21a) X saw Fred.

  C21a') Nyɛ́-mɛdɛ́_i Tɔ́nyɛ́_i a- bí- téé- ɓa
     PRN.c1-REFL Tɔnyɛ́ SM-PST2-see-REFL

   'Tɔnyɛ́ himself' OR Literally: Tɔnyɛ́ (in person) saw himself'

C21a''* Nyɛ́-mɛdɛ́_i a- bí- téé- ɓa Tɔ́nyɛ́_i
     PRN.c1-REFL SM-PST2-see-REFL Tɔnyɛ́

Intended: 'Tɔnyɛ́ himself' OR Literally: Tɔnyɛ́ (in person) saw himself'

NB: In the case of C21a' above, focus is on the anaphor. This is a sort of emphatic construction which might convey a contrastive reading (e.g Tɔnyɛ́ HIMSELF (in person),but not someone

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else.). Again, it is not possible to have the full NP (antecedent at the end of the clause) as the ungrammaticality of C21a'' shows it.

       b) X saw us. (X=us)

C21b is not applicable

       c) X saw a snake behind Fred.

C21c'' Nyέ-mɛdέᵢ Tɔ́nyέᵢ a- bí- téé   ɲɔ́ɔ í   pâŋ yêᵢ

     PRN.c1-REFL   Tɔ́nyέ SM-PST2-see.OBL snake LOC side his

    'Tɔ́nyέ saw himself' Literally: Tɔ́nyέ (in person) saw himself'

Comment below C21a above also applies to C21c

       d) X impressed Fred

Difficult to process

       e) Bill spoke to X about Fred.

C21e') Ewasᵢ a- bí-   pód- ɔ́ l   nyέ-mɛdέⱼ Tɔ́nyέⱼ íɲuu yêᵢ/ⱼ/ₖ

         Ewas SM-PST2-speak-OBL PRN.c1-REFL   Tɔ́nyέ for   his/her

  'Ewasᵢ talked about himselfᵢ to Tɔ́nyέ' 'Ewas talked to Tɔ́nyέ about someone else' 'Ewas talked about Tɔ́nyέⱼ to himselfᵢ'

       f) Bill told X about Fred

 C21f) Ewasᵢ a- bí-   pód- ɔ́ l   nyέ-mɛdέⱼ Tɔ́nyέⱼ íɲuu yêᵢ/ⱼ/ₖ

         Ewas SM-PST2-speak-OBL PRN.c1-REFL   Tɔ́nyέ for   his/herf

  'Ewasᵢ talked about himselfᵢ to Tɔ́nyέ' 'Ewas talked to Tɔ́nyέ about someone else' 'Ewas talked about Tɔ́nyέⱼ to himselfᵢ'

Note that CC21e and C21f' are the same in Basaá.

   g) X was praised by Fred.

Not applicable

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

Note applicable.

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.

C22a' Nyέ-mɛdέᵢ Tɔ́nyέᵢ a- bí- seβêl ɲâŋᵢ/ⱼ í   siŋga

       PRN.c1-REFL   Tɔ́nyέ SM-PST2-call   mother LOC thread

  'Tonyeᵢ himselfᵢ called hisᵢ/ⱼ mother' Literally: Tɔ́nyέᵢ (in person) called hisᵢ/ⱼ mother on the phone'

Note that at this level, it is not possible to have the antecedent at the end of the clause as already mentioned in previous sections.

       b) X's mother wanted to improve George.

In C22b' below, there is topicalization of the whole nominal chunck *Nyέ-mɛdέᵢ Tɔ́nyέᵢ* 'Tɔ́nyέ himself' or in person but, as already known, the antecedent cannot close off the sentence.

C22b') Nyέ-mɛdέᵢ Tɔ́nyέᵢ, ɲâŋᵢ/ⱼ a-   bí-   sómbôl héŋêl   nyέᵢ/ⱼ

       PRN.c1-REFL   Tɔ́nyɛ́ mother SM-PST2-want   change/improve him

'Tɔ́nyɛ́$_i$ himself$_i$, his$_i$ mother (Tɔ́nyɛ́'s mother or someone else (known in the context) mother) wanted to improve him$_i$/$_j$ (Tɔ́nyɛ́ or someone else known in the context)

      c) X's mother worried/impressed George.

C22c') Nyɛ́-mɛdɛ́$_i$ Tɔ́nyɛ́$_i$, ɲâŋ$_i$/$_j$ a- bí- toŋ- ɓá íɲuu yê$_i$/$_j$
       PRN.c1-REFL   Tɔ́nyɛ́ mother SM-PST2-worry-REFL for his/her

     'Tɔ́nyɛ́$_i$'s mother worried about him$_i$/$_j$'

In C22c' there is topicalization of the whole nominal chunk *Nyɛ́-mɛdɛ́$_i$ Tɔ́nyɛ́$_i$* 'Tɔ́nyɛ́ himself' or in person, but coreference can hold between either 'mother' and *Tɔ́nyɛ́* or between 'mother' and some other name in the discourse'

      d) Mary told X's mother about George.

C22d') ?? Maríya a- bí- pód-ól ɲâŋ$_i$ Tɔnyɛ́$_i$ íɲuu Tɔnyɛ́$_i$ (nyɛ́-mɛdɛ́$_i$)
       Mary SM-PST2-speak-OBL mother T.   for his/her PRN.c1-REFL

     'Mary$_i$ talked to Tɔnyɛ́$_j$'s mother about him$_i$/$_j$/$_k$' 'Literally:

C22d'') Tɔnyɛ́$_i$, Maríya$_j$ a- bí- pód- ól ɲâŋ$_i$ íɲuu yê$_i$/$_j$/$_k$
      T.   M.   SM-PST2-speak-OBL mother for his/her

      'Tɔnyɛ́$_i$, Mary$_j$ spoke to his$_i$ mother about him/her$_i$/$_j$/$_k$'

C22d''') nyɛ́-mɛdɛ́$_i$ Tɔnyɛ́$_i$, Maríya a- bí- pód- ól ɲâŋ$_i$ íɲuu yê$_i$/$_j$/$_k$
       PRN.c1-REFL T.   M.   SM-PST2-speak-OBL mother for   his/her

     'Tɔnyɛ́$_i$ himself$_i$, Mary$_j$ talked to his$_i$/$_j$/$_k$ mother about him/her$_i$/$_j$/$_k$'

C22d'''') Tɔnyɛ́$_i$ nyɛ́-mɛdɛ́$_i$, Maríya a- bí- pód- ól ɲâŋ$_i$ íɲuu yê$_i$/$_j$/$_k$
       T.   PRN.c1-REFL M.   SM-PST2-speak-OBL mother for   his/her

     'Tɔnyɛ́$_i$ himself$_i$, Mary$_j$ talked to his$_i$/$_j$/$_k$ mother about him/her$_i$/$_j$/$_k$'

Note that C22d' is marginally acceptable. C22d'', C22d''' as well as C22d'''' are instances of topicalization (see also previous comments).

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

C22e') Tɔnyɛ́$_i$ nyɛ́-mɛdɛ́$_i$, ɲâŋ$_i$ titíí yê$_i$/$_j$/$_k$ í- bí- kwel nyɛ́$_i$/$_j$/$_k$
      T.   PRN.c1-REFL mother picture his/her SM-PST2-fall on him/her

  'A picture of Tɔnyɛ́$_i$s mother fell on him/her$_i$/$_j$/$_k$' 'Literally: 'Tonyɛ́$_i$ (in person), his mother's picture fell on him/her$_i$/$_j$/$_k$'

      f) A picture of X's mother pleased George.

C22f') Tɔnyɛ́$_i$ nyɛ́-mɛdɛ́$_i$, ɲâŋ$_i$ titíí yê$_i$/$_j$/$_k$ í- bí- lémél nyɛ́$_i$/$_j$/$_k$
       T.   PRN.c1-REFL mother picture his/her SM-PST2-please him/her

  'A picture of Tɔnyɛ́$_i$s mother$_j$ pleased him/her$_i$/$_j$/$_k$'

Please, have a careful look at co-indexation which enables one to have an idea about coreference.

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.

  C23a) ɓodaá$_i$ ɓá- bí- hól- ná (ɓɔ́ ni ɓɔ́)$_i$
     women SM-PST2-help-RCM them CONN them

    'The women helped each other/one another/themseves'

  C23a') ɓodaá$_i$ ɓá- bí- hólá ɓɔ́-mɛdɛ́$_i$

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women SM-PST2-help PRN.c2-REFL

'The women helped themseves'   Literally: 'The women help

Note that in C23a, there is a reciprocal reading while in C23a' we don't have such a reading, rather, what we obtain is a reflexive meaning.. Note that the base form of the verb 'help' is *hoɁá* like in C23a' but due category changing, the last vowel *á* of the base is deleted before the reciprocal morpheme get attached to the verbal root.

Which of the following meanings can this example have?

   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.

C23a corresponds to C24b,and C24c, while C24a' corresponds to C24e and probably C24d and C24f.

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

   C25a) The women praised X.
   C25a' ɓodaá$_i$ ɓá- bí-   ɓéɣês ɓɔ+mɛdɛ́$_i$
      women SM-PST2-praise PRN.c2-REFL

   'The women praised themselves' Literally: 'The women as a group praised themselves as a group'/ Each woman of the group praised the other women of the same group including herself'.

         C25a'' ɓodaá$_i$ ɓá- bí- ɓéɣ- há   (ɓɔ+mɛdɛ́$_i$)
            women SM-PST2-praise-RFM.RCM PRN.c2-REFL

   'The women praised each other/one another Literally: 'The women as a group praised themselves as a group'/ Each woman of the group praised the other women of the same group including herself'.

NB: Note that in C25a'' we have an instance of a reciprocal reflexive i.e. the women did not only praise themselves but also, praised each other/one another.

 b) The women will support X.
C25b') ɓodaá$_i$ ɓá- bí-hónɓá-ná   (ɓɔ ni   ɓɔ́$_i$)
        women SM-PST2-support-RCM   them CONN them

        'The women supported each other/one another'
C25b'') ɓodaá$_i$ ɓá- bí-hónɓá-ná   ɓɔ+mɛdɛ́$_i$
         women SM-PST2-support-REFL PRN.c2-REFL

        'The women supported themselves' Literally: 'Each woman of the group supported herself" and 'each woman of the group supported other women of the same group'/'The women as a group supported the whole group (nobody out of the group should not help them'

Note that the morpheme –*ná* is multifunctional i.e. it encodes reciprocity (C25b') and reflexivity (C25b'').

        c) The women photographed X.
C25c') ɓodaá$_i$ ɓá- bí- ot-   ná bítitíi (ɓɔ ni   ɓɔ́$_i$)
         women SM-PST2-photograph-RCM pictures them CONN them

'The women photographed each other/one another' i.e. 'Each woman of the group photographed at least one woman of the same group'

C25c'') ɓodaá_i ɓá- ɓí- ot   ɓɔ́-mɛdɛ́_i ɓítitíi
       women SM-PST2-photograph PRN.c2-REFL pictures
 'The women photographed each other/one another' i.e. 'Each woman of the group photographed at least one woman of the same group'
     d) The women betrayed X.
C25d') ɓodaá_i   ɓá- ɓí-sɔhɓɛ́-nɛ́   ɓɔ́-mɛdɛ́_i
      women SM-PST2-betray-RCM PRN.c2-REFL
     'The women betrayed themselves' i.e. 'The women as a group betrayed their own group'/
C25d'') ɓodaá_i   ɓá- ɓí-sɔhɓɛ́-nɛ́   ɓɔ́   ni   ɓɔ́_i
      women SM-PST2-betray-RCM them CONN them
     'The women betrayed each other/one another' OR 'Each woman of the group betrayed at least one woman of the same group'

NB: Here again, note that the morpheme *nɛ́* is multifunctional in that it conveys reflexivity as well as reciprocity.

In light of these observations, which of the local coreference strategies in your language permit only reciprocal readings, which ones permit only reflexive readings, and which ones permit both?

     If this strategy can have both reflexive and reciprocal readings, can you think of some predicates in which it is ambiguous? For example, in German, <u>Die Kinderen wassen sich</u> can mean either "the children are washing themselves" or "the children are washing each other."

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

No verb in the language allows for readings such as C24a and C24f.

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

  C26) "meet", "see", "fight", "speak", "hit"

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.")

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.

b) The women praised X.

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

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

    C30) Bill and Mary think that they like X.

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.

Note that the following sentences in C31a' and C31b' express simultaneity (glossed as SIMUL) rather than reciprocity or reflexivity.
    C31a) The baboons left together
C31a') βinuɣá βí- bí- ki- **ha**
      animals SM-PST2-leave/go-SIMUL
    'The animals left together'
      b) The baboons ate fish together
C31b') ŋgwɔ́ í- bí- jé- **há** ńlámb
      dogs SM-PST2-eat-SIMUL meat
    'The dogs ate meat together'
Note that the simultaneous morpheme may bear a high or low tone depending on the argument structure of the predicate. If the verb is intransitive, there is no tone on it, but when the verb is transitive, this morpheme bears a high tine. Note also that the original forms of the verbs 'leave' and 'eat' are $k\varepsilon$ and $j\acute{\varepsilon}$ and respectively. But due to simultaneity formation these verbs change the basic vowel ε into i and e respectively.
4.1.4.4 Antipassive readings
    C32a) That panther bites people.
    C32a') í njeé i i- ŋ́- ɔ́β- **βa**
        DEF panther that (DEM) SM-Pres-bite-A.PASS
      'That panther bites (people or anything else)'
    C32a'') í njeé i i- ŋ́- ɔ́β ɓôt
        DEF panther that (DEM) SM-Pres-bite people
      'That panther bites people'
      b) The government arrests people.
    C32b') ŋgɔ́mîn a- ŋ́- gwɛl- **a**

government/state   SM-Pres-arrest/catch-A.PASS

'The government arrests (people or anything else)'

C32b'') ŋgɔ́mîn   a-   ŋ́-   gwɛl   ɓôt

government/state   SM-Pres-arrest/catch people

'The government arrests people'

c) Bill praises people

C32c') Ewas a-   ḿ-   ɓêɣ-   **ha**

Ewas SM-Pres-praise-A.PASS

'Ewas praises people'

C32c'') Ewas a-   ḿ-   ɓêɣês ɓôt

Ewas SM-Pres-praise   people

'Ewas praises people'

4.2   Cross-clausal binding

X4) John expects himself to win.

X4') Yohánɛs$_i$ a-ḿ-ɓɛm   lɛ́   nyɛ́-mɛdɛ́$_i$/$_j$ a$_i$/$_j$-ŋ́-kɔmɔl

John   SM-PRS-expect that PRN.c1-REFL SM- PRS-win

 'John$_i$ expects himself$_i$ to win' OR 'John expects some other X (in person) to win'

As can be seen from co-indexation, the anaphor can corefer with the higher subject namely *Yohánɛs* 'John' or with another name known in the discourse. Note that sentences like X4' in Basaá are serial verb constructions. In a serial verb construction in this language the embedded subject is never realized overtly, but is semantically recovered by the subject marker (SM) of the embedded clause (see co-indexation)

X5') **Ewas**$_i$ a-   ŋ́-   kâl   lɛ́   mɛ   nɔɔ́dɛ́   kâl   wɛ́   lɛ́

Ewas   SM- PRS-say/tell that I   try.SUBJ   say/tell you that

u   pód-   dôs   **nyɛ́**$_i$/$_j$ mɓɛŋɛl

you talk/speak-OBL.SUBJ   him   quietly

 'Ewas$_i$ told me that I should try to tell you that you should talk to him$_i$/$_j$ quitely'

NB: Note that SUBJ stands for SUBJUNCTIVE. Coreference here can hold either between the matrix subject 'Ewas' and the most embedded object *nyɛ́* 'him/her' or between the most embedded object *nyɛ́* and another name known in the discourse.

X6') **Ewas**$_i$ a-ŋ-kâl   lɛ́ **Hjɔl**$_j$ a-ŋ́-gwês   híŋgɔndá hí   hí-bí-samblá **nyɛ́**$_i$/$_j$/$_k$

E.   SM-PST2-say that H.   SM-Pres-love girl.DEF   REL SM-PST2-kiss him/her

 'Ewas$_i$ said that Hjɔl$_j$ loves the girl who loves him$_i$/$_j$/$_k$'

NB: In X6' above DEF stands for DEFINITE (ness) and REL for RELATIVE (operator). Coreference can hold between the pronoun *nyɛ́* 'him/her' and the matrix subject 'Ewas', between the pronoun and the intermediate embedded subject *Hjɔl* or between the pronoun and another presupposed name.

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X7') **Ewas**$_i$ a-   ŋ́-   kâl lɛ́   **Hjɔl**$_j$ a-   ḿ-   ɓená   kɔ́sɛ́   nyɛ́$_i$/$_j$/$_k$

E.   SM-Pres-say that H.   SM-Pres-have a habit criticize him/her

'**Ewas**ᵢ says that **Hjɔl**ⱼ has a habit of criticizing **him**ⱼ/ₖ'

4.2.1 Coreference relations across typical tensed clausal complement

X8') Yohánɛsᵢ a- ŋ- kâl lɛ́ Maríyaⱼ a- ɲ́- gwês-ɓá (nyɛ́-mɛdɛ́ⱼ)
    Jonh   SM-PST1-say that Mary   SM-Pres-love-REFL PRN.c1-REFL
    'Johnᵢ said that Mary loves herselfᵢ'
X8'') Yohánɛsᵢ a- ŋ- kâl lɛ́ Maríyaⱼ a- ɲ́- gwês nyɛ́-mɛdɛ́ᵢ/ⱼ/ₖ
    Jonh   SM-PST1-say that Mary   SM-Pres-love PRN.c1-REFL
    'John said that Mary loves herself'

Note that in X8' the anaphor is optional because eof the presence of the reflexive morpheme *ɓá*, but when used coreference holds only between the embedded subject and the anaphor. In X8'' where the anaphor is not optional coreference can hold in three ways. Note that no relationship holds between the matrix subject and the reflexive morpheme. This state of affais provides evidence that the use of the reflexive morpheme is strictly local.
Keeping X8 abobe in mind and as already indicated, no reflexivity can hold between the highest subject and the reflexive morpheme.

X10') Yohánɛsᵢ a- ŋ- kâl lɛ́ Maríyaⱼ a- ɲ́- gwês nyɛ́ᵢ/ₖ
    Jonh   SM-PST1-say that Mary   SM-Pres-love PRN.c1
    'John said that Mary loves him'

Note that coreference can also hold between the pronoun and another presupposed name.

X11') **Yohánɛs**ᵢ a- ŋ- kâl **nyɛ́**ⱼ lɛ́ Maríyaₖ a- ɲ́- gwês **nyɛ́**ᵢ/ⱼ
    Jonh   SM-PST1-say him/her that Mary   SM-Pres-love   PRN.c1-REFL
    'Johnᵢ told him/herⱼ that Mary loves him/herᵢ/ⱼ'
X11'') **Yohánɛs**ᵢ a- ŋ- kâl **nyɛ́**ⱼ lɛ́ Maríyaₖ a- ɲ́- gwês-ɓa
    Jonh   SM-PST1-say him/her that Mary   SM-Pres-love-REFL
    'Johnᵢ told him/herⱼ that Maryₖ loves herselfₖ'

X11'' confirms the fact that reflexivity applies locally.

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.
  D1a')*? Ewasᵢ a- bí- kâl lɛ́ **nyɛ́+mɛd**ᵢ áᵢ/ⱼ- ń- yí   jâm
        Ewas SM-PST2-say that PRN.c1-REFL   SM- Pres-know thing
        'Ewas said that he is smart'
  D1a'') Ewasᵢ a- bí- kâl lɛ́ **ny**ᵢ/ⱼ **á**ᵢ/ⱼ- ń- yí   jâm
        Ewas SM-PST2-say that him SM-Pres-know thing
        'Ewas said that he is smart'
  D1a''') Ewasᵢ aᵢ- bí- kâl l **á**ᵢ/ⱼ- ń- yí   jâm
        Ewas SM-PST2-say that SM- Pres-know thing
        'Ewas said that he is smart'

NB: Sentence D1a' is unacceptable because the predicate *yí* cannot select an anaphor as a subject. Note also that where there is a succession of two vowels at a morpheme boundary, one

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causes elision of the first vowel as in D1a' and D1a'' where the anaphor *nyɛ́+mɛdɛ* 'himself' (D1a') and the pronoun *nyɛ́* 'him/her realize as *nyɛ́+mɛd* and *ny* respectively by loosing the final vowel due to adjacency with the subject marker *–a*. As a result of this, the high tone on the final vowel of both the anaphor *nyɛ́-mɛdɛ́* 'himself'and the pronoun *nyɛ́* 'him/her spreads over the subject marker *a*-which is right adjacent to it. The same process applies to D1a'' between the lexical complementizer *l(ɛ́)* 'that' and the subject marker *–á*. D1a'' and D1a''' are correct because the verb 'know' successfully selects *pro* as its subject since Basaá is pro-drop (D1a'''). In D1a'' the pronoun *ny(ɛ́)* 'him' can also be selected by the verb *yí*'know'. Note also from co-indexation that it can be the case that the subject marker corefer with another presupposed name in the discourse.

b) Jack knows that George likes X.
D1b') Ewas_i a_i- ń- yí   lɛ́ Tɔnyɛ́_j a_j- ŋ́- gwês nyɛ́_i/_k
   E.   SM-Pres-know that T.   SM-Pres-love him/her
   'Ewas_i knows that Tɔnyɛ́_j likes him_i/_k'

c) Jack knows that Bill said that X is smart.
D1c')*Ewas_i a_i- ń- yí   lɛ́ Tɔnyɛ́_j a_j- bí-kâl   lɛ́ **nyɛ́+mɛd**_i/_j/_k **á**-n-yí jâm
      E.   SM-Pres-know that T.   SM-PST2-say that PRN.c1-REFL SM.c1-PRS-know thing
Dc'') Ewas_i a_i- ń- yí   lɛ́ Tɔnyɛ́_j a_j- bí- kâl lɛ́ **á**_i/_j/_k ń- yí   jâm
   E.   SM-Pres-know that T.   SM-PST2-say that SM-Pres-know thing
    'Ewas_i knows that Tɔnyɛ́_j said that he_i/_j/_k is smart'
Dc''') Ewas_i a_i- ń- yí   lɛ́ Tɔnyɛ́_j a_j- bí- kâl lɛ́ **ny**   **á**_i/_j/_k ń- yí jâm
   E.   SM-Pres-know that T.   SM-PST2-say that him/her SM-Pres-know thing
    'Ewas_i knows that Tɔnyɛ́_j said that he_i/_j/_k is smart'

d) Jack thinks that Lisa knows that Wendy likes X.
D1d') Ewas_i a- ŋ́- hɔ́ŋɔ̂l lɛ́ Tɔnyɛ́_j a- ń- yí   lɛ́ Hjɔl_k a- ŋ́-gwês nyɛ́_i/_j/_k/_l
      E.   SM-Pres-think that T.   SM-Pres-know that H. SM-Pres-like him/her
    'Ewas_i thinks that Tɔnyɛ́_j knows that Hjɔl_k likes him/her_i/_j/_k/_l'
D1d' Ewas_i a- ŋ́- hɔ́ŋɔ̂l lɛ́ Tɔnyɛ́_j a- ń- yí   lɛ́ Hjɔl_k a- ŋ́-gwês nyɛ́-mɛdɛ́_i/_j/_k/_l
      E.   SM-Pres-think that T.   SM-Pres-know that H. SM-Pres-like him/her-REFL
    'Ewas_i thinks that Tɔnyɛ́_j knows that Hjɔl_k likes him/herself_i/_j/_k/_l'

e) Jack thinks that Lisa knows that X likes Alice.
D1d'') Ewas_i a- ŋ́- hɔ́ŋɔ̂l lɛ́ Tɔnyɛ́_j a- ń- yí   l **á**_i/_j/_k ŋ́- gwês Hjɔl
      E.   SM-Pres-think that T.   SM-Pres-know that SM-   Pres-like H.
    'Ewas_i thinks that Tɔnyɛ́_j knows that he_i/_j/_k likes Hjɔl'
D1d''') Ewas_i a- ŋ́- hɔ́ŋɔ̂l lɛ́ Tɔnyɛ́_j a- ń- yí   lɛ́ **ny**_i/_j/_k á_i/_j/_k ŋ́- gwês Hjɔl
      E.   SM-Pres-think that T.   SM-Pres-know that him/her SM-   Pres-like   H.
     'Ewas_i thinks that Tɔnyɛ́_j knows that he_i/_j/_k likes Hjɔl'
D1d'''') Ewas_i a- ŋ́- hɔ́ŋɔ̂l lɛ́ Tɔnyɛ́_j a- ń- yí   lɛ́ **nyɛ́-mɛdɛ́**_i/_j/_k á_i/_j/_k
      E.   SM-Pres-think that T.   SM-Pres-know that him/her-REFL   SM-
     ŋ́- gwês Hjɔl
      Pres-like   H.
     'Ewas_i thinks that Tɔnyɛ́_j knows that he_i/_j/_k (in

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f) Sarah told Jack that Lisa loves X.

D1f') Kondέ$_i$ a- bí- kâl Bíkûn$_j$ lέ Ewas$_k$ a- ŋ́- gwês **nyέ**$_i$/$_j$/$_k$/$_l$
      K.   SM-PST2-say B.   that E.   SM-Pres-like him/her
      'Kondέ$_i$ told Bíkûn$_j$ that Ewas$_k$ likes him$_i$/$_j$/$_k$/$_l$'

D1f'') Kondέ$_i$ a- bí- kâl Bíkûn$_j$ lέ Ewas$_k$ a- ŋ́- gwês **nyέ-mεdέ**$_i$/$_j$/$_k$/$_l$
      K.   SM-PST2-say B.   that E.   SM-Pres-like him/her
      'Kondέ$_i$ told Bíkûn$_j$ that Ewas$_k$ likes himself (in person)$_i$/$_j$/$_k$/$_l$'

      g) Sarah told Jack that X loves Wendy.

D1g') Kondέ$_i$ a- bí- kâl Bíkûn$_j$ lέ   **nyέ-mεdέ**$_i$/$_j$/$_k$ a- ŋ́- gwês Ewas
      K.   SM-PST2-tell B.   that PRN.c1-REFL   SM-Pres-like   E.
      'Kondέ$_i$ told Bíkûn$_j$ that himself$_i$/$_j$/$_k$ (or him$_i$/$_j$/$_k$ in person) loves Ewas'

D1g'') Kondέ$_i$ a- bí- kâl Bíkûn$_j$ lέ   **nyε**$_i$/$_j$/$_k$ á- ŋ́- gwês Ewas
      K.   SM-PST2-tell B.   that him/her SM-Pres-like   E.
      'Kondέ$_i$ told Bíkûn$_j$ that he $_i$/$_j$/$_k$ $_i$/$_j$/$_k$loves Ewas'

D1h') Kondέ$_i$ a- bí- kâl Bíkûn$_j$ l   **á**$_i$/$_j$/$_k$ ŋ́- gwês Ewas
      K.   SM-PST2-tell B.   that SM- Pres-like   E.
      'Kondέ$_i$ told Bíkûn$_j$ that he$_i$/$_j$/$_k$ $_i$/$_j$/$_k$loves Ewas'

Note that D1c'is not acceptable for the reasons mentioned above for D1a'. See also comments below D1a in terms of phonological processes and interpretability alongside co-indexation. Also, in D1d'' we can see that the anaphor can corefer with not only all the names in the sentence, but also, it can corefer with another discourse salient (given) name. In D1d'' we have an instance of pro-drop in the lowest clause where what is realized is the subject marker. In D1d''' we have a pronominal object *ny(ε)* followed by the subject marker. Finally in D1d'''' the anaphor *nyέ-mεdέ* in the embedded clause occupies the subject position and can have multiple coreferences. The same multiple coreference is obtained in D1f', D1f'' D1g' D1g'' and D1g'''.

    D2a) Jack admitted that Mary loved X.

  D2a') **Ewas**$_i$ a- bí- nέέβέ lέ Maríya$_j$ a- bí- gwês **nyέ**$_i$/$_k$
      E.   SM-PST2-admit that M.   SM-PST2-love him/her
      'Ewas admitted that Mary loved him$_i$/$_j$

  D2a'') **Ewas**$_i$ a- bí- nέέβέ lέ Maríya$_j$ a- bí- gwês **nyέ-mεdέ**$_i$/$_j$/$_k$
      E.   SM-PST2-admit that M.   SM-PST2-love him/her-REFL
      'Ewas admitted that Mary loved himself$_i$ (Ewas in person)$_j$/$_k$

Note that the anaphor *nyέ-mεdέ*$_i$/$_k$ can corefer with the matrix subject 'Ewas', the embedded subject 'Mary' or another discourse salient) known) name.
      b) Jack suspected that Mary loved X.   Difficult to process so far

Please also test adjuncts, such as those in (D3), where X = Jeff.
    D3a) Jeff complained about Mary when Ella blamed X
D3a') Ewas$_i$ a- bí- tʃélél íɲuú Maríya$_j$ í ŋgeda Kondέ$_k$ a- bí- kónd
      E.   SM-PST2-complain about M.   LOC time K.   SM-PST2-blame
    nyέ-mεdέ$_i$/$_j$/$_k$
      him/her-REFL
      'Ewas$_i$ complained about Mary$_j$ when Kondέ$_k$ blamed him(self)$_i$/$_j$/$_k$'
D3a'') Ewas$_i$ a- bí- tʃélél íɲuú Maríya$_j$ í ŋgeda Kondέ$_k$ a- bí- kónd nyέ$_i$/$_l$

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E.   SM-PST2-complain about M.   LOC time   K.   SM-PST2-blame him/her

'Ewas_i complained about Mary_j when Kondé_k blamed him_{i/l}'

b) Jeff returned home when/before/after X became tired.

D3b') Ewas_i a- bí- temb í   mbáy í   ŋgeda nyέ-medέ_i/_j a- bí- wáâ

E.   SM-PST2-return LOC home LOC time   him/her-REFL SM-PST2-tire

'Ewas_i returned home when he_i/_j (in person) tired'

D3b'') Ewas_i a- bí- temb í   mbáy í   ŋgeda **ny**_i/_j   **á-** bí- wáâ

E.   SM-PST2-return LOC home LOC time   him/her SM-PST2-tire

'Ewas_i returned home when he_i/_j(as opposed to the others) tired'

D3b''') Ewas_i a- bí- temb í   mbáy í   ŋgeda a_i/_j bí- wáâ

E.   SM-PST2-return LOC home LOC time   SM-PST2-tire

'Ewas_i returned home when he_i/_j tired'

Note that D3b has three possibilities and many interpretative properties. Note that the interpretation in D3b'' is that of contrastive topic. In other words, D3b'' can be uttered in a context whereby we have a list of 'people including Ewas working at the farm for instance'. In such a context, D3b'' can be literally means that 'Ewas, as opposed to the other workers' returned home when he tired'. Since it is the case that coreference can also hold between the pronoun and another discourse name known in the context, the pronoun *ny(έ)* will be contrasted to other member of the same list. In this case, the sentence will become 'Ewas_i returned home when HE_j (e.g. Peter) tired.

c) When/before/after Mary wrote to X, Jeff returned home.

D3c') í   mbûs Maríya_i a- bí- til- ná Kóndέ, ni nyέ_i/_k a-têmb   í   mbáy

LOC back M.   SM-PST2-write-OBL K.   and him/her SM-return LOC home

'Kóndέ_i immediately went home after Mary_j wrote him_i/_ka letter'

D3c'') Kóndέ_i a- bí- têmb í   mbáy í   mbûs Maríya_j a_j- ɓê   a_j- ma-

K.   SM-PST2-return LOC home LOC back   M.   SM-be.PAST SM-COMPL

til-   na   **nyɛ**_i/_j

write-OBL him/her

'Kóndέ_i immediately went home after Mary_j wrote him_i/_ka letter'

Note that PAST and COMPL above stand for PAST TENSE and COMPLETIVE ASPECT respectively. Also the adjunct clause *í   mbûs Maríya a- ɓê a- ma-til-na nyέ*_{i/j} 'after Mary had written her/him_{i/j}' is a serial verb construction in which we have two subject markers which are co-indexed with the lowest subject 'Mary' as expected.

d) Jeff left without Mary seeing X.

D3c') Kóndέ_i a- bí- kɛ   ŋgi   ni lέ   Maríya_j á_j- tέhέ   nyέ_i

K.   SM-PST2-leave without and that M.   SM-see.SUBJ him

'Kóndέ_i left without Mary seeing him_i'

e) Mary condemned Jeff without meeting X.

D3c'') Maríya_i a- bí-   nóɣós   Kóndέ_j ŋgi   ɓɔmá nyέ_j/_k

M.   SM-PST2-condemn/punish K   without meet him/her

'Mary_i condemned/punished Kóndέ_j without meeting him_j/_k'

D3c''') Maríya_i a- bí-   nóɣós   Kóndέ_j ŋgi   ni lέ   á_i/_k ɓɔmá nyέ_j/_k

M.   SM-PST2-condemn/punish K   without and that SM-meet him/her

'Mary_i   condemned/punished Kóndέ_j   without   meeting   him_j/_k' Literally: 'Mary_i condemned/punished Kóndέ_j without Mary meeting him_j/_k' OR ….without Kóndέ_j her/him_j/_k'

D3c'''') Maríya_i a- bí-   nóɣós   Kóndέ_j ŋgi   ni lέ ɓá_i/_k   **ɓɔm-ná**

        M.   SM-PST2-condemn/punish K   without and that SM-/they meet-RCM

    'Mary$_i$ condemned/punished Kóndέ$_j$ without meeting each other'

D3c''''') Maríya$_i$ a- bí-   nóɣós   Kóndέ$_j$ ɓɔ́   ŋgi   **ɓɔ̂m-ná ɓɔ́ ɓáa**

        M.   SM-PST2-condemn/punish K   them without meet-RCM them two

    'Mary$_i$ condemned/punished Kóndέ$_j$ without the two of them meeting each other'

Note that D3c'''' and D3c''''' involve reciprocal readings. Also, I glossed ɓá$_i$/$_k$ as 'them or SM simply because of the homophony between the subject marker and the accusative pronoun. The interpretation according to which this SM or pronoun ɓá$_i$/$_k$ corefer with any other plural name (e.g. John and Peter) is possible. In this vein we will have the following: 'Mary$_i$ condemned/punished Kóndέ$_j$ without John and Peter meeting each other'. All the same, in D3''''', it is possible to get the interpretation "Mary$_i$ condemned/punished Kóndέ$_j$ without both John and Peter (for instance) meeting'.

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.
Not applicable

4.2.2 Long distance relations and the variety of clausal embedding types

    Consider what a list of major clause embedding types in your language would include.

  X12a) I hope [to leave]

  X12a') Mɛ ḿ-   ɓɔ́t ŋέm lέ   mɛ ŋ́-kɛ

      I   Pres-hope   that I Pres-leave/go

 'I hope to leave' Literally; 'I hope that I (will) leave'

  X12a'') Mɛ ḿ- ɓɔ́t ŋέm í- kɛ

     I   Pres-hope   INF-leave/go

     'I hope to leave'

Note that X12a' and X12'' convey almost the same meaning.

     I hope [for Bill to leave]

X12a''') Mɛ ḿ- ɓɔ́t ŋέm lέ   Ewas a- ŋ́- kɛ

     I   Pres-hope   that Ewas SM-Pres-leave/go

   'I hope that Ewas (will) leave(s)'

     I expect [Bill to be unpleasant]

X12a'''') Mɛ ḿ- ɓɛm   lέ Ewas á- ɓéβêl   ɓôt

     I   Pres-expect that Ewas SM-be unpleasant/disgust.SUBJ   people

      'I expect Ewas to be unpleasant'

X12''''') Mɛ ḿ- ɓɛm   Ewas lέ á- ɓéβêl   ɓôt

     I   Pres-expect Ewas that SM-be unpleasant/disgust.SUBJ   people

      'I expect Ewas to be unpleasant'

     I persuaded Bill [to leave]

X12'''''') Mɛ m- néέβá-   **há**   Ewas lέ á- kê NB: Causative construction

     I   PST1-agree/accept-CAUS Ewas that SM/he-leave.SUBJ

    'I persuaded Ewas to leave' Literally: 'I made Ewas to leave'

X12''''''') Mɛ m- ɓóŋ-   **há**   Ewas lέ á- kê   NB: Causative construction

     I   PST1-do/make-CAUS Ewas that SM/he-leave.SUBJ

'I persuaded Ewas to leave' Literally: 'I made Ewas leave'
      b) I made [Bill leave]

X12b') Mɛ ŋ-   kí-   **há**   Ewas   NB: Causative construction
       I   PST1-leave-CAUS Ewas
        'I made Ewas leave'

X12b'') Mɛ m-   ɓɔ̂ŋ   lɛ́   Ewas   á- kɛ̂
       I   PST1-do/make that Ewas   SM-leave.SUBJ
        'I made Ewas leave'
      c) I saw [someone leaving]

X12c') Mɛ bí-   tɛ́hɛ́ ŋgîm mut í   ŋ́-   kɛ
      I   PST2-see some man SM-PROG-leave
     'I saw someone leaving/going'
      d) I require [that he speak softly]

X12d') Mɛ bí-   ɓat lɛ́   á-   pɔ́t   mbɛŋɛl   NB: IMP stands for Imperative
       I   PST2-ask that SM/he-speak.IMP softy
       'I required that he speak sofly'

X12d'') Mɛ bí-   ɓat nyɛ́   lɛ́   á-   pɔ́t   mbɛŋɛl
       I   PST2-ask him/her that SM/he-speak.IMP softy
       'I required that he speak sofly' OR 'I asked him to speak sofly'
      e) I consider [Bill unpleasant]

X12e') Mɛ ŋ́- yɔŋ   Ewas kikií mut βitɛ́mbɛ́
        I   Pres-take/consider Ewas as   man lie (noun)
        'I consider Ewas as a liar' OR 'I consider Ewas a liar'
NB: Not possible to find the Basaá adjective which translates as 'unpleasant.

In providing data for infinitives (if your language has infinitives), and where X = <u>Edgar</u>, we want you to give us a range of examples where the infinitive subject is not controlled by the matrix subject.

   D4a) Edgar asked Bill to trust X.
   D4a') Ewas$_i$ a- bí-   ɓat Kóndɛ́$_j$ lɛ́ á$_j$/$_k$- ɓód-ól   nyɛ́$_i$/$_k$ ŋɛ́m
       E.   SM-PST2-ask K.   that SM-   trust-OBL him   heart
        'Ewas$_i$ asked Bill$_j$ to trust him$_i$/$_k$'
   D4a'') Ewas$_i$ a- bí- ɓat Kóndɛ́$_j$ lɛ́ á$_j$/$_k$- ɓód-ól   **nyɛ́-mɛdɛ́$_i$**/$_k$ ŋɛ́m
        E.   SM-PST2-ask K.   that SM- trust-OBL PRN.c1-REFL   heart
        'Ewas$_i$ asked Bill$_j$ to trust himself$_i$/$_j$/$_k$'
   D4a''') Ewas$_i$ a- bí- ɓat lɛ́   Kóndɛ́$_j$ á- ɓód-ól   **nyɛ́-mɛdɛ́$_i$**/$_k$ ŋɛ́m
        E.   SM-PST2-ask that K.   SM- trust-OBL PRN.c1-REFL   heart
        'Ewas$_i$ asked Bill$_j$ to trust himself$_i$/$_j$/$_k$' OR 'Ewas$_i$ required that Bill$_j$ should himself$_i$/$_j$/$_k$' OR 'Ewas$_i$ asked Bill$_j$ or someone$_k$ else to trust himself$_i$/$_j$/$_k$'
Note that in D4a'') and D4a''' coreference operates in three ways as is shown by co-indexation. Note that in D4a'' the lexical complementizer *lɛ́* 'that' follows the embedded subject *Kóndɛ́* while in D4''' the embedded subject *Kóndɛ́* follows it.
     b) Edgar asked Bill to give a book to X.
   D4b') Ewas$_i$ a- bí-   ɓat Kóndɛ́$_j$ lɛ́   á$_j$/$_k$- tí   **nyɛ́$_i$**/$_j$/$_k$ kaat
        E.   SM-PST2-ask K.   that SM-give.SUBJ him   book
        'Ewas$_i$ asked Bill$_j$ to give him$_k$ a book'

D4b'') Ewas_i a- bí- ɓat lɛ́ Kóndɛ́_j á- tí   **nyɛ́-mɛdɛ́**_i/_j/_k kaat
       E.   SM-PST2-ask that K .   SM-give.SUBJ PRN.c1-REFL   book
        'Ewas_i asked Bill_j to give himself_i/_j/ _k a book'

Note that the anaphor *nyɛ́-mɛdɛ́* above converys the meaning of 'in person'. See also co-indexation in order to see how far coreference operates. In D4b' the embedded subject *Kóndɛ́* precedes the lexical complementizer while in D4b'' it rather follows it.

       c) Edgar asked Bill to talk to X.
  D4c') Ewas_i a- bí-   ɓat Kóndɛ́_j lɛ́   á_j/_k- pód- ós **nyɛ́**_i/_j/_k
          E.   SM-PST2-ask K.   that SM- speak-OBL him
         'Ewas_i asked Kóndɛ́_j to speak to him_i/_k' 'OR Literally: 'Ewas asked Kóndɛ́ that someone else should speak to him_i/_k/_l'
  Dc'') Ewas_i a- bí-   ɓat lɛ́ Kóndɛ́_j á- pód- ós **nyɛ́**_i/_j/_k
       E.   SM-PST2-ask that K.   SM-speak-OBL him
        'Ewas_i asked Kóndɛ́_j to speak to him_i/_k' 'OR Literally: 'Ewas asked Kondɛ́ that

       d) Edgar asked Bill to talk about X.
  D4d') Ewas_i a-   bí-   ɓat Kóndɛ́_j lɛ́   á- pód-ól   **nyɛ́**_i/_k
        E.   SM-PST2-ask K   that SM-talk-OBL.SUBJ him
        'Ewas_i asked Kóndɛ́_j to speak about him_i/_k'
  D4d'') Ewas_i a-   bí-   ɓat lɛ́   Kóndɛ́_j á- pód-ól   **nyɛ**_i/_k
        E.   SM-PST2-ask that K.   that SM-talk-OBL.SUBJ him
        'Ewas_i asked Kóndɛ́_j to speak about himself_i/_k'
  D4d''') Ewas_i a-   bí-   ɓat lɛ́   Kóndɛ́_j á- pód-ól   **nyɛ́-mɛdɛ́**_i /_j/_k
        E.   SM-PST2-ask that K.   that SM-talk-OBL.SUBJ PRN.c1-REFL
        'Ewas_i asked Kóndɛ́_j to speak about himself_i/_k (in person)'

       e) Edgar expected Bill to trust X.
  D4e') Ewas_i a- bí- ɓɛm   lɛ́ Kóndɛ́_j á- ɓódól   **nyɛ́**_i/_k ŋêm
     E   SM-PST2-expect that K.   SM-trust.SUBJ him   heart
      'Ewas_i expected Kondɛ́_j to trust him_i/_k'
D4e'') Ewas_i a- bí- ɓɛm   Kóndɛ́_j lɛ́ á- ɓódól   **nyɛ́**_i/_k ŋêm
     E   SM-PST2-expect K.   that SM-trust.SUBJ him   heart
      'Ewas_i expected Kondɛ́_j to trust him_i/_k'
D4e''') Ewas_i a- bí- ɓɛm   Kóndɛ́_j lɛ́ á- ɓódól   **nyɛ́-mɛdɛ́**_i/_k ŋêm
     E   SM-PST2-expect K.   that SM-trust.SUBJ PRN.c1-REFL   heart
      'Ewas_i expected Kondɛ́_j to trust himself_i/_k'

Note that D4e' and D4e'' differ only on the position of the lexical complementizer. Sentence D4e''' is anaphoric with three possible coreferences.

       f) Edgar ordered Bill to pay X.
D4f')   Ewas_i a- bí- anɛ́   Kóndɛ́_j lɛ́ á- sáá   **nyɛ́**_i/_k
      Ewas SM-PST2-order K.   that SM-pay.IMP him
     'Ewas_i ordered Kóndɛ́_j to pay him_i/_k'

The following sentence with borrowing from English is also possible. So the Basaá item *ɔ́da* derive from the English verb 'order'.

D4f'') Ewas_i a- bí- tí Kóndɛ́_j **ɔ́da** lɛ́ á- sáá **nyɛ́**_i/_k
     Ewas SM-PST2-give K. that SM-pay.IMP him him
    'Ewas_i ordered Kóndɛ́_j to pay him_i/_k'
    g) Edgar ordered Bill to say that X was smart.
D4g') Ewas_i a- bí- anɛ́ Kóndɛ́_j lɛ́ á_i kâl lɛ́ a_i/_j-/_k ɓê yí jâm
    E. SM-PST2-order K. that SM-say that SM/he/she-be.PAST.SUBJ know thing
    'Ewas_i ordered Kóndɛ́_j to say that he_i/_j/_k was smart'
D4g'') Ewas_i a- bí- anɛ́ Kóndɛ́_j í kâl lɛ́ a_i/_j-/_k ɓê yí jâm
    E. SM-PST2-order K. INF say that SM/he/she-be.PAST.SUBJ know thing

'Ewas_i ordered Kóndɛ́_j to say that he_i/_j/_k was smart'

NB: See coreference between the most embedded subject marker/pronoun '*a*-_i/_j/_k'(remember that we already showed that both are homophonous in the language) and the NPs.

h) Edgar ordered Bill to say that Mary loved X.
D4') Ewas_i a- bí- anɛ́ Kóndɛ́_j lɛ́ á_j kâl lɛ́ Maríya_k a_k- bí- gwês **nyɛ́**_i/_j-/_l
    E. SM-PST2-order K. that SM-say that M. SM-PST2-love him
    'Ewas_i ordered Kóndɛ́_j to say that Maríya_k loved him_i/_j/_k/_l'
D4h'') Ewas_i a- bí- anɛ́ Kóndɛ́_j í kâl lɛ́ Maríya_k a_k- bí- gwês **nyɛ́** _i/_j-/_k
    E. SM-PST2-order K. INF say that M. SM-PST2-love him
    'Ewas_i ordered Kóndɛ́_j to say that Maríya_k loved him_i/_j/_k/_l'

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

    D5a) Edgar expects X to win.
D5a') Ewas_i a- ḿ- ɓêm lɛ́ **á**_i/_j- kɔ́mɔ̂l
    E. SM-Pres-expect that SM/he-win.SUBJ
    'Ewas expects himself to win' / 'Ewas expects someone else to win'
D5a'') Ewas_i a- ḿ- ɓêm lɛ́ **nyɛ́-mɛdɛ́**_i/_j **á**_i/_j- kɔ́mɔ̂l
    E. SM-Pres-expect that PRN.c1-REFL SM/he-win.SUBJ
    'Ewas_i expects himself_j to win' / 'Ewas expects someone else to win'
    b) Edgar expects Bill to defeat X.
D5b') Ewas_i a- ḿ- ɓêm lɛ́ Hjɔl_j **á**_j yémbêl **nyɛ́**_i/_k
    E. SM-Pres-expect that H. SM-defeat him
    'Ewas_i expects Hjɔl_j to defeat him_i/_k'
D5b'') Ewas_i a- ḿ- ɓêm lɛ́ Hjɔl_j **á**_j yémbêl **nyɛ́-mɛdɛ́**_i/_j/_k
    E. SM-Pres-expect that H. SM-defeat him
    'Ewas_i expects Hjɔl_j to defeat himself_i/_j/_k'

Note once more that the co-indexation used in the English translation for convenience (for explanatory reasons).

    D6a) Edgar hopes for X to win.
D6a') Ewas_i a- ḿ- ɓɔ́t ŋêm lɛ́ **a**_i/_j- ŋ́- kɔmɔl
    E. SM-Pres-hope that SM/he-Pres-win
 Literally: 'Ewas_i hopes that he_i/_j (wins)/will win'
D6a'') Ewas_i a- ḿ- ɓɔ́t ŋêm lɛ́ **nyɛ́-mɛdɛ́**_i/_j a_i/_j- ŋ́- kɔmɔl
    E. SM-Pres-hope that PRN.c1-REFL SM/he-Pres-win
 Literally: 'Ewas_i hopes that himself_i/_j (wins)/will win'

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b) Edgar hopes for Bill to defeat X.

D6b') Ewas$_i$ a- ḿ- ɓɔ́t ŋêm lɛ́ Hjɔl$_j$ **a**$_j$ ń- yémbêl **nyɛ́**$_{i/k}$
      E.   SM-Pres-hope   that H.   SM-Pres-defeat   him
  'Ewas$_i$ hopes for Hjɔl$_j$ to defeat him$_{i/l}$'

D6b'') D5b') Ewas$_i$ a- ḿ- ɓɔ́t ŋêm lɛ́ Hjɔl$_j$ **a**$_j$ ń- yémbêl **nyɛ́-mɛdɛ́**$_{i/j/k}$
        E.   SM-Pres-hope   that H.   SM-Pres-defeat   PRN.c1-REFL
      'Ewas$_i$ hopes for Hjɔl$_j$ to defeat himself$_{i/j/l}$'

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

   D7a) Edgar expects Bill to defeat X's brother.

D7a') Ewas$_i$ a- ḿ- ɓɛm lɛ́ Hjɔl$_j$ **á**$_j$ yémbêl   **ɲâŋ**$_{i/j/k}$
      E.   SM-Pres-expect that H.   SM-defeat.SUBJ mother
   'Ewas$_i$ expects Hjɔl$_j$ to defeat his$_{i/j/k}$ mother'

D7a'') Ewas$_i$ a- ḿ- ɓɛm lɛ́ Hjɔl$_j$ **á**$_j$ yémbêl   **ɲâŋ wê**$_{i/j/k}$
      E.   SM-Pres-expect that H.   SM-defeat.SUBJ mother his
   'Ewas$_i$ expects Hjɔl$_j$ to defeat his$_{i/j/k}$ mother'

NB: Note that when the item *ɲâŋ* 'mother' is used along with a possessive it conveys more the meaning of social relationship (i.e. it means 'his boss') than of 'kinship' i.e. biological mother'. The same holds for the item *nsâŋ* 'father'.

   b) Edgar hopes for Bill to defeat X's brother.

D7b') Ewas$_i$ a- ḿ- ɓɔ́t ŋêm lɛ́ Hjɔl$_j$ **a**$_j$ ń- yémbêl **ɲâŋ**$_{i/j/k}$
      E.   SM-Pres-hope   that H.   SM-Pres-defeat mother
  Literally: 'Ewas$_i$ hopes that Hjɔl$_j$ defeats/will defeat his$_{i/j/k}$ mother'

D7b'') Ewas$_i$ a- ḿ- ɓɔ́t ŋêm lɛ́ Hjɔl$_j$ **a**$_j$ ń- yémbêl **ɲâŋ wê**$_{i/j/k}$
      E.   SM-Pres-hope   that H.   SM-Pres-defeat mother
  Literally: 'Ewas$_i$ hopes that Hjɔl$_j$ defeats/will defeat his$_{i/j/k}$ mother'

See comments below D7a above for D7b' and D7b''.

   c) Edgar expects X's brother to defeat him.

D7c') Ewas$_i$ a- ḿ- ɓɛm lɛ́ **ɲâŋ**$_{i/k}$ **á**$_j$ yémbêl **nyɛ́**$_{i/k}$
      E.   SM-Pres-expect that mother SM-defeat.SUBJ him
   'Ewas$_i$ expects his$_{i/k}$ mother to deafeat him$_{i/k}$'

D7c'') Ewas$_i$ a- ḿ- ɓɛm lɛ́ **ɲâŋ**   **wê**$_{i/j}$ **á**$_j$ yémbêl **nyɛ́**$_{i/j}$
      E.   SM-Pres-expect that mother SM-defeat.SUBJ him
   'Ewas$_i$ expects his$_{i/k}$ boss to deafeat him$_{i/k}$'

   d) Edgar hopes for Bill to defeat X's brother.

I think D7d is the same as D7c above.

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

NB: Sentences involving climbing such as D5 above are not possible in the language.

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

   D8a) Tom considers X intelligent.

D8a') **Ewas**$_i$ a- ń- yɔŋ   **nyɛ́-mɛdɛ́**$_{i/j}$ kikií nyíjam
      E.   SM-PRS-consider/take PRN.c1-REFL   as   wise/intelligent
    'Ewas$_i$ considers himself$_{i/j}$ intelligent'

D8a'') **Ewas**ᵢ a- ń- yɔŋ-**ɓá** (**nyɛ́-mɛdɛ́**ᵢ/ⱼ) kikií nyíjam
      E.   SM-PRS-consider/take PRN.c1-REFL   as   wise/intelligent
      'Ewasᵢ considers himselfᵢ/ⱼ intelligent'

    b) Tom considers Mary fond of X.

D8b') **Ewas**ᵢ a- ń- yɔŋ **Hjɔ̂l**ⱼ kikií ŋgŵês nyɛ́ᵢ/ₖ
      E.   SM-Pres-consider/take H.   as   lover   him
Literally: 'Ewasᵢ considers **Hjɔ̂l**ⱼ as hisᵢ/ₖ lover'

D8b'') **Ewas**ᵢ a- ń- yɔŋ **Hjɔ̂l**ⱼ kikií mut nú a- ɲ́- gwês **nyɛ́**ᵢ/ₖ
      E.   SM-Pres-consider/take H.   as   man REL SM-Pres-love   him
   'Ewasᵢ considers **Hjɔ̂l**ⱼ as someone who loves himᵢ/ₖ'

    c) Tom considers Mary angry at X.

D8c') **Ewas**ᵢ a- ń- yɔŋ **Hjɔ̂l**ⱼ kikií mut nú a- ɲ́- únɓɛ́- nɛ́ **nyɛ́**ᵢ/ₖ
      E.   SM-Pres-consider/take H. as   man REL SM-Pres-be angry-OBL him
   'Ewasᵢ considers **Hjɔ̂l**ⱼ as someone angry with himᵢ/ₖ'

4.2.3 Backwards anaphora
  D9a) That X was late upset Oliver.

D9a')** lɛ́ **nyɛ́-mɛdɛ́**ᵢ a- bí- sóɣ ɓɔ́m̂â (hála) a- bí- hélês Kóndɛ́ᵢ
       that PRN.c1-REFL SM-PST2-be late meeting (that) SM-PST2-surprise K.
  '**That himselfᵢ was late at the meeting surprised Kóndɛ́ᵢ'
    b) That X was late suggested that Oliver was guilty.

D9b')** lɛ́ **nyɛ́**ᵢ a- bí- sóɣ ɓɔ́m̂â (hála) a- bí- hélês Kóndɛ́ᵢ
       that him SM-PST2-be late meeting (that) SM-PST2-surprise K.
  '**That himᵢ was late at the meeting surprised Kóndɛ́ᵢ'
    c) That X was late made Oliver look guilty.
    d) That X was late implicated Oliver.

Section 4.3 Principle C-type effects
  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.

E4a) Malik criticized Malik.

    b) Malik said Mariam criticized Malik.

    c) The boy criticized the boy.

    d) The boy said Mariam criticized the boy.

   E5a) Malik's mother criticized Malik.

Talking about Ewas, Ewas's mother and some other person (s), the following sentence in E5a' can be uttered.

E5a') ŋân$_i$ Ewas$_j$ a- bí- kɔ́sɛ́ Ewas$_j$ (nyɛ́-mɛdɛ́$_j$)

    mother Ewas SM-PST2-criticize Ewas   PRN.c1-REFL

    'Ewas's mother criticized Ewas (himself (in person))'

    b) Malik's mother said Mariam criticized Malik.

E5b') ŋân$_i$ Ewas$_j$ a- bí- kâl lɛ́ Hjɔl$_k$ a- bí- kɔ́sɛ́ Ewas$_j$ (nyɛ́-mɛdɛ́$_j$)-REFL

    mother Ewas SM-PST2-say that H.   SM-PST2-criticize Ewas PRN.c1-REFL

    'Ewas's mother$_i$ said that Hjɔl criticized Ewas himself (in person)'

    c) The boy's mother criticized the boy.

E5c') ŋân$_i$ hilɔ́ɣá$_j$ a- bí- kɔ́sɛ́ hílɔ́ɣá$_j$ (hjɔ́+mɛdɛ́$_j$)

    mother Ewas   SM-PST2-criticize Ewas   PRN.c1-REFL

    'The boy's mother criticized the boy (himself (in person))'

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

E5d') ŋân$_i$ hilɔ́ɣá$_j$ a- bí- kâl lɛ́ Hjɔl$_k$ a- bí- kɔ́sɛ́ hilɔ́ɣá$_j$ (hjɔ́+mɛdɛ́$_j$)

    mother boy   SM-PST2-say that H. SM-PST2-criticize boy   PRN.c1-REFL

    'The boy's mother$_i$ said that Hjɔl criticized the boy himself (in person)'

   E6a) The man who Malik liked criticized Malik

    b) The man who the boy liked criticized the boy.

    c) The man who liked the boy criticized the boy.

None of the sentences in E6 is acceptable.

Now consider whether <u>the boy</u> = <u>Malik</u> for the following examples

   E7a) The boy criticized Malik.

    b) The boy said Mariam criticized Malik.

    c) Malik criticized the boy.

    d) Malik said Mariam criticized the boy.

E7 is not acceptable.

   E8a) The boy's mother criticized Malik.

    b) The boy's mother said Mariam criticized Malik.

    c) Malik's mother criticized the boy.

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

Not acceptable

   E9a) The man who the boy liked criticized Malik

    b) The man who Malik liked criticized the boy.

    c) The man who liked Malik criticized the boy.

    d) The man who liked the boy criticized Malik

Not acceptable

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.

D10) *John* believes *he* is guilty.

D10a') **Ewas**$_i$ a- ŋ́- hɔ́ŋɔ̂l lɛ́ a$_i$/$_j$- ye híhoha
  Ewas SM-Pres-think that SM/he-be.Pres fault/mistake
  'Ewas$_i$ thinks that he$_i$/$_j$ is guilty.'

D10a'') **Ewas**$_i$ a- ŋ́- hɔ́ŋɔ̂l lɛ́ **nyɛ́-mɛdɛ́$_i$/$_j$** a$_i$/$_j$- ye híhoha
  Ewas SM-Pres-think that PRN.c1-REFL SM/he-be.Pres fault/mistake
  'Ewas$_i$ thinks that himself$_i$ (Ewas or any other presupposed discourse name in person) is guilty.'

Note that coreference can hold between the subject 'Ewas' and the SM/pronoun or between another discourse salient name and the SM/pronoun. Recall that Basaá is pro-drop in such a way that the SM helps recover the meaning of the dropped subject even though in a serial verb construction such as D10a' the lexical subject 'Ewas' can never realize in the embedded clause i.e. before the SM *a-*.

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. If your language does not use the simple independent pronoun, but another form, be sure to show not only the form that works, but the one that doesn't.

NB: As usual co-indexation in the English translation is simply explanatory (indicative).

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

D11a') Ewas$_i$ a- bí- kal Kɔ́ndɛ́$_j$ lɛ́ Hjɔl$_k$ a- ŋ́- gwês ɓéé **nyɛ́$_i$/$_j$/$_l$**
  E. SM-PST2-tell K that H. SM-Pres-like NEG him
  'Ewas$_i$ told Kɔ́ndɛ́$_j$ that Hjɔl$_k$ does not like him$_i$/$_j$/$_l$'

D11a'') Ewas$_i$ a- bí- kal Kɔ́ndɛ́$_j$ lɛ́ Hjɔl$_k$ a- ŋ́- gwês ɓéé **nyɛ́-mɛdɛ́$_i$/$_j$/$_l$**
  E. SM-PST2-tell K that H. SM-Pres-like NEG PRN.c1-REFL
  'Ewas$_i$ told Kɔ́ndɛ́$_j$ that Hjɔl$_k$ does not like himself$_i$/$_j$/$_k$/$_l$'

D11a''') Ewas$_i$ a- bí- kal Kɔ́ndɛ́$_j$ lɛ́ Hjɔl$_k$ a- ŋ́- gwês-ɓa ɓéé (**nyɛ́-mɛdɛ́$_k$**)
  E. SM-PST2-tell K that H. SM-Pres-like- REFL NEG PRN.c1-REFL
  'Ewas$_i$ told Kɔ́ndɛ́$_j$ that Hjɔl$_k$ does not like himself$_k$'

Note that in the reflexive strategy i.e. in D11a''' the anaphor is optional and coreference holds only between the anaphor and the most embedded subject namely *Hjɔl*.

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

D11b') Ewas$_i$ a- bí- kal Kɔ́ndɛ́$_j$ lɛ́ Hjɔl$_k$ a- ŋ́- gwês ɓéé **nyɛ́$_i$/$_j$/$_l$**
  E. SM-PST2-tell K that H. SM-Pres-like NEG him
  'Ewas$_i$ told Kɔ́ndɛ́$_j$ that Hjɔl$_k$ does not like him$_i$/$_j$/$_l$'

D11b'') Ewas$_i$ a- bí- kal Kɔ́ndɛ́$_j$ lɛ́ Hjɔl$_k$ a- ŋ́- gwês ɓéé **nyɛ́-mɛdɛ́$_i$/$_j$/$_l$**
  E. SM-PST2-tell K that H. SM-Pres-like NEG PRN.c1-REFL
  'Ewas$_i$ told Kɔ́ndɛ́$_j$ that Hjɔl$_k$ does not like him$_i$/$_j$/$_l$'

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

D11c')** **Ewas**ᵢ a- bí- kal Kóndέⱼ lέ **Ewas**ᵢ a- ŋ́- gwês ɓéé Hjɔlₖ

      E.   SM-PST2-tell K   that E.   SM-Pres-like   NEG H.

      '**Ewasᵢ told Kóndέⱼ that Ewasᵢ does not like Hjɔlₖ'

D11c'') Ewasᵢ a- bí- kal Kóndέⱼ lέ **nyέ-mɛdέ**ᵢ/ⱼ/ₖ a- ŋ́- gwês ɓéé Hjɔ̂lₗ

      E.   SM-PST2-tell K   that PRN.c1-REFL   SM-Pres-like   NEG H.

      'Ewasᵢ told Kóndέⱼ himselfᵢ/ⱼ/ₖ does not like Hjɔl'

D11c''') Ewasᵢ a- bí- kal Kóndέⱼ lέ **nyέ**ᵢ/ⱼ/ₖ a- ŋ́- gwês ɓéé Hjɔ̂lₗ

      E.   SM-PST2-tell K   that him   SM-Pres-like NEG H.

      'Ewasᵢ told Kóndέⱼ heᵢ/ⱼ/ₖ does not like Hjɔl' Literally: "Ewasᵢ told Kóndέⱼ heᵢ/ⱼ/ₖ (as opposed to the other(s) does not like Hjɔl'

D11c'''') Ewasᵢ a- bí- kal Kóndέⱼ lέ **a**ᵢ/ⱼ/ₖ - ŋ́- gwês ɓéé Hjɔ̂lₗ

      E.   SM-PST2-tell K   that SM/he-Pres-like   NEG H.

      'Ewasᵢ told Kóndέⱼ heᵢ/ⱼ/ₖ does not like Hjɔl'

Note that in D11c''' we have a contrastive topic reading i.e. a context in which the element (here the pronoun *nyέ*) is contrasted is contrasted with other members of the same list.

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

D11d') Hjɔ̂lᵢ a- bí- kal Ewasⱼ lέ Ewasⱼ a- ŋ́- gwês ɓéé Kóndê̂ₖ   EMPHATIC

      H.   SM-PST2-tell E.   that E.   SM-Pres-like   NEG H.

      'Hjɔlᵢ told Ewasⱼ that heⱼ (Ewas) does not like Kóndê̂ₖ'

Note that cases like D11d' are used in emphatic constructions, for instance when the speaker wants to make the subject (here Ewas) salient.

D11d'') Hjɔ̂lᵢ a- bí- kal Ewasⱼ lέ **a**ᵢ/ⱼ/ₗ- ŋ́- gwês ɓéé Kóndê̂ₖ

      H.   SM-PST2-tell E.   that SM/he -Pres-like   NEG H.

      'Hjɔlᵢ told Ewasⱼ that heⱼ (Ewas) does not like Kóndê̂ₖ'

    'Hjɔlᵢ told Ewasⱼ that heᵢ/ⱼ/ₖ does not like Kóndê̂ₗ'

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

D11e') Hjɔlᵢ a- ŋ́- yí lέ Ewasⱼ a- ŋ́- hɔ́ŋɔ̂l lέ Kóndê̂ₖ a- ŋ́- gwês ɓéé **nyέ**ᵢ/ⱼ/ₗ

      H. SM-Pres-know that E.   SM-Pres-think that K.   SM-Pres-like NEG him

      'Hjɔlᵢ knows that Ewasⱼ thinks that Kóndê̂ₖ does not like himᵢ/ⱼ/ₗ'

D11e''?? Hjɔlᵢ a- ŋ́- yí lέ **Ewas**ⱼ a- ŋ́- hɔ́ŋɔ̂l lέ Kóndê̂ₖ a- ŋ́- gwês ɓéé **Ewas**ⱼ

      H. SM-Pres-know that E.   SM-Pres-think that K.   SM-Pres-like NEG him

      '**Hjɔlᵢ knows that Ewasⱼ thinks that Kóndê̂ₖ does not like Ewasⱼ'

Note that D11e'' can be used as an explanatory sentence i.e. when the speaker wants to explain what s/he has said before clearly. This happens if the speaker first produce an ambiguous sentence such as D11e' with a pronoun corefering with more than one name. In this case the hearer might notbe able to interpret the sentence, then the speaker produces D11e'' in order to disambiguate D11e'.

D11e''') Hjɔlᵢ a- ŋ́- yí lέ Ewasⱼ a- ŋ́- hɔ́ŋɔ̂l lέ

      H. SM-Pres-know that E.   SM-Pres-think that

    Kóndê̂ₖ a- ŋ́- gwês ɓéé **nyέ+médέ**ᵢ/ⱼ/ₖ/ₗ

      K.   SM-Pres-like NEG PRN.c1-REFL

Literally: 'Hjɔlᵢ knows that Ewasⱼ thinks that Kóndê̂ₖ does not like **himself**ᵢ/ⱼ/ₗ'

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

D11f') Ewasᵢ a- ŋ́- yí lέ Hjɔlⱼ a- ŋ́- hɔ́ŋɔ̂l lέ Kóndê̂ₖ a- ŋ́- gwês ɓéé **nyέ**ᵢ/ⱼ/ₗ

      E   SM-Pres-know that H   SM-Pres-think that K.   SM-Pres-like NEG him

'Ewas_i knows that Hjɔl_j thinks that Kóndê_k does not like him_i/_j/_l'

D11f''?? Ewas_i a- ń- yí lɛ́ Hjɔl_j a- ή- hɔ́ŋɔ̂l lɛ́ Kóndê_k a- ή- gwês ɓéé **Ewas**_i

E SM-Pres-know that H SM-Pres-think that K. SM-Pres-like NEG E.

'**Ewas_i knows that Hjɔl_j thinks that Kóndê_k does not like Ewas_i'

D11f''') Ewas_i a- ń- yí lɛ́ Hjɔl_j a- ή- hɔ́ŋɔ̂l lɛ́

E SM-Pres-know that H SM-Pres-think that

Kóndê_k a- ή- gwês ɓéé **nyɛ́-mɛdɛ́**_i/_j/_k/_l

K. SM-Pres-like NEG PRN.c1-REFL.

Literally: 'Ewas knows that thinks that does not like himself_i/_j/_k/_l'

D12a) Zeke's mother thinks that Mike does not like X.

D12a') [ŋǎŋ **Ewas**_i]_j a- ή- hɔ́ŋɔ̂l lɛ́ Kóndê_k a- ή- gwês ɓéé **Ewas**_i

mother E. SM-Pres-think that K. SM-Pres-like NEG E.

**[Ewas_i's mother]_j thinks that Kóndê_k does not like Ewas_i'

b) Zeke's mother thinks that X does not like Mike.

D12b') [ŋǎŋ **Ewas**_i]_j a- ή- hɔ́ŋɔ̂l lɛ́ **Ewas**_i a- ή- gwês ɓéé Kóndê_k

mothe E. SM-Pres-think that E. SM-Pres-like NEG K.

'[Ewas_i's mother]_j thinks that Ewas_i does not like Kóndê_k'

D12b'') [ŋǎŋ **Ewas**_i]_j a- ή- hɔ́ŋɔ̂l lɛ́ **á** ??_i/_j/_k- ή- gwês ɓéé Kóndê_k

mothe E. SM-Pres-think that SM/he- Pres-like NEG K.

'??[Ewas_i's mother]_j thinks that Ewas_i does not like Kóndê_k'

'[Ewas_i's mother]_j thinks that s/he_j/_l does not like Kóndê_k'

c) Zeke thinks that Mike does not like X.

D12c') Ewas_i a- ή- hɔ́ŋɔ̂l lɛ́ Kóndê_j a- ή- gwês ɓéé **nyɛ́**_i/_k

E. SM-Pres-think that K. SM-Pres-like NEG him

'Ewas_i thinks that Kóndê_j does not like him_i/_k'

D12c'') Ewas_i a- ή- hɔ́ŋɔ̂l lɛ́ Kóndê_j a- ή- gwês ɓéé **nyɛ́-mɛdɛ́**_i/_j/_k

E. SM-Pres-think that K. SM-Pres-like NEG PRN.c1-REFL

'Ewas_i thinks that Kóndê_j does not like himself_i/_j/_k'

D12c''') Ewas_i a- ή- hɔ́ŋɔ̂l lɛ́ Kóndê_j a- ή- gwês ɓéé **Ewas**_i

E. SM-Pres-think that K. SM-Pres-like NEG E.

'Ewas_i thinks that Kóndê_j does not like Ewas_i'

d) Zeke's letter said that Mike does not like X.

D12d') Kaat Ewas_i í- bí- pɔ́t lɛ́ Kóndê_j a- ή- gwês ɓéé **nyɛ́**_i/_k

letter E. SM-PST2-tell that K. SM-Pres-like NEG him

'Ewas_i's letter said that Kóndê_j does not like him_i/_k'

D12d'') Kaat Ewas_i í- bí- pɔ́t lɛ́ Kóndê_j a- ή- gwês ɓéé **nyɛ́-mɛdɛ́**_i/_k

letter E. SM-PST2-tell that K. SM-Pres-like NEG PRN.c1-REFL

'Literally: 'Ewas_i's letter said that Kóndê_j does not like himself_i/_j/_k'

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D12d''') Kaat Ewasᵢ í- bí- pɔ́t lɛ́ Kɔ́ndɛ̂ⱼ a- ŋ́- gwês ɓéé **Ewas**ᵢ
    letter E.   SM-PST2-tell that K.   SM-Pres-like NEG E.
  Literally: 'Ewasᵢ's letter said that Kɔ́ndɛ̂ⱼ does not like Ewasᵢ'

The comment above i.e. below D12c holds for D12d.
   e) Zeke heard that Mary did not like X.
D12e') Ewasᵢ a- bí- nɔ́ɣ lɛ́ Kɔ́ndɛ̂ⱼ a- ŋ́- gwês ɓéé **nyɛ́**ᵢ/ₖ
    E.   SM-PST2-hear that K.   SM-Pres-like NEG him
   'Ewasᵢ heard that Kɔ́ndɛ̂ⱼ does not like himᵢ/ₖ'
D12e'') Ewasᵢ a- bí- nɔ́ɣ lɛ́ Kɔ́ndɛ̂ⱼ a- ŋ́- gwês ɓéé **nyɛ́-mɛdɛ́**ᵢ/ⱼ
    E.   SM-PST2-hear that K.   SM-Pres-like NEG PRN.c1-REFL
  Literally: 'Ewasᵢ heard that Kɔ́ndɛ̂ⱼ does not like himselfᵢ/ₖ'
    f) Zeke was told that Mary did not like X. (if your language permits passive)
The following examples are correct. Note also that INDEF stands for 'INDEFINITE' (indefinite pronoun of course) like the French 'ON' while Expl. Stands for EXPLETIVE.
D12f') ɓá bí- kal Ewasᵢ lɛ́ Kɔ́ndɛ̂ⱼ a- ŋ́- gwês ɓéé **nyɛ́**ᵢ/ₖ
    INDEF PST2-tell E.   that K.   SM-Pres-like NEG him
   'Ewasᵢ was told that does not like himᵢ/ₖ'
  Literally: 'They told Ewasᵢ that Kɔ́ndɛ̂ⱼ does not like himᵢ/ₖ'
D12f'') í bí- kel-**á** Ewasᵢ lɛ́ Kɔ́ndɛ̂ⱼ a- ŋ́- gwês ɓéé **nyɛ́**ᵢ/ₖ
    Expl. PST2-tell-PASS E.   that K.   SM-Pres-like NEG him
   'Ewasᵢ was told that does not like himᵢ/ₖ'
   'It was told to Ewasᵢ that Kɔ́ndɛ̂ⱼ does not like himᵢ/ₖ'
  D13a) Zeke said that X had dressed X.
D13a') Ewasᵢ a- bí- kal lɛ́ Kɔ́ndɛ̂ⱼ **nyɛ́-mɛdɛ́**ⱼ **nyɛ́**ⱼ-n   a- bí- **ɛŋg- ɓa**
    E.   SM-PST2-say that K.   PRN.c1-REFL AGR-FOC SM-PST2-dress-PASS
   'Ewas said that Kɔ́ndɛ̂ⱼ dressed himselfⱼ Literally: 'Ewas said that it is Kɔ́ndɛ̂ⱼ himselfᵢ who dressed dressed'
D13a'') Ewasᵢ a- bí- kal lɛ́ Kɔ́ndɛ̂ⱼ a- bí- **ɛŋg- ɓá** (**nyɛ́-mɛdɛ́**ᵢⱼ)
    E.   SM-PST2-say that K   SM-PST2-dress-PASS PRN.c1-REFL
    'Ewasᵢ said that Kɔ́ndɛ̂ⱼ dressed himselfⱼ
Keep in mind that D13a' involves a focus construction which can be translated as a cleft. As already said before, AGR stands for AGREEMENT and encodes class agreement with the focused element. Here again, AGR is homophonous with the accusative pronoun.
   b) Zeke said that X had wounded X.
D13b') Ewasᵢ a- bí- kal lɛ́ **Kɔ́ndɛ̂**ⱼ a- bí- **ɓééβá**   (**nyɛ́-mɛdɛ́**ⱼ)
    E.   SM-PST2-say that K   SM-PST2-wound.REFL PRN.c1-REFL
   'Ewasᵢ said that Kɔ́ndɛ̂ⱼ wounded himselfⱼ'
D13b'') Ewasᵢ a- bí- kal lɛ́ **Kɔ́ndɛ̂**ⱼ **nyɛ́-mɛdɛ́**ⱼ **nyɛ́**ⱼ-n   a- bí- **ɓééβa**
    E.   SM-PST2-say that K   PRN.c1-REFL   AGR-FOC SM-PST2-wound.REFL
   'Ewasᵢ said that Kɔ́ndɛ̂ⱼ wounded himselfᵢ (nobody wounded him)'
Note here that D13a' contains an 'inherent' reflexive verb in the language namely *ɓééβa* 'wound oneself' with an optional anaphor while D13b'' involves a focus construction.
   c) Zeke said that X had tatooed X.
D13c') Ewasᵢ a- bí- kal lɛ́ **Kɔ́ndɛ̂**ⱼ a- bí- wat-βá   (**nyɛ́-mɛdɛ́**ⱼ)
    E.   SM-PST2-say that K   SM-PST2-scratch-REFL PRN.c1-REFL

‘Ewas_i said that Kóndê_j tatooed himself_j’

D13c”) Ewas_i a- bí- kal lέ **Kóndê_j nyέ-mɛdέ_j nyέ_j-n** a- bí- wat-βa
    E. SM-PST2-say that K PRN.c1-REFL AGR-FOC SM-PST2-scratch-REFL
        ‘Ewas_i said that Kóndê_j tatooed himself_j’

For D13c above, see comment below D12b. The only difference is that in D13c” we have an overt reflexive morpheme while in D12b’ and b” the verb *ɓééɓa* ‘wound oneself’ is inherently reflexive.

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

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.

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.

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

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

  D14a) Ozzie talked about Harriet to X.
      b) Ozzie talked about X to Harriet.
Note that D14a and b are not applicable in Basaá.
        c) Ozzie told Harriet that X should leave.
D14c’) Ewas a- bí- kal Kóndέ lέ **ɓá** kέ- n- êɣ
      E SM-PST2-tell K. that SM/they leave-EPTH-SUBJ
    ‘Ewas told Kondέ that they ((Ewas and K together)/other persons) should leave.’
D14c”) Ewas a- bí- kal Kóndέ lέ **ɓɔ́ ɓáa ɓá-** kέ- n- êɣ
      E SM-PST2-tell K. that them two SM/they leave-EPTH-SUBJ
    ‘Ewas told Kondέ that they ((E. and K. together)/other persons) should leave.’
    ‘Literally: Ewas told Kondέ that both of them (E. and K.)/ two other persons and should leave’
        d) Ozzie told Harriet that Bill dislikes X.
D14d’) Ewas a- bí- kal Kóndέ lέ Hjɔl a- ń́- ɔɔ **ɓɔ́**
        E. SM-PST2-tell K that H. SM-Pres-dislike them
    ‘Ewas told Kondέ that Hjɔl dislikes them (E. and K)/ other persons’

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D14d'') Ewas a- bí- kal Kóndɛ́ lɛ́ Hjɔl a- ŋ́- ɔɔ **ɓɔ́ ɓáa**
      E.   SM-PST2-tell K   that H.   SM-Pres-dislike them two
      'Ewas told Kondɛ́ that Hjɔl dislikes both of them (E. and K)/ two other persons'
  e) Ozzie said that Harriet thinks that Bill dislikes X.
D14e') Ewas a- bí- kal lɛ́ Kóndɛ́ a- ŋ́- hɔ́ŋɔ̂l lɛ́ Hjɔl a- ŋ́- ɔɔ **ɓɔ́**
      E.   SM-PST2-say that K.   SM-Pres-think that H. SM-Pres-dislike them
    'Ewas said that Kóndɛ́ thinks that Hjɔl dislikes them (E. and K.)/other persons'
D14e'') Ewas a- bí- kal lɛ́ Kóndɛ́ a- ŋ́- hɔ́ŋɔ̂l lɛ́ Hjɔl a- ŋ́- ɔɔ **ɓɔ́ ɓáa**
      E.   SM-PST2-say that K.   SM-Pres-think that H. SM-Pres-dislike them two
    'Ewas said that Kóndɛ́ thinks that Hjɔl dislikes both of them (E. and K.)/two other persons'

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).

   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?
D15a) **Ewas**$_i$ a- bí- kɔn wɔ́ŋí lɛ́ lɔ̂ɣ yê í- ɓê líkala liɓɛ,
      E.   SM-PST2-fell sick fear that son his SM-be.PAST scale bad/serious
   a$_i$- ɓê wɔ́ ɲuu lɛ́ **a**$_i$- gá- la ɓéé tât mut **wê**$_i$ ɲuu.
   he-be.past die body that SM/he-FUT2-can NEG protect person his body
    βiloɣ βí ŋâŋ (**gwê**$_i$) βí- gá- yɔŋ láá **nyɛ́**$_i$
    brothers his SM-FUT2-consider how him
'Ewas feared that his son was in a bad situation, he was ashamed that that he would not protect a person/relative of his. How will his brothers consider him?'
   D16) Mark was shocked to see his picture in the paper. All of his supporters would
      abandon him. How would he tell his mother?
D16a) **Ewas**$_i$ a- bí- hɛ̂l títíi **yê**$_i$ í- ye í péβa.
      E.   SM-PST2-be surprise picture his SM-be.Pres LOC paper
    Mawandá **mê**$_i$ mɔ́másɔ́nâ má-ŋ́- la tʃô **nyɛ́**$_i$ **a**$_i$- gá- kal láá **ŋâŋ**$_i$
     friends his all   SM-Pres-can abandon him he/SM-FUT2-tell how mother
'Ewas$_i$ was surprise to see his$_i$ picture in the paper. All his$_i$ friends would abandon him$_i$. What would he$_i$ tell his$_i$ mother'

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.
Note that in D16a above we have a pro-drop case in which the subject marker (SM) helps recover the missing NP subject (Ewas).

   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.

D17) **Ewas**$_i$ a- ŋ- kâl lɛ́ **lěn**$_j$ a- ɓâɣ *Hjɔl*$_k$ kêl iβɛ́ Pɔ̂ɣ, **a**$_{i/k}$- ŋ- kâl **nyɛ́**$_k$/$_l$ lɛ́
      E.   SM-PST1-say that today SM-be.PAST H.   day bad first SM/he-PST1-tell him   that
      litówa **jê**$_{i/k}$ lí- n- nîβ- á, í mbûs hála, *a*$_k$-lámgá lɛ́
      car   his   SM-PST1-steal-PASS LOC back that   SM-have to.PAST that
     á$_k$- pɔ̂ litówa lipɛ́ í- kɛ-na *nyɛ́*$_k$ í hɔmá nsɔ̂n
     SM/he-borrow car   another INF-go-OBL him LOC place   work
     Ewas a- hɔ́ŋl- áɣ lɛ́ a- gá- únûβ
      E.   SM-think-PROG   that SM/he-FUT2-get angry

   'Ewas$_i$ said that today was a bad day for *Hjɔl*$_k$. First, he$_i$ (Ewas$_i$) told him$_k$ that his$_{i/k}$ car had been stolen. Then (after that), he$_{i/k}$ had to borrow another car to take him to work. Ewas$_i$ thought that he$_i$ would get angry.'

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

    D18)   A: Look, there's Mark!
D18a) ɓeŋgɛ́   ki,   **Ewas**$_i$ **núú**$_i$ (nɔɔ́)
      look.IMP.2pers.sg a little bit Ewas   DEM.DIST.LOC   over there (reinforcer)
     'Look a little bit, there is Ewas!' Literally: 'Look, over there is Ewas!'

Note that in D18a, DEM stands for DEMONSTRATIVE, DIST for DISTAL and LOC for locative. Note that in Basaá D18a is a presentative construction which always involves demonstratives depending on the position of the object of reference. The demonstrative always agrees in class with the object it locates. Reinforcers change according to the position (proximal, distal etc).

         B: He is so handsome.
D18a'') **a**$_i$-   ye   nlâm   lɛ́/ŋgandaɣ
      SM-he-be.Pres handsome so/very
      '**He**$_i$ is so handsome'
         A: I would not want to be his wife though. All the women are chasing him.
D18a''') Mɛ gá-   gwês ɓéé ɓá   **wɛ́á** **(wê**$_i$**)** ɓodaá ɓɔ́ɓásónâ ɓá-ŋ́-gwês nyɛ́$_i$
      I   FUT2-like NEG be.INF wife his   women all   SM-Pres-like him
      'I will not want to be his wife$_i$ All the women like him$_i$'

         B: Also, I think he praises himself too much.
D18a''') Ni   lɛ́   mɛ ŋ́-hɔ́ŋɔ̂l lɛ́   a-   ŋ́- heŋɓá lɛ́ /ŋgándaɣ
        and that I Pres-think that SM-he-Pres-boast so/a lot
        'In addition, I think, he$_i$ shows up a lot'
      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?

4.4.3 Blocking Effects

      The agreement features of nominals intervening between an anaphor and its antecedent

can sometimes affect the grammaticality of coconstrual 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.

    D19a) Larry thinks that John respects X.

D19a') **Ewa**s$_i$ a- ń- hɔ́ŋɔ̂l lɛ́ Kondɛ́$_j$ a- ń- tí **nyɛ́**$_{i/k}$ lipém
      E.   SM-Pres-think that K   SM-Pres-give him   respect
    'Ewas$_i$ thinks that K respects him$_{i/k}$'

D19a'') **Ewa**s$_i$ a- ń- hɔ́ŋɔ̂l lɛ́ Kondɛ́$_j$ a- ń- tí **nyɛ́-mɛdɛ́**$_{i/j/k}$ lipém
      E.   SM-Pres-think that K   SM-Pres-give PRN.c1-REFL   respect
    'Ewas$_i$ thinks that K respects himself$_{i/j/k}$'

    b) Larry thinks that I respect X.

D19b') **Ewa**s$_i$ a- ń- hɔ́ŋɔ̂l lɛ́ mɛ ń- tí **nyɛ́**$_{i/k}$ lipém
      E.   SM-Pres-think that I Pres-give him   respect
    'Ewas$_i$ thinks that I respect him$_{i/j}$'

D19b'') **Ewa**s$_i$ a- ń- hɔ́ŋɔ̂l lɛ́ mɛ ń- tí **nyɛ́-mɛdɛ́**$_{i/j}$ lipém
      E.   SM-Pres-think that I Pres-give PRN.c1-REFL   respect
    'Ewas$_i$ thinks that I respect himself$_{i/j}$'

    c) Larry thinks that Mary respects X.

Please see sentences D19a' and a'' above. There is no gender mismatch.

    d) Larry thinks that the boys respect X.

D19d') **Ewa**s$_i$ a- ń- hɔ́ŋɔ̂l lɛ́ dilɔ́ɣá$_j$ dí- ń- tí **nyɛ́**$_{i/k}$ lipém
      E.   SM-Pres-think that boys   SM-Pres-give him respect
    'Ewas$_i$ thinks that the boys respect him$_{i/k}$'

D19d'') **Ewa**s$_i$ a- ń- hɔ́ŋɔ̂l lɛ́ dilɔ́ɣá$_j$ dí- ń- tí **nyɛ́-mɛdɛ́**$_{i/k}$ lipém
      E.   SM-Pres-think that boys   SM-Pres-give PRN.c1-REFL   respect
    'Ewas$_i$ thinks that the boys respect himself (in person)$_{i/k}$'

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

D19e') ɓoolôm$_i$ ɓá- ń- hɔ́ŋɔ̂l lɛ́ dilɔ́ɣá$_j$ dí- ń- tí **ɓɔ́**$_{i/k}$ lipém
    men   SM-Pres-think that boys   SM-Pres-give them respect
      'The men$_i$ think that the boys respect them$_{i/k}$'

D19e') ɓoolôm$_i$ ɓá- ń- hɔ́ŋɔ̂l lɛ́ dilɔ́ɣá$_j$ dí- ń- tí **ɓɔ́+mɛdɛ́**$_{i/j/k}$ lipém
    men   SM-Pres-think that boys   SM-Pres-give PRN.c2-REFL   respect
      'The men$_i$ think that the boys respect them+selves (in person)$_{i/k}$'

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

    D20a) Larry thinks that Bill knows that Dave respects X.

D20a') **Ewa**s$_i$ a- ń- hɔ́ŋɔ̂l lɛ́ Hjɔl$_j$ a- ń- yí lɛ́ Kondɛ́$_k$ a- ń- tí nyɛ́$_{i/j/l}$ lipém
      E.   SM-Pres-think that H. SM-Pres-know that K.   SM-Pres-give him   respect
    'Ewas thinks that Hjɔl$_j$ knows that Kondɛ́$_k$ respects him$_{i/j/l}$'

D20a'') **Ewa**s$_i$ a- ń- hɔ́ŋɔ̂l lɛ́ Hjɔl$_j$ a- ń- yí lɛ́ Kondɛ́$_k$ a- ń- tí nyɛ́-mɛdɛ́$_{i/j/k/l}$
      E.   SM-PRS-think that H. SM-Pres-know that K.   SM-PRS-give PRN.c1-REFL
     lipém
     respect
    'Ewas thinks that Hjɔl$_j$ knows that Kondɛ́$_k$ respects himself (in person)$_{i/j/k/l}$'

    b) Larry thinks that I know that Dave respects X.

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c) Larry thinks that Mary knows that Dave respects X.

Please, for D20b-c, see D20 above. No person/number/gender mismatch.

d) Larry thinks that the boys know that Dave respects X.

D20d') **Ewa**s$_i$ a- ŋ́- hɔ́ŋɔ̂l lɛ́ dilɔ́ɣá$_j$ dí- ń- yí lɛ́ Kondɛ́$_k$ a- ń- tí
    E.   SM-Pres-think that boys SM-Pres-know that K.   SM-Pres-give
    nyɛ́$_{i/l}$ lipém
    him   respect
   'Ewas$_i$ thinks that the boys know that Kondɛ́$_k$ respect him$_{i/l}$'

D20d'') **Ewa**s$_i$ a- ŋ́- hɔ́ŋɔ̂l lɛ́ dilɔ́ɣá$_j$ dí- ń- yí lɛ́ Kondɛ́$_k$ a- ń- tí
    E.   SM-Pres-think that boys SM-Pres-know that K.   SM-Pres-give
    nyɛ́-mɛdɛ́$_{i/k/l}$ lipém
    PRN.c1-REFL   respect
   'Ewas$_i$ thinks that the boys know that Kondɛ́$_k$ respect himself (in person)$_{i/l}$'

e) The men think that the boys know that Dave respects. (the men = X)

D20e') **ɓoolôm**$_i$ ɓá- ŋ́- hɔ́ŋɔ̂l lɛ́ dilɔ́ɣá$_j$ dí- ń- yí lɛ́ Hjɔl$_k$ a- ń- tí
    men   SM-Pres-think that boys SM-Pres-know that H.   SM-Pres-give
  ɓɔ́$_{i/l}$ lipêm
    them respect
  'The men$_i$ think that the boys$_j$ know that Hjɔl$_k$ respects them$_{i/l}$'

D20e') **ɓoolôm**$_i$ ɓá- ŋ́- hɔ́ŋɔ̂l lɛ́ dilɔ́ɣá$_j$ dí- ń- yí lɛ́ Hjɔl$_k$ a- ń- tí
    men   SM-Pres-think that boys SM-Pres-know that H.   SM-Pres-give
  ɓɔ́m+mɛdɛ́$_{i/j/l}$ lipêm
    them respect
  'The men$_i$ think that the boys$_j$ know that Hjɔl$_k$ respects themselves$_{i/l}$'

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.

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

D21a') **Ewa**s$_i$ a- ŋ́- hɔ́ŋɔ̂l lɛ́ Hjɔl$_j$ a- bí- kal Kóndɛ́$_k$ lɛ́
    E.   SM-Pres-know that H.   SM-PST2-tell K.   that
  Bíkûn$_l$ a- ń- tí nyɛ́$_{i/j/k/m}$ lipêm
    B.   SM-Pres-give him   respect
  'Ewas$_i$ thinks that Hjɔl$_j$ told Kóndɛ́$_k$ that Bíkûn$_l$ respects him$_{i/j/k/m}$'

D21a') **Ewa**s$_i$ a- ŋ́- hɔ́ŋɔ̂l lɛ́ **Hjɔl**$_j$ a- bí- kal **Kóndɛ́**$_k$ lɛ́
    E.   SM-Pres-know that H.   SM-PST2-tell K.   that
  Bíkûn$_l$ a- ń- tí **nyɛ́-mɛdɛ́**$_{i/j/k/l/m}$ lipêm
    B.   SM-Pres-give PRN.c1-REFL   respect
  'Ewas$_i$ thinks that Hjɔl$_j$ told Kóndɛ́$_k$ that Bíkûn$_l$ respects himself (in person)$_{i/j/k/l/m}$'

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

D21b') **Ewa**s$_i$ a- ŋ́- hɔ́ŋɔ̂l lɛ́ **Hjɔl**$_j$ a- bí- kal mɛ́ lɛ́
    E.   SM-Pres-think that H.   SM-PST2-tell me that
  Bíkûn$_k$ a- ń- tí nyɛ́$_{i/j/l}$ lipêm
    B.   SM-Pres-give him   respect
  'Ewas$_i$ thinks that Hjɔl$_j$ told me that Bíkûn$_k$ respects him$_{i/j/l}$'

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D21b'') **Ewas**ᵢ a- ŋ́- hɔ́ŋɔ̂l lɛ́ **Hjɔl**ⱼ a- bí- kal mɛ́ lɛ́
  E. SM-Pres-think that H. SM-PST2-tell me that

 Bíkûnₖ a- ń- tí nyɛ́-mɛdɛ́ᵢ/ⱼ/ₖ/ₗ lipêm
  B. SM-Pres-give him respect

 'Ewasᵢ thinks that Hjɔlⱼ told me that Bíkûnₖ respects himself (in person)ᵢ/ⱼ/ₗ'

 c) Walter told me that Dave respects X.

D21c') **Hjɔl**ᵢ a- bí- kal mɛ́ lɛ́ Bíkûnⱼ a- ń- tí nyɛ́ᵢ/ₗ lipêm
   H. SM-PST2-tell me that B. SM-Pres-give him respect

 '**Hjɔl**ᵢ told me that Bíkûnⱼ respects himᵢ/ₗ'

D21c'') **Hjɔl**ᵢ a- bí- kal mɛ́ lɛ́ Bíkûnⱼ a- ń- tí nyɛ́-mɛdɛ́ᵢ/ⱼ/ₖ/ₗ lipêm
   H. SM-PST2-tell me that B. SM-Pres-give PRN.c1-REFL   respect
  '**Hjɔl**ᵢ told me that Bíkûnⱼ respects himself (in person) ᵢ/ⱼₖ/ₗ'

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

D21d') **Hjɔl**ᵢ a- bí- kal lɛ́ Bíkûnⱼ a- bí- tí nyɛ́ᵢ/ₗ kaat i i- ḿ- pód-ól
  H. SM-PST2-say that B. SM-PST2-give him book REL SM-Pres-talk-OBL

  nyɛ́ᵢ/ⱼ/ₗ
  him

 '**Hjɔl**ᵢ said that Bíkûnⱼ gave himᵢ/ₗ a book about himᵢ/ⱼ/ₗ'

D21d') **Hjɔl**ᵢ a- bí- kal lɛ́ Bíkûnⱼ a- bí- tí nyɛ́ᵢ/ₗ kaat i i- ḿ- pód-ól
  H. SM-PST2-say that B. SM-PST2-give him book REL SM-Pres-talk-OBL

  nyɛ́-mɛdɛ́ᵢ/ⱼ/ₗ
  PRN.c1-REFL

 '**Hjɔl**ᵢ said that Bíkûnⱼ gave himᵢ/ₗ a book about himself (in person)ᵢ/ⱼ/ₗ'

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.

D22a') ****Ewas**ᵢ a- ŋ́-gwês í ŋâŋ únú lɛ́ Kondɛ́ⱼ a- ŋ́- ɔɔ́ nyɛ́ᵢ/ⱼ/ₗ
   E. SM-Pres-like DEF news DEM that K. SM-Pres-hate him
   'Ewasᵢ likes the news that Kondɛ́ⱼ hates himᵢ/ⱼ/ₗ'

  b) Ira respects the man who likes X.

D22b') Ewasᵢ a- ń- **tí** í mut nú a- ŋ́- gwês **nyɛ́**ᵢ/ⱼ **lipêm**
  E. SM-Pres-give DEF person REL SM-Pres-like him respect
  'Ewasᵢ respects the man who likes himᵢ/ⱼ'

D22b''') Ewasᵢ a- ń- **tí** [í mut nú]ⱼ a- ŋ́- gwês **nyɛ́-mɛdɛ́**ᵢ/ⱼ/ₖ **lipêm**
  E. SM-Pres-give DEF person REL SM-Pres-like PRN.c1-REFL respect
  Literally: 'Ewasᵢ respects the man who likes himselfᵢ/ⱼ'

Note that D22b' is correct and the predicate *tí lipêm* 'respect' is discontinuous as expected i.e. it is always interspersed by an indirect object (note that the predicate *tí lipêm* can literally mean 'give respect' so that the English 'give respect to someone' is translated as *tí mut lipêm* (give someone respect' in Basaá. The sentence D22b' is correct. Note that the pronoun *nyɛ́* 'him' in

D22b' can corefer with the subject 'Ewas' and with any other name known in the discourse. See also coreference in D22b'' with the anaphor *nyέ-mεdέ* 'himself' which can also corefer with the bracketed relativized NP (co-indexation in the latter case is not fine in fact, but not that it is the equivalent of the English complex NP 'the man who like himself' which is co-indexed as $_j$.

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

D22d' Ewas$_i$ a- ń- kal lέ [í   mut   nú a- ń- gwês **nyέ**$_{i/j}$]$_k$ a ń- yí   jâm
      E.   SM-Pres-say that DEF person REL SM-Pres-like   him   SM-Pres-know thing
   'Ewas$_i$ says that [the man who likes him$_{i/j}$]$_k$ is intelligent'

D22d' Ewas$_i$ a- ń- kal lέ [í   mut   nú a- ń- gwês **nyέ-mεdέ**$_{i/j}$]$_k$
      E.   SM-Pres-say that DEF person REL SM-Pres-like   PRN.c1-REFL
   a ń- yí   jâm
   SM-Pres-know thing
   'Ewas$_i$ says that [the man who likes himself$_{i/j}$]$_k$ is intelligent'   ANAPHORIC

       d) Ira asked whether Bill saw X.

D22d') **Ewas**$_i$ a- bí- ɓát lέ tɔ̀ɔ́   **Kondέ**$_j$ a- bí- tέhέ **nyέ**$_{i/l}$
       E.   SM-PST2-ask that whether/if K.   SM-PST2-see him
    'Ewas$_i$ asked whether Kondέ$_j$ saw him$_{i/l}$'

D22d'') **Ewas**$_i$ a- bí- ɓát lέ tɔ̀ɔ́   **Kondέ**$_j$ a- bí- tέhέ **nyέ-mεdέ**$_{i/j/l}$
       E.   SM-PST2-ask that whether/if K.   SM-PST2-see PRN.c1-REFL
    'Ewas$_i$ asked whether Kondέ$_j$ saw himself$_{i/j/l}$'   ANAPHORIC

       e) Ira asked when Bill saw X.

D22e') **Ewas**$_i$ a- bí- ɓát lέ   kέlkíí **Kondέ**$_j$ a- bí- tέhέ **nyέ**$_{i/l}$
      E.   SM-PST2-ask that when K.   SM-PST2-see him
    'Ewas$_i$ asked when Kondέ$_j$ saw him$_{i/l}$'

D22e'') **Ewas**$_i$ a- bí- ɓát lέ   kέlkíí **Kondέ**$_j$ a- bí- tέhέ **nyέ-mεdέ**$_{i/j/k}$
      E.   SM-PST2-ask that when K.   SM-PST2-see PRN.c1-REFL
    'Ewas$_i$ asked when Kondέ$_j$ saw him$_{i/j/k}$'   ANAPHORIC

NB: Coreference holds between the embedded subject *Kondέ*$_j$ and the anaphor *nyέ-mεdέ* 'himself' if and only if it is the case that *Kondέ* sees himself in the mirror for instance, and under the assumption that he had never seen *himself* before in the mirror.

In D22e'''below where the reflexive morpheme is used, coreference holds only between the embedded subject *Kondέ*$_j$ and the anaphor *nyέ-mεdέ* 'himself' in case the anaphor is used.

D22e'') **Ewas**$_i$ a- bí- ɓát lέ   kέlkíí **Kondέ**$_j$ a- bí- téé-ɓá   (**nyέ-mεdέ**$_i$)
      E.   SM-PST2-ask that when K.   SM-PST2-see-REFL PRN.c1-REFL
    'Ewas$_i$ asked when Kondέ$_j$ saw him$_{i/j/k}$'

       f) Ira did not realize that George followed X.

D22f') **Ewas**$_i$ a- bí- yí   ɓéé lέ   **Kondέ**$_j$ a- bí- nɔŋ **nyέ**$_{i/l}$
      E.   SM-PST2-know NEG that K.   SM-PST2-follow him
   'Ewas$_i$ did not know that **Kondέ**$_j$ followed him$_{i/l}$'

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

D22g') **Ewas**$_i$ a- bí-   kal lέ Maríya$_j$ a- ye   nlâm,
      E.   SM-PST2-say that M.   SM-be.Pres nice
   ni lέ a$_{i/j/k}$- gá- la ɓíí   nyέ$_{i/k}$
    and that SM/s/he-FUT2-can marry him

NB: The following interpretations are possible.

'Ewas$_i$ said that Mary$_j$ is nice and that s/he$_{i/j/l}$ will marry him$_{i/j/k}$'
  'Ewas said that Mary is nice and that she (Mary/another person) will marry him
  (Ewas/another person)'
'Ewas said that Mary is nice and that he (Ewas) will marry her (Mary/another person)'
'Ewas said that Mary is nice and that another person will marry her/him (Mary/Ewas)'

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 <u>believe</u> is aware that he is referring to himself. The distinction is between two readings where <u>his</u>=<u>Oedipus</u>, that is, we are not interested, for theses cases, in readings where <u>his</u> is not <u>Oedipus</u>. 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.
D23a') Ewas$_i$ a- ŋ́-   kal lɛ́   ŋâŋ$_{i/j}$ (wê$_{i/j}$) a- ye   nlâm
      E.   SM-Pres-say that mother (his)   SM-be.Pres nice
      'Ewas$_i$ says that his$_{i/j}$ mother is nice'

Note that since the item *ŋâŋ* 'mother' conveys inherent possession like any other kinship name as already mentioned, in the absence of the possessive adjective *wê* 'his' two interpretations are possible namely 'Ewas biological mother' and 'someone else mother' although a social reading might be possible.When the possessive is used, there is no kinship relation (to the best of my knowledge) between 'Ewas' or 'someone else' and 'mother'. The relationship will be based more on social hierarchy (e.g. Ewas' boss) than on kinship. However, it is important to mention that whether the possessive is dropped or not, the English interpretation of D23a also holds for Basaá. Globally the dropping of the possessive leads to two readings namely a kinship reading and a social one. The same thing holds for D23b' below.

    b) *Oedipus* thinks/says *his* mother is mean.
D23a') Ewas$_i$ a- ŋ́-   kal lɛ́   ŋâŋ$_{i/j}$ (wê$_{i/j}$) a- ye   ɓéβá
      E.   SM-Pres-say that mother (his)   SM-be.Pres wicked
      'Ewas$_i$ says that his$_{i/j}$ mother is wicked'

Now <u>his</u> in both examples is to be coconstrued with Oedipus, but <u>his mother</u> 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.
No morphological distinction is attested.

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.

PART 5 Final thoughts

5.1 - Having looked at the details of each strategy individually, do you have any general comments on differences in meaning between the various strategies, conditions that would cause one or another to be preferred or required, etc.?

Globally, we have examined four strategies in Basaá namely the independent pronoun strategy which involves an accusative pronoun, the reflexive strategy which involves addition of a specific reflexive morpheme (which varies depending on the verb base) to the verb base (although some verb are inherently reflexive i.e. they conveys reflexivity even with an implicit reflexive morpheme),. Also, the reflexive strategy may involve an anaphoric pronoun. The reciprocal strategy which involves addition of a reciprocal morpheme to the verb base,(the reciprocal morpheme also varies in form) and the null object strategy. Summarizing, the independent pronoun strategy, including the anaphoric pronoun and the null object strategy have been said to be very productive while the reciprocal and reflexive with specific morphemes are very limited.

5.2 - Are there any properties of the questionnaire that you think could be improved, made more relevant, or more flexible? Is there any part of the questionnaire that you thought was unsuccessful at addressing what seems to you an important class of phenomena for our anaphora project? Please make us aware of any way in which you think we could improve our data collection.

I suggest investigation be carried out on information structure devices such as topic, focus, question formation and the like if and only if they appear to be relevant to the project.

Also, any misunderstanding of the date provided should be mentioned so as to provide appropriate explanations. Some English translations used in the work do not abide with

grammaticality, rather, they are used for explanatory reasons.