

# 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 I 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 *nanhatiien* ‘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 *iehwei*), 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 menəŋ məne nəkava kati*  
brother that 3SG-PST-carry fowl and kava one  
SUB PRED OBJ

That brother took a kava and a fowl. ISJHWS3\_20100329JVC-02-all 00:11:31.151 - 00:11:33.201

The following examples (3), (4) and (5) show some predicates with their prefixing and agreement patterns.

- (3) *ilahal k-am-l-aliwok mən t-apama nuveitən*  
 3TRI 3-PST-TRI-walk again 3SG.NPST-long little  
 The three walked on a little more. ISJHWS3\_20100322JVC-pear-EK 00:03:43.369 - 00:03:47.439
- (4) *iou ia-am-əs-at-ø-uven = iie*  
 1SG 1.EXCL-PST-NEG-PROG-SG-go = NEG  
 I wasn't going.
- (5) *suah-u t-iet-ijam ukunu*  
 guy-PROX 3SG.NPST-leave-outwards here  
 This man comes out here. ISJHWS3\_20100329JVC-01-hi\_full 648408-651278

## 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 t-oh ik*  
 1.EXCL-PST-PL-let.go 3SG.NPST-hit 2SG  
 We (PL.EXCL) let go and it hit you. ISJHWS3\_20100329JVC-03-all 178676 - 180083
- (7) *ia-am-ø-ek kapiel apiapwei kani t-us nelma-k*  
 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). <sup>fn2,49</sup>

Example (8) shows this pattern where *nuveiin* ‘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) *nuveiin k-awt-ue i = Vila nuveiin 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. jhws1-20080417-all01-005 28460 - 32218

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 t-eni = ahu...*  
 3SG<sub>x</sub>.NPST-jump 3SG<sub>y</sub>.NPST-say = down  
 He<sub>x</sub> jumped and she<sub>y</sub> scolded... JHWS1-20080308-ma04\_25-adapted
- (10) *iepəu 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) *iepəu t-ue m-ø-alwaiŋ anah*  
 child 3SG.NPST-go ER-SG-hide still  
 The little boy still goes to hide. jhws1-20080417-all01\_141

- (12) *ko ia-k-ø-eles nerow m-ø-aiiu m-ø-uven iwakir...*  
 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-uven 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-araŋ 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] WS4-110527-pig-4 888590 - 890180
- (15) *kani n-eur-ien ama t-uven 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) *nəwəin k-oh-uven m-es-h-əwa = iie nəwəin 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-etow-pen ra-lah tiŋtiŋ m-ən-ø-əpah 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-araŋ*  
 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. ek-pear

### 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 towəl, noke-nepək*  
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 *towəl 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-ahji ia-k-ø-eru mə 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=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. jhws2-20090301-ak01 36.565–52.512

- (21) ( $I_x$  held tight the line,  $I_x$  couldn’t hold it well,  $I_x$  held it,  $it_y$  was strong)

1 *m-at-ø-eiwi t-at-uven m-ø-eiwi*  
 $ER_x$ -PROG-SG-pull  $3SG_y$ .NPST-PROG-go  $ER_x$ -SG-pull  
 $I_x$  was pulling it, and  $it_y$  was going.  $I_x$  pulled

2 *m-ø-eiwi m-ø-ua, t-uven*  
 $ER_x$ -SG-pull  $ER_x$ -SG-come  $3SG_y$ .NPST-go  
and I pulled it towards me and  $it_y$  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 iwakir*  
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.

- 4        *t-imis*            *ko*            *m-ot-etei*  
 3SG.NPST-die and.then ER-PL-cut  
 It dies, then we cut it up.
- 5        *m-ot-eles*            *m-h-awt*            *a(paha) lahwanu*  
 ER-PL-carry.SG ER-PL-quick LOC        village  
 and carry it and hurry back to the village. jhws2-20090301-ak01\_040-42

## 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

1 'FIRST PERSON', 2 'SECOND PERSON', 3 'THIRD PERSON', COMP 'COMPLEMENTISER', DAT 'DATIVE', DU 'DUAL', ER 'ECHO REFERENT', EXCL 'EXCLUSIVE', INCL 'INCLUSIVE', M 'MASCULINE', N 'NON/NEGATIVE', NEG 'NEGATIVE CIRCUMFIX', NMLZ 'NOMINALISER CIRCUMFIX', NOM 'AGENTIVE NOMINALISER', OBL 'OBLIQUE', PL 'PLURAL', POSS 'GENERAL POSSESSION CLASSIFIER', PERF 'PERFECT(IVE)', PROG 'PROGRESSIVE', PROX 'PROXIMAL', PROS 'PROSPECTIVE', PST 'PAST', RDP 'REDUPLICATION', SEQ 'SEQUENTIAL', SG 'SINGULAR', SUBJ 'SUBJECT', TAM 'TENSE ASPECT MOOD', TRI 'TRIAL', TRNS 'TRANSITIVE'.