Who did that?
Comprehension in Switch Reference Clauses

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Background
This paper investigates hearer comprehension of the switch reference system found in the Oceanic language Whitesands. The system presented here has been previously described as the “Echo Subject” construction in some of the related languages of southern Vanuatu (????). I explore the system from the perspective of experimental evidence and aim to answer the following questions: How well do speakers comprehend ECHO REFERENT clauses? What discourse factors play a role in determining antecedents for complex clauses?

Whitesands
Classification
Austronesian > Malayo-Polynesian > Central-Eastern > Eastern Malayo-Polynesian > Oceanic > Central-Eastern Oceanic > South Vanuatu > Tanna > Whitesands

Whitesands (ISO: TNP) is a language whose homeland is in the east of Tanna, Vanuatu. It has a variety of indigenous names; Narak ‘Narak’ or naghattien ‘talk’ being the two most used. However, speakers use Whitesands as their exonym for both themselves and their language. Further, the language is also named Whitesands in most linguistic research (???). It is spoken by roughly 7500 native speakers who live in family oriented hamlets immediately north of the volcano Mt Yasur (Whitesands iehwi), reaching until the bay of Weasisi where the dialect chain has changed enough so that it is no longer intelligible to Whitesands speakers.

1 Whitesands Grammar

SVO; head marking; subjects and TAM are prefixing; non-subjects are optionally suffixed. Nominal reference is not obligatory.

(1) Schema of Whitesands verbal prefixing (a) and suffixing (b)

a. MOOD/TENSE - SUBJ.PERSON - TENSE - ASPECT/NEGATION - SUBJ.NUMBER - root
b. root - (movement.DIRECTION) - (GOAL.PERSON) = (NEGATION)

(2) Pragmatically unmarked word order

brata aha t-am-os menaj mane nskava kati
brother that 3SG-PST-carry fowl and kava one
SUB PRED OBJ
That brother took a kava and a fowl.

The following examples (3), (4) and (5) show some predicates with their prefixing and agreement patterns.
1.1 Canonical Different Referent Clause Chains

For a canonical different subject reading across two clauses, both clauses are fully inflected for person, number and TAM.

(6) *ia-am-o-ehrakis*  
1.EXCL-PST-PL-let.go 3SG.NPST-hit 2SG  
We (PL.EXCL) let go and it hit you.  

(7) *ia-am-ø-ek*  
kapiel apiapwei kani t-us  
1.EXCL-PST-SG-touch rock hot and 3SG.NPST-bite hand-1SG  
I touched a hot stone and it burnt me (lit. it bit my hand). fn2,49

Example (8) shows this pattern where *nuvein* ‘some’ is the argument but it is different for both of the clauses. The only felicitous interpretation of the construction in (8) is that there are two groups of ‘some people’.

(8)  
*nuvein* k-awt-ue  
i = Vila *nuvein* k-awt-uven Santo  
some 3.NPST-PROG.PL-go LOC = Vila some 3.NPST-PROG.PL-go Santo  
Some go to Vila, some others go to Santo.  

Similarly, the t- ‘3SG’ argument in the two verbs in (9) and (10) are different real world participants (even though there is no nominal indication of this).

(9)  
t-iwoŋ  
3SGs.NPST-jump 3SGs.NPST-say = down  
He jumped and she scolded…  

(10)  
*iepau* t-ue  
t-alwaiŋ anah  
child 3SG.NPST-go 3SG.NPST-hide still  
The little boy goes and (a different one) still hides.

1.2 Complex Clauses *m-*

The alternative to the cases outlined in §1.1 is when there is a continued referent that fills the subject position. That is, when two consecutive finite clauses share a single real-world referent as the subject, this is marked via the verbal prefixing. In Whitesands these constitute the ECHO REFERENT clauses, where the prefix *m-* ‘ER’ “replaces” the person and tense prefixes on the second predicate (?).

(11)  
*iepau* t-ue  
m-ø-alwaiŋ anah  
child 3SG.NPST-go ER-SG-hide still  
The little boy still goes to hide.  

(12) ko ia-k-ø-eles nerow m-ø-aiiu m-ø-uen iwalkir...
   and.then 1.EXCL-NPST-SG-hold spear ER-SG-run ER-SG-go close
   And then I take the spear and run close up...  jhws2-20090301-AK01

(13) na-k-ø-uen ko m-at-ø-ua
   2-NPST-SG-go and.then ER-PROG-SG-come
   You will go and then (you will) come back  jhws1-20080417-all01_065

(14) Jerry ø-arąn la-n m-ø-iwaiiu petiŋam
    Jerry SG-push DAT-3SG ER-SG-descend downhill
    Jerry, push her and go downwards! [Imperatives can use the same construction for
    co-reference between subject arguments] W54-110527-pig-4 888390 - 890180

(15) kani n-eur-ien ama t-uen m-at-ø-oarus roiiu
    and NMLZ-good-NMLZ only 3SG.NPST-go ER-PROG-SG-until now
    And the goodness has come until now. [PROGRESSIVE is marked individually on each
    clause] ISJHWS3JPG29mar2010-03-all

(16) nawain k-oh-uen m-es-h-əwa=iiə nawain ko-om-awt-əwa
    some 3.NPST-PL-go ER-NEG-PL-come=NEG some 3-PST-PROG.PL-come
    Some of them go and didn’t return and some have been returning. [NEGATION is marked
    individually on each clause] jhws1-20080417-all01_010

(17) iou ia-n-ø-etoŋ-pen ra-lah tiŋtiŋ m-an-ø-apah kastom ko roiiu
    1SG 1.EXCL-PRF-SG-listen-to3 POSS-3PL think ER-PRF-SG-forget kastom PROX2 now
    raha-k POSS-1SG
    I will follow them in their thinking and I will now have left that kastom that was mine.
    [PERFECT is marked individually on each clause] jhws1-20080417-all01_047

1.2.1 Combination antecedent

The two following examples show that the antecedent for the ECHO REFERENT clause can come from
previously disparate arguments.

(18) ilau k-am-w-eru in m-l-aran
    3SU 3-PST-DU-see 3SG ER-TRIAL-sit
    They (DUAL) saw him and they (TRIAL) sat down

(19) Excerpt: there are three boys in the story, and one of them collects food and then redistributes
    it to the others.

1 EK ko t-os m-ø-uen
   then 3SG.NPST-took ER-SG-go
   He went and got (them)

2 ko m-ø-əfen niŋ-kati kati,
   then ER-SG-give POSS.FOOD-one one
   and he gave one his food

3 m-ø-əfen niŋ-kati kati
   ER-SG-give POSS.FOOD-one one
   and he gave one his food

4 ko m-l-un m-a-l-uen
   then ER-TRIAL-eat.TRNS ER-PROG-TRIAL-go
   And then they (TRIAL) ate the food and they went along
1.2.2 Discourse antecedent

The following examples show how chains can be formed with the ECHO REFERENT prefix. The discourse has an established referent and the ECHO REFERENT refers back to this, sometimes skipping adjacent finite predicates for alternative resolution.

(20) Excerpt: how to string a bow and arrow. The argument 1SG.EXCL is shared across the chain of clauses — creating a same referent chain with all the dependent predicates using the initial verb *ie-k-ø-uven* ‘1.EXCL-NPST-SG-go’ for resolution. The speaker establishes a key referent and then his continual use of the *m- ‘ER’* on the predicates looks back to that original referent as the antecedent for the subject argument.

1 AK  *ko*  *ie-k-ø-uven*  *m-ø-eti*  *raha-n*  *towol*,  *nokê-nepsk*
   and.then  1.EXCL-NPST-SG-go  ER-SG-hit  POSS-3SG  string.of.bow  root-k.o.ba
   nyan.tree
   And then I go and cut down its string which is Banyan root.

2  *towol*  *m-ø-os*  *m-ø-ua*
   string.of.bow  ER-SG-carry  ER-SG-come
   The string, I bring it back.

3  *ko*  *m-ø-awi*
   and.then  ER-SG-string.wood
   Then I pull the string out of it.

4  *m-at-ø-arawieh-i*  *m-ø-elahu*  *narawieh*
   ER-PROG-SG-sun  ER-SG-put  sun
   I put it in the sun,

5  *t-aŋi*  *ia-k-ø-etu*  *m₃*  *n-asik*  *n-eur*
   3SG-NPST-sundry  1.EXCL-NPST-SG-see  COMP  3SG.PRF-dry,  3SG.PRF-good
   It dries it and when I see it has become dry, it is good.

6  *ko*  *ia-k-ø-uerin-uerin*
   and.then  1.EXCL-NPST-SG-twist-RDP
   Then I twist it together.

7  *ko*  *m-ø-etu=t*  *pen*  *e*  *nima-nfaŋa*  *m-ø-orain*
   and.then  ER-SG-join=to3  DAT  house-bow.and.arrow  ER-SG-bind
   and (I) put it on the bow and bind it.

(21) (Iₓ held tight the line, Iₓ couldn’t hold it well, Iₓ held it, itᵧ was strong)

1  *m-at-ø-eiwi*  *t-at-uven*  *m-ø-eiwi*
   ERₓ-PROG-SG-pull  3SGₓ-NPST-PROG-goe  ERₓ-SG-pull
   Iₓ was pulling it, and itᵧ was going. Iₓ pulled

2  *m-ø-eiwi*  *m-ø-ua*,  *t-uven*
   ERₓ-SG-pull  ERₓ-SG-come  3SGₓ-NPST-go
   and I pulled it towards me and itᵧ went. SM-fishing

(22) (And we craft it and put in the wood, for when the dogs corner the pigs.)

1 AK  *ko*  *ia-k-ø-eles*  *nerow*
   and.then  1.EXCL-NPST-SG-hold.SG  spear
   and then I take the spear

2  *m-ø-aiiu*  *m-ø-uen*  *twakir*
   ER-SG-run  ER-SG-go  close
   and I run close up

3  *ko*  *m-ø-oh*  *pukah-i*
   and.then  ER-SG-hit  pig-TRANS
   and hit the pig.
2 Comprehension Task

The goal of the experiment was to test hearers interpretation of the three different antecedent configurations — the canonical adjacent subject, the partial co-reference through combination and skipping to a discourse topic. The method for investigating these questions was forced choice timed comprehension test. Participants were asked to listen to a series of stories and then were presented a question immediately afterwards about the content of the story.

• 31 native Whitesands-speaking participants from Inamakel (16 Male)
• Aged between 20 and 40
• Varying levels of schooling from 1st class to college
• Paid, but no incentive to finish

The stimuli consisted of 48 items, with 24 filler items. There were 6 conditions in a 2 x 3 design. The first condition pair was the grammatical construction — Echo Referent vs. Full Inflection. The second condition pair was target (controller) type — canonical, topical and combinational.
Abbreviations