

A very long-distance anaphor?

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Yag Dii (Niger-Congo/Adamawa-Ubangi, Cameroon; also called Duru: Bohnhoff 1986): Four types of pronouns.

PRON: can bear any grammatical function, except for subject in SUBORD domain; noncoreferent with LD antecedent if in LD domain

SUBORD: must appear as subject in SUBORD domain; noncoreferent with LD antecedent if in LD domain

LD: can bear any grammatical function in LD domain, except for subject in SUBORD domain within LD domain; coreferent with LD antecedent

2LD: must appear as subject in SUBORD domain within LD domain; coreferent with LD antecedent

1 The very long distance anaphor

Claim:

- Languages do not have grammatical dependencies that are exclusively nonlocal – there are no grammatical dependencies that operate at a minimal distance of two clauses away, for example.
- In particular, anaphors do not ignore their local context. This is the *Locality Condition* of Dalrymple (1993), stated as: “binding constraints ... always refer to local elements, never exclusively to nonlocal ones”, and the *subset principle* of Manzini & Wexler (1987) for anaphoric binding domains, stating that smaller potential binding domains are always contained in larger ones.

Counterexample? 2LD: must appear as the subject of a subordinate clause within a subordinate domain.

- (1) Nán ba'ad Ø 'ò [moo 'èh dà bì tóó bà ka vì
 man work (he_i) say for what friend his.LD_i other that sb-he_j ask
 bi [bà 'ii súwɛ 'áíá]?
 him.LD_i that he.2LD_i repay.him_j CM-Q
 'The worker_i asked why his.LD_i friend asked him.LD_i that he.2LD_i repay
 the IOU.' (corrected version of Bohnhoff 1986, 119)

⁰Some of the examples presented here are corrected versions of examples appearing in Bohnhoff (1986), which contains much of the data and the generalisations presented in the following. I am grateful to Lee Bohnhoff (personal communication, October 1991) for providing corrections to examples from his original article, additional examples, and helpful comments on the patterns discussed here, and to Ash Asudeh for helpful comments on the analysis.

Intervening clause may, but need not, contain a coreferential pronoun.

- (2) Bà'á Ø gàà [[sèy ì làà téé] bà bíń hò hẹn
 Papa_i, (he_i) knows time he.2LD_i goes when, that he.LD_i. will see thing
 Múúsà wòò]
 Moses his
 'Papa_i knows that when he.2LD_i goes, he.LD_i'll see Moses's thing.'
 (L. Bohnhoff, p.c.)

- (3) Bà'á Ø gàà [[kóó ì lúu ní sị'] bà míń hò hẹn
 Papa_i, (he_i) knows time he.2LD_i leave NEG even, that I. will see thing
 Múúsà wòò]
 Moses his
 'Papa_i knows that even if he.2LD_i doesn't leave, I'll see Moses's thing.'
 (L. Bohnhoff, p.c.)

Similar in some respects to switch reference (Haiman & Munro 1983):

- (4) a. Hegai 'uuvi 'a-t 'am şöñi hegai ceoj c 'am şösa.
 that woman 3-perf hit that man SS cry
 'The woman_i hit the man and she_i cried.'
- b. Hegai 'uuvi 'a-t 'am şöñi hegai ceoj ku-t (hegai ceoj) 'am şösa.
 that woman 3-perf hit that man DS that man cry
 'The woman hit the man_i and he_i (the man) cried.'
 (Pima; Haiman & Munro 1983, x)

But according to Haiman & Munro (1983, xiii), “there seem to be no languages ... in which switch-reference is marked *exclusively* between non-adjacent clauses. Thus, if a language has switch-reference marking between non-adjacent clauses, it will also mark switch-reference between adjacent clauses.”

2 PRON and SUBORD pronouns

PRON and SUBORD pronoun paradigms, from Bohnhoff (1986, 107,109,110)
(there are no SUBORD nonsubject pronouns):

	PRON subject	PRON object	PRON possessive	SUBORD subject
1.sg	-n/mí	-n/mí	míí	'àh
1incl.dual	ba	ba	bàà	ba
2.sg	-m/mó	-m/mó	móó	'àm
3.sg	∅	-wɥ	wòò	'à
1excl.pl	vó	vó	vóó	'òo
1incl.pl	ba...ví	ba ví	bàà ví	ba...ví
2.pl	ví	ví	víí	'ì
3.pl	wɥ	wɥ	wòò	'ùu

Distribution of PRON and SUBORD subject pronouns:

	main clauses	subordinate clauses
PRON:	imperfective-factative, perfective-factative	indirect quotation, comparison clauses, causal adjuncts (“be- cause...”) introduced by <i>moo</i> , 'until' adjuncts
SUBORD:	imperfective-hortative	indirect order, relative clause, temporal/locative/conditional clause, purpose clause, con- cessive clause, causal adjunct introduced by <i>ka</i> or <i>bà</i>

2.1 PRON

Subject PRON:

(5) Imperfective-factative:

Mó làà kaalí
you.PRON go to.town
'You go to town.'

(Bohnhoff 1986, 107)

(6) Indirect quotation:

... bà mó làà kaalí
that you.PRON go town.to
'... that you go to town.'

(Bohnhoff 1986, 107)

Object PRON:

(7) Mí hò ví 'ú
I.PRON see you.PL.PRON CM
'I see you.'

(Bohnhoff 1986, 110)

Possessive PRON:

(8) Mí hò lig móó sú'ú
I.PRON see house your.Sg.PRON already
'I saw your house already.'

(Bohnhoff 1986, 110)

PRON encoding reflexive meaning with *fóó* 'body':

(9) Reflexive:

'Àm híí dàm wɥ kó 'í kám híí
you.SUBORD.IMP love neighbor.your PL as as subordinator.you love
[fóó móó] wɔgho 'úm
body your.PRON as also
'Love your neighbor as you love yourself.'

(corrected version of Bohnhoff 1986, 112)

2.2 SUBORD

(10) Imperfective-hortative:

'Àm làà kaalí
you.SUBORD.must go town.to
'Go to town!'

(Bohnhoff 1986, 108)

(11) Temporal/locative/conditional:

Tòw/sè'èy/ya 'àm làà kaalí téé
if/when/where you.SUBORD go town.to demonstrative
'If/when/where you go to town...'

(Bohnhoff 1986, 108)

Does not depend on presence of binder in matrix clause:

(12) Wɥ híí 'ùu làà kaalí
they.PRON_i want they.SUBORD_{*i,j} go town.to
'They want others to go to town.'

(Bohnhoff 1986, 114)

(13) Nà'á ∅ 'òd bà'á [[sè'èy bà 'à fíí ya
Mother_i (she_i) says.to Father_j time that he.SUBORD_j returns comes
babbí téé] bà 'à dèè dubbì]
field.from then] that he.SUBORD_j cook yam.CM
'Mother_i says to Father_j that when he_j returns from the field, he_j should
cook the yams.'

(corrected version of Bohnhoff 1986, 122)

3 LD pronouns

(Bohnhoff 1986, 115)

Bohnhoff's (1986, 112) *reference condition*: the LD pronoun must be bound by the grammatical subject of the clause immediately containing the LD domain.

- (14) V_H hǐǐ [bi làà kaalí]
 they.PRON_i want they.LD_i go town.to
 'They want to go to town.' (corrected version of Bohnhoff 1986, 113)

SUBORD in the same environment cannot be bound:

- (15) V_H hǐǐ ['ùu làà kaalí]
 they.PRON_i want they.SUBORD_{*i,j} go town.to
 'They want others to go to town.' (Bohnhoff 1986, 114)

Pronoun paradigms including LD forms, from Bohnhoff (1986, 107,109,110,113):

	PRON subject	PRON object	PRON possessive	SUBORD subject	LD subject	LD nonsubject emphatic	LD object
1.sg	-n/mí	-n/mí	mí	'àn	bi	mí	-n/mí
1incl.dual	ba	ba	bàà	ba	bi	bàà	ba
2.sg	-m/mó	-m/mó	móó	'àm	bi	bìi	bi
3.sg	∅	-w _H	wòò	'à	bi	bìi	bi
1excl.pl	vó	vó	vóó	'òo	bi	vóó	vó
1incl.pl	ba...ví	ba ví	bàà ví	ba...ví	bi	bàà	ba ví
2.pl	ví	ví	víí	'ì	bi	bìi	bi
3.pl	v _H	v _H	vòò	'àu	bi	bìi	bi

Distribution of LD and SUBORD subject pronouns:

	main clauses	subordinate clauses
SUBORD only:	imperfective- hortative	relative clause, concessive clause, temporal/locative/conditional clause
LD only:		indirect quotation, subordinate desiderative
SUBORD and LD:		indirect order, purpose clause, causal adjunct introduced by <i>ka</i> or <i>bà</i>

Object LD:

- (16) Yòqòb v_H kó 'à'á [bà háǐ]
 ancestor.spirits_i they.PRON_i attack grandmother because.she refuses
 bi nannè]
 them.LD_i food
 'Ancestor spirits_i, they_i attack grandmother because she refuses them_i food.'

Possessor LD:

- (17) v_H hǐǐ [bi mbàà kan yúú bì nu]
 they.PRON_i want they.LD_i sit with head their.LD_i CM
 'They_i want to sit with their_i head.' (= 'They want to be independent.')
 (Bohnhoff 1986, 116)

4 The LD domain

Not (synchronically) logophoricity:

- The LD domain "does not seem to be limited to contexts containing a performative verb, nor to a desiderative context, nor do such pragmatic/semantic notions as source/receiver of the information seem to govern the use of the series" (Bohnhoff 1986, 113).
- Nonsubject antecedents of LD pronouns are not permitted.
- Constructions with very similar meanings vary as to whether they introduce a LD domain: causal constructions introduced by *ka/bà* form a LD domain (example 16), while the causal construction in example (18) does not.

- (18) Cause with *moo*:
 V_H yaa bi mà"q lùù 'ú, [moo v_H 'ò]
 they.PRON_i come, they.LD_i grab.him leave CM, because they.PRON_i say
 bà yǎǎǎ]
 that.he crazy.CM
 'They_i came to take him away, because they_i said that he's crazy.'
 (Bohnhoff 1986, 115-116)

LD domain often (but not always) marked by subordinator/complementiser *bà*. Subordinate purpose clauses are not marked:

- (19) Subordinate purpose clause:
 Bà'á ∅ nə'əy hághá bi hò púggì
 Father_i (he_i) bends down he.LD_i sees animal.CM
 'Father bends down to see the animal.'
 (corrected version of Bohnhoff 1986, 114)
- (20) Indirect quotation (with *bà*):
 Bà'á ∅ 'ò bà bíí láá kòddí
 Father_i (he_i) says that he.LD_i.will go forest.to
 'Father_i says that he_i will go to the forest.'
 (corrected version of Bohnhoff 1986, 114)

Bohnhoff (1986, 112) observes that clauses constituting the LD domain “all may have been derived from underlying quotes”. Culy (1997): logophoric marking often extended from typical logophoric domains such as reported speech, thought, or perception to adjuncts such as purpose clauses and causal clauses, and proposes that this is the result of grammaticisation of an original logophoric system; this seems to be the case for Yag Dii.

5 Subordinate clause LD pronouns: 2LD

(21) Subject pronoun paradigms for all four pronoun types, from Bohnhoff (1986, 107,113,120) (as with SUBORD, there are no nonsubject 2LD forms):

	PRON	SUBORD	LD	2LD
1.sg	-n/mí	'àh	bi	'àh
1.incl.dual	ba	ba	bi	'aa
2.sg	-m/mó	'àh	bi	'ii
3.sg	∅	'à	bi	'ii
1.excl.pl	vó	'òo	bi	'òo
1.incl.pl	ba...ví	ba...ví	bi	'aa...ví
2.pl	ví	'ì	bi	'ii
3.pl	vũ	'àu	bi	'ii

(22) Nán ba'ad ∅ 'ò [moo 'èh dà bì tóó bà ka vì
man work (he_i) say for what friend his.LD_i other that sb-he_j ask
bi [bà 'ii súúwũ 'úlá]]?
him.LD_i that he.2LD_i repay.him_j CM-Q
'The worker_i asked why his.LD_i friend asked him.LD_i that he.2LD_i repay
the IOU.'
(corrected version of Bohnhoff 1986, 119)

No requirement for/prohibition against binder in intervening clause:

(23) Bà'á ∅ gàà [[sèy ii làà téé] bà bíń hù hèn
Papa_i, (he_i) knows time he.2LD_i goes when, that he.LD_i.will see thing
Múúsà wòò]
Moses his
'Papa_i knows that when he.2LD_i goes, he.LD_i'll see Moses's thing.'
(L. Bohnhoff, p.c.)

(24) Bà'á ∅ gàà [[kóó ìi lúu ní sù'] bà míń hù hèn
Papa_i, (he_i) knows time he.2LD_i leave NEG even, that I.will see thing
Múúsà wòò]
Moses his
'Papa_i knows that even if he.2LD_i doesn't leave, I'll see Moses's thing.'
(L. Bohnhoff, p.c.)

More examples:

(25) ... ví ọd í kíí àgà: “Àkàw ∅ ọ [lig [bà ìi
you say.to the.one house self: “Teacher_i (he_i) say house that he.2LD_i
lá hèn lálí páska kan waa duulí bìi vũ wulí máa]
eat thing eating Easter with child following his.LD_i plural there when,
bà ði tɛlá?”
that.it is.there where?”
'... you'll ask the house owner: “The teacher asks, where is the house in
which he.2LD will eat the passover meal with his disciples?”’ (L. Bohnhoff,
p.c.)

(26) ∅ 'ò [[sè'èy bà 'ii là fíí ya babbí tée] bà
(she_i) says time that she.2LD_i goes returns comes field.from when,
bíń ðòò gbókii]
she.LD_i.will cook pigeon
'She_i said that when she.2LD_i returned from the field, she.LD_i would cook
the pigeon.'

(Bohnhoff 1986, 121)

6 Standard binding theory and 2LD

- 2LD does not behave like a standard pronominal, in that it does not obey only Binding Condition B (a pronominal must be free in its governing category: Chomsky 1981). 2LD pronouns require an antecedent in the same sentence, unlike pronominals, and cannot appear without an antecedent.
- 2LD does not behave like a standard anaphor either, since it is not locally bound.
- Is it both a pronominal and an anaphor?

Mohanan (1981): Malayalam “pronominal anaphor” *taan* must be bound within the sentence in which it appears, but may not be locally bound:

(27) a. *taan aanaye nulli
self.NOM elephant.ACC pinched
'Self pinched the elephant.'
(Malayalam; Mohanan 1981, 13)

b. [ʔaan aanaye nulli enɲə] kuʔi ʔaajaawinootə maraɲiɲu
 self.NOM elephant.ACC punched that child king.DAT said
 ‘The child_j told the king that self_i pinched the elephant.’
 (Mohanan 1981, 17)

c. *moohan ʔaane aaʔaadhik’k’uɲɲu
 Mohan self.ACC worships
 ‘Mohan_i worships himself_i.’
 (Mohanan 1981, 15)

Does not work for Yag Dii: (2) vs. (3).

7 Binding features: the LD feature

Binding features could be implemented in terms of LFG-style binding equations (Dalrymple 1993; Bresnan 2001) or movement (Hornstein 2001; Kayne 2002), but we won’t do that here.

(28) \pm LD: A +LD pronoun must appear in a LD domain, and must take the subject of the immediately containing clause as its antecedent; a –LD pronoun satisfies the negation of that condition, and may not have a LD antecedent if it appears in the LD domain.

Note that there is no exceptional nonlocality associated with this feature; a +LD pronoun located anywhere within the LD domain must corefer with the LD antecedent, and a –LD pronoun anywhere within the LD domain may not corefer with the LD antecedent.

This is sufficient to differentiate between the PRON and LD nonsubject (object and possessive) pronouns.

(29) Binding features for nonsubject pronouns:

PRON: –LD

LD: +LD

(30) V_H hɲɲ [bi làà kaalí]
 they.PRON_i want they.LD_i go town.to
 –LD +LD
 ‘They want to go to town.’ (corrected version of Bohnhoff 1986, 113)

(31) V_H hɲɲ [’ù_H làà kaalí]
 they.PRON_i want they.SUBORD_{*i,j} go town.to
 –LD –LD
 ‘They want others to go to town.’ (Bohnhoff 1986, 114)

8 Binding features: the SUBORD feature

(32) \pm SUBORD: The subject in the SUBORD domain is marked with a +SUBORD feature. +SUBORD pronouns require the presence of that feature, while –SUBORD pronouns are incompatible with that feature.

Strong intuition that 2LD is just the +LD version of SUBORD. Almost but not quite correct to assume this:

(33) Binding features for subject pronouns (first try):

PRON: –SUBORD, –LD

SUBORD: +SUBORD, –LD

LD: –SUBORD, +LD

2LD: +SUBORD, +LD

Works for this example:

(34) Nán ba’ad Ø ’ò [moo ’èh dà bì tóó bà ka vì
 man work (he_i) say for what friend his.LD_i other that sb-he_j ask
 bi [bà ’ii súúw_H ’úlá]?
 him.LD_i that he.2LD_i repay.him_j CM-Q
 ‘The worker_i asked why his.LD_i friend asked him.LD_i that he.2LD_i repay
 the IOU.’ (corrected version of Bohnhoff 1986, 119)

Does not work in cases of overlap between the SUBORD and LD domains:

(35) V_H hɲɲ [’ù_H làà kaalí]
 they.PRON_i want they.SUBORD_j go town.to
 ‘They want others to go to town.’ (Bohnhoff 1986, 114)

(36) V_H hɲɲ [bi làà kaalí]
 they.PRON_i want they.LD_i go town.to
 ‘They want to go to town.’ (corrected version of Bohnhoff 1986, 113)

- The complement of the verb *want* is an indirect order, and is in the overlap between the SUBORD and LD domains. Both SUBORD and LD pronouns are allowed in this domain. Hence, the subordinate clause subject position in these examples is +LD and +SUBORD, incorrectly matching the requirements for the 2LD pronoun.
- Does not help to claim that a clause cannot be +LD and +SUBORD at the same time, since we would then incorrectly predict that LD and SUBORD pronouns cannot appear in the same clause.

(37) Bábàám Ø vî [moo 'èh pèh vùn tid waa bìi gbɔ
 Rabbit_i (he_i) asks for what first they.PRON_j hold child his.LD_i leave
 mammé máalá?] ['í yè máa, bà vùn sóó 'ú] [bà
 water.in Q? this here focus that they.PRON_j fake CM, that
 'ùù sòò waa bìi pú bi dóg 'yà'á yè
 they.SUBORD_j.must look.for child his.LD_i give him.LD_i go.up now here
 no.]
 CM
 'Rabbit_i asks why they (Boar) held his_i child and let it fall in the water?
 (He says) that they faked it, that they must look for his_i child and give it to
 him_i now!' (Bohnhoff 1986, 118-119)

Result:

- there are two very closely related but independent features assigned in (nearly) identical environments which license these special SUBORD and 2LD subordinate clause forms.
- 2LD pronouns are associated with a +2LD feature which is assigned only by verbs in the LD domain; the +SUBORD feature is assigned only outside the LD domain.

Support for this analysis comes from Bohnhoff's observation that 2LD is optional for some speakers in some environments:

Initial concessive and cause clauses for many speakers simply retain the *bi* [LD] forms, although some examples of *'ii* [2LD] may also be heard. (Bohnhoff 1986, 121)

If both 2LD and SUBORD were governed by the same feature, we would expect the same optionality for the SUBORD pronoun series, but this is not reported by Bohnhoff (1986).

9 Conclusion

- The 2LD pronoun does not exemplify an exclusively nonlocal grammatical dependency: its distribution is the result of a complicated combination of *locally specified* requirements on the form of pronouns in certain subordinate clauses.
- The resemblance between 2LD and SUBORD is extremely close, but 2LD seems to behave slightly differently from SUBORD, and requires a slightly different specification of distributional constraints.

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