Same subject reference in Northern Toussian

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Toussian

Two/three languages

- · Northern Toussian
- Southern Toussian
- Potentially another variety called Moami Kan

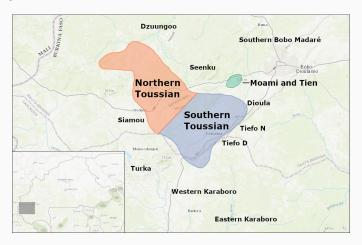
Genetic classification is uncertain

- Traditionally classified as a Gur language (Niger Congo) (Manessy, 1979; Naden, 1989)
- Recent work has cast doubt on this classification (Güldemann, 2018)

Geography

Spoken in southwest Burkina Faso

 \sim 20,000 speakers of NT (last surveyed 1995) (Eberhard et al., 2020)



Same subject reference

Northern Toussian employs two strategies for coreference

- 1. Logophoric pronouns
- 2. A morpheme *n*∂ which denotes same subject reference in non-logophoric contexts

The distribution of this morpheme $n \geq n$ shares many similarities with a form of switch reference called 'echo reference' found in several languages of southern Vanuatu (Hammond, 2014; Gijn & Hammond, 2016)

Goals

This talk seeks to fulfill the following goals:

- Describe same subject reference and how Northern
 Toussian employs it, drawing comparisons to languages
 with switch reference systems
- 2. Discuss Northern Toussian logophoric pronouns and their function
- Demonstrate how same subject reference and logophoricity work in tandem within the wider discourse system

Switch reference is a diverse set of phenomena that tracks coreferent entities across clauses.¹

Switch reference systems involve a same subject morpheme (SS) and/or different subject morpheme (DS).²

¹See van Gijn (2016) and de Sousa (2016) for specific diagnostics.

²Some non-canonical switch reference systems can refer to other constituents such as objects and some authors prefer other terms such as *coreference* and *disjoint-reference* or *identity* and *nonidentity*, etc.

Switch reference morphemes are typically affixes on the verb in the first clause, indicating whether the subject of the current clause matches or differs from the subject of the following clause.

However, the type and location of the switch reference markers differ widely cross-linguistically.

The Papuan language Usan demonstrates canonical switch reference. In (1), the verbal suffix -ab is a same subject marker and -ine is a different subject marker. Both of these morphemes are affixed to the verb of the first clause.

- (1) Usan, Reesink (1983, pg. 355), cited in Gijn & Hammond (2016, pg. 2)
 - a. ye nam su-ab isomei1SG tree cut-ss I.went.down'I cut the tree and went down.'
 - b. ye name su-ine isorei1SG tree cut-DS it.went.down'I cut the tree down,' i.e. 'I cut the tree and it went down.'

Same subject reference in Northern Toussian

Northern Toussian employs a same subject (SS) marker, which is realized as $n \hat{a} \sim \hat{n} = .$

It surfaces in the same location as personal pronouns, and indicates that the subject of the current clause is coreferent with the subject of a prior clause.

Personal pronouns

The Northern Toussian personal pronouns can be seen here.

Person		SG	PL
1st	Non-emphatic	má	á
	Emphatic	mŝ	án
2nd	Non-emphatic	á	í
	Emphatic	ár	yīn
3rd ним	Non-emphatic	à	pà
	Emphatic	têr	pə́n
3rd NONHUM	Non-emphatic	kà	sà
	Emphatic	krê	sə́n

Table 1: Personal pronoun paradigm

Same subject reference

Below, (2a) shows an example of same subject reference, where the same subject morpheme $n \hat{\sigma}$ refers back to sidi 'cat.'

Conversely, when the non-human pronoun $k \hat{\sigma}$ is used in (2b), it refers instead to the object, $p \hat{\alpha} n t \bar{\sigma}$ 'dog.'

(2) a. Same subject reference $s\bar{l}di~p \\ ant \bar{o}~w \\ eq. \\ mathred \\ mat$

b. Different subject
 sīdí pàntō wé kò tǔ³
 cat dog see 3sg.Nonhum run
 'The cat_i saw the dog_k, it_k ran away.'

 $^{^{3}\}mbox{The difference}$ in tone is not fully understood—see the appendix for more information

Same subject— $n\hat{\sigma}$ vs. \hat{n} =

There are two forms of the same subject morpheme, $n \hat{\partial}$ and $\hat{n} = .$ $n \hat{\partial}$ is used at slow rates of speech and $\hat{n} =$ is used at fast rates of speech; there is no difference in meaning.

(3) a. nà
sīdí pàntō wé nà tú
cat dog see ss run
'The cat_j saw the dog_k, it_j ran away.'
b. n̂ =
sīdí pàntō wé n̂ = tú
cat dog see ss = run
'The cat_j saw the dog_k, it_j ran away.'

Same subject—conjunctions

This morpheme does not appear to be a conjunction, as conjunctions can be used between the two clauses.

(4) sīdí pàntō wé nnê n=tú cat dog see and ss=run 'The cat_j saw the dog_k and it_j ran away.'

Same subject—third person referents

The same subject morpheme can refer to any person or number. Here, the SS morpheme $n \hat{\sigma}$ refers to $p \hat{\sigma} n$, a third person plural emphatic pronoun.

(5) **pən** pə pwo **nə** pwo pɛy yamana tegi = sē **3PL.EMPH** IS⁴ come **ss** come do⁵ land owner = with

'When they came, they then became village chiefs.'

(0080)

⁴Immediate sequencing morpheme, it gives the sense 'when...then...'

⁵'Become' is expressed with the construction $x p \not\in y Y = s \bar{\epsilon}$, lit. 'X does with Y.'

Same subject—second person referents

In example (6), the same subject morpheme refers to a 2PL antecedent.

(6) krê kór-yǎr-yǎr 3SG.NONHUM.EMPH meaning-REFL-REFL

> kà pěy áyō 3sg.nonhum do as if

í sớ kéy tớ sú t<u>ế</u>mớ **2PL** DUB go 3SG.HUM.POSS father help

nè swā pέyss field do

"[Bride price's] true meaning, it is basically that you would go help her father and farm the fields." (0084)

Same subject—first person referents

In the example below, the same subject morpheme $\hat{n}=$ refers to the first singular pronoun $m\hat{\delta}$

(7) $\mathbf{m}\mathbf{\acute{o}}$ pàntō wé $\mathbf{\grave{n}} = \mathbf{t\acute{u}}$ $\mathbf{1sG}$ dog see $\mathbf{ss} = \mathbf{run}$ 'I saw the dog (then) I ran.'

Same subject—chaining

Several clauses in a row can bear the same subject marking. Example (8) comes from a discussion of marriage customs and the bride price.

(8) maintenant est-ce que kớ wájíbíyá-nō ¹pé que now INT 3SG.NONHUM.POSS oblige-NOM COP COMP

flê-mpmpár bía tōŋ = rí yó dí = ré woman-child house members = JUSS say man = LOC

í fwð nð tō héké = mè kǒ 2PL good ss millet beer amount = DEM give

n $\grave{\bullet}$ n̂wðr h£k£=m $\grave{\epsilon}$ kǧ SS kola amount=DEM give

'Now, is it an obligation that the members of the girl's house say to the man, "you are good, give this amount of millet beer, give this amount of kola nuts"?'

Switch reference can take many forms, and the morphological marking of switch reference systems can vary widely. The Northern Toussian data resembles the switch reference systems of several southern Vanuatu languages, including Lenakel and Whitesands.

Their switch reference systems have been called 'echo reference' because the switch reference morpheme is found in the right clause instead of the left clause.

Switch reference—echo reference

The Vanuatu language Lenakel demonstrates echo reference, where *m*- is a same subject marker.

- Lenakel, Lynch (1978, pg. 211), cited in Gijn & Hammond (2016, pg. 17)
 - a. i-im-vin (kani) r-im-apul
 1EXCL-PST-go (and) 3SG-PST-sleep
 'I went and he slept.'
 - i-im-vin (kani) m-im-apul
 1EXCL-PST-go (and) SS-PST-sleep
 'I went and slept.'

Echo reference

If the personal pronoun is used instead of the SS morpheme in an echo reference system, then it indicates that there has been a switch in subject.

- (10) Whitesands, Hammond (2014, pg. 276)
 - a. iepəu t-ue m-Ø-alwain anah child 3sg.NPST-go ss-sg-hide still
 'The little boy still goes to hide'
 - b. iepəu t-ue t-alwain anah child 3sG.NPST-go 3sG.NPST-hide still
 'The little boy goes and (a different one) still hides.'

Echo reference—comparison

Below is a corresponding set of Toussian phrases.

- (11) Whitesands, Hammond (2014, pg. 276)
 - a. iepəu t-ue m-Ø-alwaiŋ anah child 3sg.NPsT-go ss-sg-hide still 'The little boy still goes to hide'
 - b. iepəu t-ue t-alwain anah child 3sg.NPst-go 3sg.NPst-hide still
 'The little boy goes and (a different one) still hides.'
- (12) Northern Toussian
 - a. mpmpar key $\hat{\mathbf{n}} = t\hat{\mathbf{s}}$ nuin child go $\mathbf{ss} = 3$ SG.REFL hide 'The boy_j went (and) he_j hid.'
 - b. mpmpar key à the núing child go 3sg.hum 3sg.refl hide 'The boy $_{\rm j}$ went (and) he $_{\rm k}$ hide.'

Same subject reference summary

The Northern Toussian morpheme $n \partial \sim \hat{n} = \text{marks}$ coreference between the subject of a clause and a subject found in prior clauses.

It can refer to any person or number.

The morpheme can be used serially when several clauses in a row refer to the same entity.

It appears to be a form of switch reference that resembles the echo reference systems of Whitesands and Lenakel.

Logophoricity

Northern Toussian, like many languages in the Macro-Sudan belt, employs logophoricity to mark coreference in reported and indirect discourse.

Logophoricity can be marked in a number of ways, including with pronouns or verbal markers (Ameka, 2017). Northern Toussian employs a series of logophoric pronouns, seen in table 2.

	SG	PL
non-emphatic	pá	pá
emphatic	pâr	pə́n

Table 2: Paradigm of logophoric pronouns

Logophorics—basic use

Typologically, Northern Toussian uses reported speaker logophoric pronouns, where the logophoric pronouns refer to the agent who said, thought, or felt what is being reported (Ameka, 2017).

In (13), the logophoric pronoun pá refers to plé 'rabbit.'

(13) plê yǒ pó kó n̂=tíā-nkó kàrì rabbit say LOG NEG NPST=go.NPST-can today 'The rabbit said that he will not be able to go today.' (0182)

Logophorics—basic use

Northern Toussian logophoric pronouns are not restricted to being subjects—they can be verbal objects, objects of postpositions, possessive pronouns, etc.

In example (14), the first logophor acts as a possessive pronoun and the second as an object of a postposition

(14) Jòró yǒ pôr lê-é nōŋ kèpó lion say LOG.EMPH.POSS pet peeve-IDENT⁶ person NEG.IMP vìŋ sā pôr nīŋ lie put LOG.EMPH on 'The lion_i said that that is her_i pet peeve, a person must not lie about her_i' (0182)

 $^{^6}$ An identificational morpheme, used to identify entities in 'it is X' sentences.

The domains of logophoricity can be nested, where two or more different verbs of speaking trigger reported/indirect discourse, and there can be multiple logophoric pronouns within a clause referring to different antecedents.

A longer phrase will be shown together to demonstrate this phenomenon. To facilitate interpreting it, important elements will be color coded.

Logophoric pronouns will be colored in **blue**, the **same subject marker** in **orange**, and **3rd person pronouns** in **green**.

The following example (16) comes from a story about a rabbit who instituted a law which requires animals who broke their legs to be buried alive. The very same rabbit has just broken his own leg and, in an attempt to save his life, devises a plot to trick the people who would bury him.

Logophoric pronouns; same subject marker; 3rd person pronouns

(15)
$$pl\hat{e}_j$$
 yš $[p\hat{\partial}_k = r\hat{i} \text{ kéy } p\hat{\partial}r_j]$ fã $t\bar{l}\eta$ bì $]\bar{l}\bar{l}J$ rabbit $_j$ say $3PL_K = JUSS$ go $LOG.EMPH.POSS_J$ hole dig palm tree $s\hat{\partial}kp\hat{l}\eta = \bar{a}$]

'The rabbit_j said that [they (the grave diggers)_k must go dig his_j hole (i.e. grave) at the base of that palm tree].'

$$\begin{array}{lll} n\grave{\eth}_{j} & p\bar{\jmath} & d'accord & s\grave{\eth}k\grave{\eth}\eta_{l} = s\bar{\epsilon} \\ ss_{\jmath} & s & make agreement agama lizard_{l} = with \end{array}$$

'Then he_j made an agreement with the agama lizard_l.'

phrase]].' (0182)

Logophoric pronouns; same subject marker; 3rd person pronouns

 $p\delta_k$ and $p\delta r_j$ are both in the same clause, but have different antecedents.

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(16) \dot{\mathbf{n}}_{i} = \mathbf{y} \dot{\mathbf{j}} = 
                                                               SS = say LOG NPST water = with agama lizard supply 3SG.NONHUM = JUSS
                                                                 dê kév tè bī\bar{\epsilon} = r\check{\delta}
                                                                 climb go sit palm tree = in
                                                                 'He<sub>i</sub> (the rabbit) said that [he<sub>i</sub> will give the agama lizard<sub>l</sub>
                                                               water. Let it<sub>1</sub> go climb and sit in the palm tree'
                                                                 p\hat{\sigma}_k = \hat{a} p\hat{\sigma} pwó yố [p\hat{\sigma}_k n\hat{\sigma} p\hat{\sigma}_i] nìn p\hat{\sigma}_i nà yố
                                                                 3PLK = IF COND come say LOGK NPST LOG.EMPH, bury LOG, NPST say
                                                                 l\dot{e} = pw\dot{\epsilon} n\hat{a}x
                                                                  phrase = sg one
                                                                 'If they<sub>k</sub> say that [they<sub>k</sub> will come bury him<sub>i</sub>, he<sub>i</sub> will say a
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Interaction of the SS morpheme and logophoric pronouns

Both the same subject morpheme and the logophoric pronouns can mark coreference of the subject of one clause with the subject of a prior clause.

Logophoric pronouns appear to take precedence over the SS morpheme—if a clause is found in a logophoric context, a logophoric pronoun will be used, even if the pronoun acts as the subject of the clause and is coreferenced with the subject of the prior clause.

Interaction of the SS morpheme and logophoric pronouns

In example (17a), the logophoric pronoun is the subject of $t\acute{u}$ 'run,' even though the child is the subject of the prior clause.

If this clause is not in a logophoric context, as is seen in (17b), the same subject marker $n \ge 0$ will be used.

- (17) a. mpmpar yð [pɨ pàntō wé pɨ tǔ] child say LOG dog see LOG run 'The child_j said that [he_j saw the dog_k and he_j ran away].
 - b. dî yɔ̃ [ḿpm̄pãr pàntō wé nə̀ tú] man say child dog see ss run 'The man $_j$ said that [the child $_k$ saw the dog $_l$ and he $_k$ ran away].

Coreference and discourse

The same subject marker appears to refer to antecedents which are on a similar syntactic level, i.e. the same subject marker will not refer to the subject of a prior clause which is subordinate to a different clause.

Coreference and discourse

Logophoric pronouns; same subject marker; 3rd person pronouns

The same subject morpheme $n\partial$ refers to $pl\hat{e}$ 'rabbit' even though the 3PL pronoun $p\partial$ is the closest subject because $n\partial$ and $pl\hat{e}$ are on the same syntactic level.

(18)
$$pl\hat{e}_{j}$$
 yš $[p\hat{a}_{k}=ri$ kéy $p\hat{a}r_{j}$ fã $t\bar{t}\eta$ bì $\bar{j}\bar{5}$ rabbit $_{j}$ say $3pl_{K}=JUSS$ go $log.emph.poss_{J}$ hole dig palm tree $s\hat{a}\bar{k}p\hat{n}=\bar{a}$] base=dem

'The rabbit $_j$ said that [they (the grave diggers) $_k$ must go dig his $_j$ hole (i.e. grave) at the base of that palm tree.]'

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\begin{array}{lll} n\grave{\vartheta}_j & p\bar{\mathfrak{J}} & d'accord & s\grave{\vartheta}k \hat{\mathfrak{J}}\eta_l = s\bar{\epsilon} \\ ss_J & is & make agreement agama lizard_l = with \end{array}
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'Then he_j made an agreement with the agama lizard_l.' (0182)

Northern Toussian discourse and typology

Logophoricity is quite common in West and Central Africa, and the Northern Toussian pronouns appear to act canonically.

The same subject marker appears to be a switch reference morpheme. Switch reference systems appear to be rare in West Africa.⁷

⁷See Apel (2019) for a description of Serer switch reference.

Conclusion—same subject reference

Northern Toussian uses a same subject marker characteristic of switch reference systems.

It marks coreference of subjects across clauses.

It particularly resembles the echo reference systems found in the southern Vanuatu languages Lenakel and Whitesands.

Conclusion—logophoric pronouns

Northern Toussian logophoric pronouns largely exhibit typical logophoric behavior.

They engage in a nesting phenomenon, where two logophoric pronouns in the same clause can be coreferenced with different agents.

Conclusion—NT discourse

The same subject morpheme interacts with logophoric pronouns and personal pronouns in Northern Toussian, enabling efficient tracking of agents across clauses.

Logophoric pronouns take precedence over the same subject morpheme during conflicts.

Coocurrence of logophoricity and switch reference appears to be quite rare.

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Appendix—tone change

Northern Toussian appears to have a floating L tone that docks onto the verb which indicates intransitivity/absence of an object.

- (19) a. Transitive with *ná* 'hear' sīdí pàntō ná cat dog hear 'The cat heard the dog.'
 - Intransitive with ná 'hear'
 sīdí nă
 cat hear.INTRANS
 'The cat heard.'

Appendix—tone change

Northern Toussian appears to have a floating L tone that docks onto the verb which indicates intransitivity/absence of an object.

- (20) a. Transitive with *plâx* 'betray' ádámá zàkí plâx Adama Zaki betray 'Adama betrayed Zaki.'
 - b. Intransitive with plâx 'betray' ádámá plãx.INTRANS [LHM]
 'Adama made a mistake.'

Appendix—tone change

When the same subject marker is used, the floating tone will not be found in intransitive phrases. It is not yet understood what motivates this difference.

- (21) a. Same subject reference $s\bar{l}$ sidí pàntō wé $n\hat{l}$ tú cat dog see ss run 'The catj saw the dogk, itj ran away.'
 - b. Different subject reference sīdí pàntō wé $k\hat{\mathbf{e}}$ tử cat dog see $\mathbf{3sg.NoNhum}$ run 'The cat_i saw the dog_k, it_k ran away.'