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PREFACE

Although the Austronesian Formal Linguistics Association (AFLA) has been holding annual meetings since 1994, until now it has had no consistent approach to the publication of its *Proceedings*. Papers from AFLA 2 and AFLA 14 were published as edited volumes; in other years the local organizers published the *Proceedings* in their Department's Working Papers series; in still other years no *Proceedings* was published. The 16th annual meeting of AFLA was held May 1-3, 2009, at the University of California, Santa Cruz. During the business meeting, the idea was floated that the *Proceedings* henceforth be published electronically, in a consistent format, at the AFLA website (<http://ling.uwo.ca/afla/>), which is generously hosted by the University of Western Ontario. The initial result is this volume, which has emerged very quickly indeed—less than six months after AFLA 16 was held. Our hope is that on-line publication of this and future volumes of the *Proceedings of AFLA* will enable research on the formal linguistics of Austronesian languages to reach as wide a readership as possible.

We want to thank UCSC's Linguistics Department and its Linguistics Research Center for hosting AFLA 16, the authors for submitting their papers so efficiently, and the University of Western Ontario for hosting the website at which this volume is posted. We also wish to acknowledge the precedent set by the *Proceedings of AFLA 12*, which was published on-line as *UCLA Working Papers in Linguistics* No. 12, and whose stylesheet heavily influenced the stylesheet we constructed for the *Proceedings of AFLA*.

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ANOTHER LOOK AT *NO*:
PSEUDO-CLEFTS AND TEMPORAL CLAUSES IN MALAGASY*

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Although there is strong evidence for analyzing the Malagasy focus construction as a pseudo-cleft, the focus particle *no*, which introduces the presupposed remnant, does not appear to be a determiner or relativizer, unlike its counterparts in other Austronesian languages. However, *no* can be used to introduce temporal ('when') clauses. Here I discuss the temporal *no* construction, arguing that that it shares properties with adjunct focus sentences in Malagasy, but does not have the structure of a pseudo-cleft.

1. Introduction

In Malagasy, a Western Malayo-Polynesian language of the Philippine type, clauses generally consist of a *predicate phrase*, followed by a syntactically prominent DP called the *trigger*, which is interpreted as the argument of clause-level predication and agrees in *voice* with the verb. Examples are given in (1) (note that the trigger is separated from the predicate phrase by second-position particles such as the yes/no question marker *ve*, shown in parentheses). Simplifying somewhat, the *actor-trigger* (AT) voice is used when the external argument is the trigger (1a), the *theme-trigger* (TT) voice is used when the trigger is an internal argument (1b), and the *circumstantial-trigger* (CT) voice is used when the trigger bears an oblique relation such as benefactee, instrument, or location (1c):¹

- (1) a. Nividy ny lamba (ve) ny vehivavy
 Pst.AT.buy Det cloth Det woman
 'The woman bought the cloth'

* Thanks to audiences at AFLA XVI, the 2006 UCSD Workshop on Comparative Syntax, and the 2008 University of Washington linguistics colloquium series, for comments on earlier versions of this work. I am indebted to the following speakers for providing the bulk of my Malagasy data: Noro Ramahatafandry, Dina Rakoto Ramambason, Hantavololona Rakotoarivony, Francine Razafimbahoaka, Raharisoa Ramanarivo, Aina Randria, Lova Rasanimanana, Clarisse Razanarisoa, Rija Raherimandimby, Elia Ranaivoson, and Hasiniaina Randriamihamina. Thanks also to Eric Potsdam and Ileana Paul for additional data. I am solely responsible for any errors of fact and interpretation.

¹ The following abbreviations are used in the glosses: 1ex = 1st plural exclusive, 1s = 1st singular, 3 = 3rd singular/plural, Acc = accusative, AT = actor-trigger, CT = circumstantial-trigger, Det = determiner, Irr = irrealis/future, Neg = negative particle, Nom = nominative, Obl = oblique marker, Pst = past, Qu = question particle, Redup = reduplicated stem, Rel = relative clause marker, TT = theme-trigger.

- b. Novidin' ny vehivavy (ve) ny lamba
Pst.**TT**.buy Det woman Det cloth
'The woman bought the cloth' or 'The cloth was bought by the woman'
- c. Nividianan' ny vehivavy ny lamba (ve) ny zanany
Pst.**CT**.buy Det woman Det cloth Det child.3
'The woman bought the cloth for her child'
or 'Her child was bought the cloth by the woman'

Focused constituents are typically fronted and separated from the rest of the clause by the particle *no* (2) (in yes/no questions, the particle *ve* appears between the focus and *no*). I will refer to (2) as the *focus construction* (FC), and the fronted constituent as the *focus*. Paul (2001) presents evidence to suggest that *no* forms a constituent with what follows it, which I will refer to as the *no-phrase*. Notice that the syntactic role of the focus determines that voice of the verb within the *no-phrase* (a fact which has received a good deal of attention since Keenan 1976): AT voice is required when the external argument is focused (2a), TT voice when the internal argument is focused (2b), and CT voice is used when an oblique nominal is focused (2c).²

- (2) a. Ny vehivavy (ve) **no** nividy ny lamba
Det woman NO Pst.**AT**.buy Det cloth
'It's the woman who bought the cloth'
- b. Ny lamba (ve) **no** novidin' ny vehivavy
Det cloth NO Pst.**TT**.buy Det woman
'It's the cloth that the woman bought'
- c. Ny zanany (ve) **no** nividianan' ny vehivavy ny lamba
Det child.3 no Pst.**CT**.buy Det woman Det cloth
'It's her child that the woman bought the cloth for'

This type of construction is typical for languages of the Philippine type. In Tagalog, for example, focused constituents are fronted and separated from the verb by the particle *ang* (3). Kroeger (1993) and Richards (1998) argue that the Tagalog FC is a kind of a (pseudo-)cleft: the focus is the main predicate, while *ang* introduces a headless relative acting as the trigger. This analysis is plausible insofar as Tagalog is a null-copula language, and *ang* is the usual determiner for marking triggers. Moreover, headless relatives of this sort occur productively outside the FC.

- (3) Babae **ang** bumili ng tela Tagalog
woman ANG AT.bought Det cloth
'It's *the woman* who bought the cloth'

² This voice restriction applies only in the case of argument focus (that is, when the focus is a DP). I discuss adjunct focus constructions in section 3.1 below, where the focus is a PP or adverbial.

Likewise, Dahl (1986), Pearson (2001), Paul (1999, 2001), and Potsdam (2006a,b) have argued for a pseudo-cleft analysis of the Malagasy FC: the focus is the main predicate of the clause, while the *no*-phrase is a headless relative functioning as the trigger (4a). According to this approach, FCs have the same basic structure as predicate nominal clauses (4b) (Malagasy, like Tagalog, is a null-copula language).

- (4) a. [_{PRED} Mpianatra] [_{TRIGGER} **no** nanoratra ny taratasy]
 student NO Pst.AT.write Det letter
 ‘The one who wrote the letter (is) a student’
- b. [_{PRED} Mpianatra] [_{TRIGGER} ny rahalahiko]
 student Det brother.1s
 ‘My brother (is) a student’

The voice restriction illustrated in (2) is typical of A'-dependencies in Philippine-type languages. Descriptively speaking, the *no*-phrase contains a ‘gap’ which controls the voice morphology on the verb, making it mutually exclusive with an overt trigger. Normally the trigger is analyzed as the subject of the clause, and the voice restriction on focus is characterized as a language-specific constraint such that only subjects are accessible for A'-extraction (see McLaughlin 1995, Nakamura 1996, Paul 2002, and Sabel 2002 for different versions of this approach). In Pearson (2005), I argue that the Malagasy trigger is instead a topic occupying an A'-position. Voice morphology is treated as a kind of generalized *wh-agreement* (Chung 1998), which marks the Case role of the A'-chain headed by the trigger, or by a *wh*-operator. In accordance with the pseudo-cleft analysis, I assume that in FC clauses the *no*-phrase contains a null *wh*-operator *Op* (cf. Paul 1999), and that the verb agrees with it in Case. The *no*-phrase inherits its index from this operator, and is in turn coindexed with the focus under predication, creating an indirect dependency between the focus and the gap. The structure is shown informally in (5) (I remain agnostic on the exact position of the operator and its trace within the *no*-phrase):

- (5) Mpianatra_i [**no** Op_i nanoratra ny taratasy *t_i*]_i (*wh-agreement*)
 student NO Pst.AT.write Det letter
 ‘The one who wrote the letter (is) a student’

Evidence for the pseudo-cleft analysis comes from a variety of tests showing that the focus patterns as the matrix predicate. For example, focused constituents—but not, say, non-focused arguments—can combine with sentential negation, modal particles, and raising predicates like *toa* ‘seem’ (see Paul 1999, 2001, and Potsdam 2006a,b for examples and discussion). However, the status of the *no*-phrase is less clear: whereas Tagalog *ang* is transparently a determiner introducing a headless relative, the same does not hold of the particle *no*. As Law (2005) points out, *no* never seems to function as a determiner or relativizer outside the FC. The usual determiner in Malagasy is *ny* (6a), and it is this element which introduces headless relatives when they function as arguments of verbal predicates (6b). In headed relatives, the relative clause is optionally introduced by the operator *izay* (6a), which is also used to form free relatives (6c). Crucially, *no* may not occur in place of *ny* or *izay* in any of the sentences in (6).

- (6) a. Matory [DP **ny** vehivavy [(**izay**) namaky ny boky]]
 AT.sleep Det woman Rel Pst.AT.read Det book
 ‘The woman who was reading the book is sleeping’
- b. Hitako [DP **ny** Ø namaky boky]
 TT.see.1s Det Pst.AT.read book
 ‘I saw the (ones) who were reading books’
- c. Tsy fanta-dRakoto [CP? **izay** namaky ny boky]
 Neg TT.know-Rakoto Rel Pst.AT.read Det book
 ‘Rakoto doesn’t know who was reading the book’

Although there is no independent evidence for analyzing *no* as a determiner or a relativizer, it does occur outside FC contexts in what I will call the *temporal no construction* (TC), illustrated in (7). Here *no* is preceded by a full clause rather than a focused phrase, and appears to introduce a temporal (‘when’) clause expressing a backgrounded event. (As far as I know, Tagalog *ang* and its equivalents in other languages cannot be used as temporal clause markers.)

- (7) a. Natory Rakoto [**no** naneno ny telefona]
 Pst.AT.sleep Rakoto NO Pst.AT.ring Det telephone
 ‘Rakoto was sleeping when the phone rang’
- b. Nandoko ny trano Rakoto [**no** nandalo ny namany]
 Pst.AT.paint Det house Rakoto NO Pst.AT.pass Det friend.3
 ‘Rakoto was painting the house when his friends passed by’

The TC has received very little attention in the Malagasy literature. Since temporal clauses take the form of free relatives in some languages (such as Hungarian; Kiss 2002), it is worth considering if and how the FC and TC might be related, and whether the fact that *no*-phrases have this dual function sheds any light on the identity of *no*, and on how the Malagasy FC differs from its Tagalog counterpart. This paper offers some preliminary discussion of these questions. In section 2 I give additional examples of the TC, together with some informal observations on the semantics of this construction. Section 3 lays the groundwork for a formal analysis of temporal *no*. I show that the TC is not itself a type of pseudo-cleft, and suggest instead that *no* introduces an extraposed (‘topicalized’) clause modifying the spatio-temporal argument of the main clause. *Ang*-phrases lack this function—which, I suggest, accounts not only for the absence of a Tagalog counterpart to the TC, but also for the absence of an adjunct focus construction.

2. The Interpretation of TC Clauses

No is one of several morphemes (with varying distributions) used to form ‘when’ clauses in Malagasy. Others include *rehefa* (8a), as well as the preposition *amin’* ‘with/to/at’ (*tamin’* in the past tense), which can select an event-denoting complement clause with trigger-initial order (8b):

- (8) a. Nody Rakoto [**rehefa** nisakafo izahay]
 Pst.AT.come.home Rakoto when Pst.AT.dine 1exNom
 ‘Rakoto came home when/while we were eating dinner’
- b. Faly Rabe [**tamin’** izy mbola nipetraka tany Antsirabe]
 happy Rabe at 3Nom still Pst.AT.live there Antsirabe
 ‘Rabe was happy when he was still living in Antsirabe’

The *no*-phrase in TC sentences denotes a presupposed event—that is, it is treated as part of the shared knowledge of the discourse participants (perhaps through pragmatic accommodation). In this respect, temporal *no*-phrases are like focus *no*-phrases. The FC in (9a), for example, presupposes that somebody came to America, and asserts that it was Rasoa; while the TC in (9b) presupposes that Rasoa came to America, and asserts that she was still young at the time.

- (9) a. Rasoa [**no** tonga tany Amerika]
 Rasoa NO arrived there America
 ‘Rasoa is the one who came to America’
- b. Mbola tanora Rasoa [**no** tonga tany Amerika]
 still young Rasoa NO arrived there America
 ‘Rasoa was still young when (she) came to America’

In both the FC and the TC, the *no*-phrase is interpreted outside the semantic scope of negation. For instance, (10a) entails (or at least strongly implicates) that somebody wrote the letter, and asserts that that individual was not Rasoa. Likewise, (10b) entails (or strongly implicates) that Rakoto left, but denies that the speaker was asleep at the time. Consequently the continuation given in parentheses, which denies the entailment, sounds odd.

- (10) a. **Tsy** Rasoa [**no** nanoratra ilay taratasy]
 Neg Rasoa NO Pst.AT.write that letter
 ‘It’s not Rasoa who wrote that letter’
- b. **Tsy** natory aho [**no** lasa Rakoto] (# ... satria tsy lasa izy)
 Neg Pst.AT.sleep 1sNom NO left Rakoto because Neg left 3Nom
 ‘I wasn’t sleeping when Rakoto left (... because he didn’t leave)’

Likewise, speakers report that (11b) is a felicitous answer to the question in (11a), where (11a) presupposes that the pencil broke (notice that the question takes the form of a FC):

- (11) a. Oviana [**no** tapaka ny pensilihazo]?
 when NO broken Det pencil
 ‘When did the pencil break?’

- b. Nanoratra ilay taratasy Rabe [**no** tapaka ny pensilihazo]
 Pst.AT.write that letter Rabe NO broken Det pencil
 ‘Rabe was writing the letter when the pencil broke’

By contrast, (11b) would not be an appropriate answer to a question like *Inona no nahazo ny pensilihazo?* ‘What happened to the pencil?’ (in this respect, (11b) contrasts with the English sentence, where the *when* clause need not be presuppositional).

Clauses introduced by *no* identify an event for which the preceding clause asserts a *temporal frame*. If we use S_1 to represent the state of affairs denoted by the clause preceding *no*, and S_2 for the state of affairs denoted by the clause headed by *no*, then the following generalizations apply: S_2 is a (relatively) punctual event, while S_1 is either a punctual event or a durative event/state. If S_1 is durative, then S_1 is understood to be on-going at the time of S_2 , and perhaps interrupted by S_2 , as in (12a). If S_1 is punctual, then S_1 properly precedes S_2 , as in (12b) (from Raha-jarizafy 1960). Alternatively, perhaps S_1 in (12b) is not the event itself, but a state resulting from that event (suggested by the presence of *efa* ‘already’). If so, then *no* uniformly indicates that S_2 occurs during the temporal span of S_1 , where S_1 is either an activity or a result state.

- (12) a. Nijery fahitalavitra Rakoto [**no** naneno ny telefaonina]
 Pst.AT.look.at television Rakoto NO Pst.AT.ring Det telephone
 ‘Rakoto was watching television when the phone rang’
- b. Efa nanomboka ny dinika [**no** tonga Rangahy]
 already Pst.AT.begin Det discussion NO arrive Monsieur
 ‘The meeting had already begun when the gentleman arrived’

Compare also the examples below. In (13a), *natory* is understood as durative: the leaving event is properly contained within the time frame established by the sleeping event. (13b) switches the order of the clauses, reversing the framing relationship between the two events. Here *natory* is interpreted as punctual, and taken to refer to the beginning point of the sleeping event (‘went to sleep’). The leaving event—or, perhaps, the state of having left—provides the temporal frame for the beginning point of the sleeping event. (Quite generally in Malagasy, durative verbs in the AT voice can be interpreted as inceptives when context forces a punctual reading.)

- (13) a. Natory aho [**no** lasa ny vadiko]
 Pst.AT.sleep 1sNom NO left Det spouse.1s
 ‘I was sleeping when my husband left’
- b. Lasa ny vadiko [**no** natory aho]
 left Det spouse.1s NO Pst.AT.sleep 1sNom
 ‘My husband had (already) left when I went (back) to sleep’

Interestingly, there is often a strong preference for the first clause to occur in the AT voice rather than the TT voice. In some cases the TT form was flat-out rejected by my consultants. Compare:

- (14) a. Nandoko ny trano aho [**no** nandalo ny namako]
 Pst.**AT**.paint Det house 1sNom NO Pst.**AT**.pass Det friend.1s
 ‘I was painting the house when my friend passed by’
- b.?* Noloikoiko ny trano [**no** nandalo ny namako]
 Pst.**TT**.paint.1s Det house NO Pst.**AT**.pass Det friend.1s
 ‘I was painting the house when my friend passed by’
- (15) a. Nitady ny kiraroko aho [**no** naneno ny telefona]
 Pst.**AT**.look.for Det shoe.1s 1sNom NO Pst.**AT**.ring Det telephone
 ‘I was looking for my shoes when the phone rang’
- b.?* Notadiaviko ny kiraroko [**no** naneno ny telefona]
 Pst.**TT**.look.for.1s Det shoe.1s NO Pst.**AT**.ring Det telephone
 ‘I was looking for my shoes when the phone rang’

I suggest that this is a consequence of the aspectual constraints on S_1 and S_2 mentioned above. In Pearson (2001) I show that, under certain conditions, the voice of the verb affects the aspectual interpretation of the clause. All else being equal, TT clauses are interpreted as more punctual and perfective (more *transitive*, in the sense of Hopper and Thompson 1980) than their AT counterparts. Compare (16a), which favors a durative/atelic reading, with (16b), which favors a punctual/telic reading. In other cases, the choice of AT voice seems to place *aspectual focus* (in the sense of Erteschik-Shir and Rapoport 1999) on the inception or activity component of the event (17a), while TT voice places aspectual focus on the event as a whole, or its endpoint (17b).

- (16) a. Nanosika sarety ny vehivavy
 Pst.**AT**.push cart Det woman
 ‘The woman pushed/was pushing the cart’
- b. Natosiky ny vehivavy ny sarety
 Pst.**TT**.push Det woman Det cart
 ‘The woman gave the cart a push’
- (17) a. Nanoratra ny taratasy [nandritra ny adiny roa] izy
 Pst.**AT**.write Det letter Pst.**AT**.last Det hour two 3Nom
 ‘She wrote/was writing the letter for two hours’ (but didn’t necessarily finish it)
- b. Nosoratany [nandritra ny adiny roa] ny taratasy
 Pst.**TT**.write.3 Pst.**AT**.last Det hour two Det letter
 ‘She wrote the letter in two hours’

This suggests that (14b) and (15b) were rejected for pragmatic reasons. If TT voice favors a (relatively) punctual/perfective reading of the clause, this would make it less natural than AT voice

for asserting a temporal frame. Note that when speakers judge AT and TT voice equally acceptable, the AT variant yields the reading where S_1 is interrupted by S_2 , while the TT variant gives the reading where S_1 precedes S_2 (or defines a result state which overlaps with S_2):³

- (18) a. Nijery fahitalavitra Rakoto [**no** naneno ny telefona]
 Pst.**AT**.look.at television Rakoto NO Pst.**AT**.ring Det telephone
 ‘Rakoto was watching television when the phone rang’
- b. Nojeren-dRakoto ny fahitalavitra [**no** naneno ny telefona]
 Pst.**TT**.look.at-Rakoto Det television NO Pst.**AT**.ring Det telephone
 ‘Rakoto had (already) watched television when the phone rang’
- (19) a. Nijinja vary ilay mpamboly [**no** avy ny orana]
 Pst.**AT**.harvest rice that farmer NO came Det rain
 ‘That farmer was harvesting rice when it began to rain’
- b. Nojinjain’ ilay mpamboly ny vary [**no** avy ny orana]
 Pst.**TT**.harvest that farmer Det rice NO came Det rain
 ‘That farmer had (already) harvested the rice when it began to rain’

3. The Structure of TC Sentences

I now turn to the structure of TC clauses. I begin by considering the possibility that the TC is a type of pseudo-cleft, with the *no*-phrase acting as the trigger of the clause. After rejecting this analysis, I show that the temporal *no*-phrase instead occupies an extraposed position.

3.1. The TC as a Pseudo-Cleft

According to the pseudo-cleft analysis of the FC, the focus is the main predicate of the clause, while *no* introduces a headless relative functioning as the trigger (cf. (4a) above). Given that the TC has a similar information structure, with the *no*-phrase presupposed, perhaps TC clauses are also pseudo-clefts, where the focus is not a DP, but an adjunct clause containing a covert complementizer (meaning roughly ‘while’), as in (20). The plausibility of this is suggested by the fact that speakers occasionally provided clefts as spontaneous translations TC sentences, where the clefted constituent is a temporal clause, as in (21):

- (20) [_{PRED} [_{CP} Natory Rakoto]] [_{TRIGGER} **no** naneno ny telefona]
 Pst.**AT**.sleep Rakoto NO Pst.**AT**.ring Det telephone
 lit. ‘The (time when) the phone rang (is while) Rakoto slept’

³ The latter reading is expected to be unavailable in the case of (15b), since ‘look for my shoes’, being atelic, cannot define a result state. However, it is unclear why (14b) cannot mean ‘I had (already) painted the house when my friends passed by’. Clearly more work needs to be done on the relationship between voice and verbal aspect.

- (21) a. Lasa ny vadiko [**no** natory aho]
 left Det spouse.1s NO Pst.AT.sleep 1sNom
 ‘C’est quand mon mari est parti que je me suis rendormi’
 (‘It’s *when my husband left* that I went back to sleep’)
- b. Nitsangatsangana aho [**no** hitako ny bokiko very]
 Pst.AT.walk.Redup 1sNom NO found.1s Det book.1s lost
 ‘C’est pendant que je me suis promené que j’ai retrouvé mon livre perdu’
 (‘It’s *while I was taking a walk* that I found my lost book’)

Interestingly, the initial clause in TC sentences may not itself contain a focus. Speakers reject (22) as having “too many *no*’s” (to express the intended meaning, the temporal *no*-phrase must be replaced by, e.g., *tamin’ ny telefaonina naneno* ‘at [the time of] the phone ringing’).

- (22) * Rakoto **no** nijery fahitalavitra [**no** naneno ny telefaonina]
 Rakoto NO Pst.AT.look.at television NO Pst.AT.ring Det telephone
 ‘It’s Rakoto who was watching television when the phone rang’

A possible objection to the pseudo-cleft analysis comes from the fact that the *no*-phrase in TC sentences does not seem to contain a gap, but looks instead like a full clause, denoting a proposition and containing an overt trigger which determines the voice of the verb.

Note, though, that these features are shared with a subtype of the Malagasy FC discussed by Paul (1999) and others, where the focus position is occupied by a PP adjunct or ‘high’ adverbial rather than a DP, as in (23).⁴ Despite appearances, however, I assume that the *no*-phrase in adjunct focus clauses does include a null operator, just as in nominal focus clauses. Here, though, the operator lacks a Case feature, and hence fails to trigger *wh*-agreement on the verb, which instead agrees with an overt trigger (24). (Significantly, the Tagalog FC, where the *ang*-phrase is transparently a headless relative, cannot be used to focus adjuncts. Instead, focused adjuncts undergo fronting to preverbal position: see Kroeger 1993, Richards 1998 for discussion.)

- (23) a. Tamin’ ny antsy [**no** *Op_i* nanapaka bozaka Rakoto *t_i*] (wh-agreement)
 with Det knife NO Pst.AT.cut grass Rakoto
 ‘It’s *with the knife* that Rakoto cut the grass’
- b. Omaly [**no** *Op_i* nanapaka bozaka Rakoto *t_i*]
 yesterday NO Pst.AT.cut grass Rakoto
 ‘It was *yesterday* that Rakoto cut the grass’

Where does this operator originate and what is its grammatical function? Following Kratzer (1995) and others, I assume that individual-level predicates include a *spatio-temporal event argument* (*e*). Although *e* is a null element, its referent can be restricted by one or more overt modi-

⁴ Focused adjuncts *can* occur with a *no*-phrase containing a gapped trigger, in which case the verb appears in the CT voice. For reasons of space I will not consider this construction here, (see Paul 1999 for examples and discussion).

fiers, including PP adjuncts and adverbials (cf. Demirdache and Uribe-Etxebarria 2004). I further assume that *e* may appear outside the predicate phrase (perhaps merging as a second specifier of the functional head which licenses the trigger; cf. Pearson 2001). This is supported by the fact that PP adjuncts and ‘high’ adverbs frequently appear extraposed to the right of the trigger. I suggest that *omaly* in (24) is modifying a dislocated *e* argument:

- (24) Nanoratra taratasy (ve) ny mpianatra **omaly**
 Pst.AT.write letter Det student yesterday
 ‘The student was writing a letter yesterday’

Right-peripheral adjuncts in Malagasy are presuppositional. In (25), for example, where the PP *tany an-tokotany* is extraposed to the right of the trigger, it is presupposed that the student did something in the garden (if the location were new information, part of what is being asserted, *tany an-tokotany* would precede the trigger):

- (25) Nanoratra taratasy (ve) ny mpianatra [tany an-tokotany]
 Pst.AT.write letter Det student there Obl-garden
 ‘The student was writing a letter in the garden’

I suggest that *Op* in (23) bears the *e* role (by assumption, *e* lacks a Case feature, and hence cannot trigger wh-agreement). The *no*-phrase is thus a headless relative meaning roughly ‘the event [such that] Rakoto cut grass’, and the focused PP or adverb is predicated, in neo-Davidsonian fashion, of this event-denoting *no*-phrase.

If this analysis is on the right track for *no*-phrases in adjunct focus contexts, perhaps the same structure can be extended to temporal *no*-phrases, making the TC a type of adjunct FC:

- (26) Natory Rakoto [**no** *Op*_i naneno ny telefaonina *t*_i]
 Pst.AT.sleep Rakoto NO Pst.AT.ring Det telephone
 ‘(The event such that) the telephone rang was (while) Rakoto slept’

While it seems plausible that the temporal *no*-phrase contains an empty operator denoting a spatio-temporal argument, there is good evidence to show that it is not the matrix trigger, predicated of a ‘covert’ temporal clause, as in (20). For example, the initial clause in TC sentences does not look like an embedded clause, in that it lacks a complementizer (adding a complementizer, such as *fa* ‘that’, renders the sentence ungrammatical: e.g., **Fa natory Rakoto no naneno ny telefaonina*). In addition, Paul (1999) shows that embedded clause adjuncts, such as purpose and reason clauses, cannot undergo adjunct focus (27). If purpose and reason clauses cannot appear in the adjunct FC, it is unclear why ‘covert’ temporal clauses would be allowed to.

- (27) a. * Mba hahazo karama be [**no** mianatra mafy aho]
 in.order.to Irr.AT.earn salary big NO AT.study hard 1sNom
 ‘It’s *in order to earn a big salary* that I am studying hard’

- b. * Noho izy mbola kely taona loatra [**no** tsy afaka handeha any
 because 3Nom still small year too NO Neg able Irr.AT.go there
 Ambositra i Koto]
 Ambositra Det Koto
 ‘It’s because he’s still too young that Koto cannot go to Ambositra’

Note also that in the adjunct FC, the overt trigger inside the *no*-phrase optionally—and frequently—appears in front of *no* (28). This is the famous *bodyguard construction*, discussed by Keenan (1976) and Paul (1999, 2001). (Paul 1999 gives evidence from coordination that the bodyguard is inside the *no*-phrase, hence the bracketing.) According to speakers I consulted, the trigger may not occupy the bodyguard position in temporal *no*-phrases (29) (*izy* must follow *lasa* for the sentence to be grammatical). If the TC is merely a sub-case of the adjunct FC, it is unclear why the latter but not the former would license a bodyguard.

- (28) Tamin’ ny pensilihazo [**Raso**a **no** nanoratra ilay taratasy]
 with Det pencil Raso NO Pst.AT.write that letter
 ‘It’s with a pencil that Raso wrote the letter’
- (29) * Natory ny vadin-dRakoto [**izy** **no** lasa]
 Pst.AT.sleep Det spouse-Rakoto 3Nom NO left
 ‘It was while Rakoto’s wife was sleeping that he left’

4.2. The Temporal *No*-Phrase as an Extraposed Clause

Rather than acting as a ‘covert’ CP adjunct which has been clefted, as in (20), there is evidence to suggest the initial clause in TC sentences patterns as the main clause, within which the *no*-phrase is embedded. The DP preceding *no* is the matrix trigger, while the *no*-phrase itself is extraposed to the right of the trigger. This is schematized in (30). Note that adjunct and complement clauses are typically extraposed in Malagasy (31).

- (30) [_{PRED} Natory] [_{TRIGGER} Rakoto] [_{CP?} **no** naneno ny telefona]
 Pst.AT.sleep Rakoto NO Pst.AT.ring Det telefona
 ‘Rakoto was sleeping when the phone rang’
- (31) Manantena ny vehivavy [_{CP} fa hamono ny akoho aho]
 AT.hope Det woman that Irr.AT.kill Det chicken 1sNom
 ‘The woman hopes that I will kill the chicken’

Evidence for the structure in (30) comes from particle placement. The yes/no question marker *ve* is confined to root contexts: it appears at the right edge of the matrix predicate (when the latter is clause-initial), immediately preceding the matrix trigger, and cannot follow an embedded predicate. (Indirect yes/no questions are formed with the complementizer *raha* ‘if/whether’.) This is illustrated in (32). In TC sentences, *ve* appears at the right edge of the first predicate, and may not follow *no* (33). This shows that *Raso*a, rather than the *no*-phrase, is the matrix trigger in (33).

- (32) Manantena <ve> ny vehivavy [fa hamono ny akoho <*ve> aho]?
 AT.hope Qu Det woman that Irr.AT.kill Det chicken Qu 1sNom
 ‘Does the woman hope that I will kill the chicken?’
- (33) Mbola tanora <ve> Rasoa [no tonga tany Amerika <*ve>]?
 still young Qu Rasoa NO arrived there America Qu
 ‘Was Rasoa still young when she came to America?’

Supporting evidence comes from *embedded topic drop*. In sentences where the matrix trigger corefers with an embedded argument, the latter generally takes the form of a null trigger. According to Keenan (1976), the missing trigger \emptyset in (34) must corefer with *Rabe*, whereas the overt pronominal trigger *izy* is generally taken to refer to someone other than *Rabe*. TC sentences appear to show the same pattern: while the *no*-phrase can contain an overt trigger, the trigger is normally omitted when it has the same referent as the trigger of the preceding clause (35). I take this as further evidence that *Rasoa* is the matrix trigger in (35).⁵

- (34) Mihevitra Rabe_i [fa tadiavin-dRasoa { \emptyset_i / izy_{j/??i} }]
 AT.think Rabe that TT.look.for-Rasoa 3Nom
 ‘Rabe thinks that Rasoa is looking for him’
- (35) Mbola tanora Rasoa [no tonga tany Amerika \emptyset]
 still young Rasoa NO arrived there America
 ‘Rasoa_i was still young when (she_i) came to America’

If temporal *no*-phrases are extraposed constituents, what position do they occupy? Recall that presuppositional (‘scene-setting’) adjuncts like *omaly* typically follow the trigger (36a). Perhaps the *no*-phrase in (36b) occupies the same position, and plays essentially the same function—i.e., modifying the null spatio-temporal argument *e*. Much as *omaly* provides a deictic anchor for *e*, the *no*-phrase temporally anchors *e* by identifying a (presupposed) event which co-occurs with *e*.

- (36) a. Nijery fahitalavitra Rabe **omaly**
 Pst.AT.watch television Rabe yesterday
 ‘Rabe was watching television yesterday’
- b. Nijery fahitalavitra Rabe [no naneno ny telefona]
 Pst.AT.watch television Rabe NO Pst.AT.ring Det telephone
 ‘Rabe was watching television when the phone rang’

Under this analysis, temporal *no*-phrases are treated essentially like event-denoting *adjunct free relatives*. One problem with this approach, however, is that temporal *no*-phrases do not have a distribution typical of adjuncts. For example, besides appearing in post-trigger position (36a),

⁵ Note that the empty category \emptyset in (35) is distinct from the ‘gap’ in *no*-phrases discussed earlier: The gap is a trace of wh-operator movement, while \emptyset is presumably a null pronominal.

adverbials like *omaly* can be topic-fronted (37). Temporal *no*-phrases, however, must be clause-final, and may not undergo topic-fronting (38a). As (38b) shows, *no*-phrases contrast in this respect with other kinds of ‘when’ clauses, such as those formed with *rehefa*, which readily undergo fronting (in fact, *rehefa* clauses are normally fronted in Malagasy texts).

- (37) **Omaly** **dia** nijery fahitalavitra Rabe
yesterday Top Pst.AT.watch television Rabe
‘Yesterday, Rabe was watching television’

- (38) a. * [**No** naneno ny telefona] **dia** nijery fahitalavitra Rabe
NO Pst.AT.ring Det telephone Top Pst.AT.watch television Rabe
‘When the phone rang, Rabe was watching television’

- b. [**Rehefa** nisakafo izahay] **dia** tonga Rabe
when Pst.AT.dine 1stNom Top arrive Rabe
‘While we were having dinner, Rabe arrived’

This inability to undergo topic-fronting is apparently shared with *no*-phrases in the FC, as can be seen by comparing (39a-b). Headless relatives *can* be fronted in a pseudo-cleft-like structure, but they must be introduced by a regular determiner instead of *no* (39c) (Paul, to appear).

- (39) a. Ity peratra ity [**no** nomeko azy]
this ring this NO Pst.TT.give.1s 3Acc
‘It’s this ring that I gave to her’

- b. * [**No** nomeko azy] **dia** ity peratra ity
NO Pst.TT.give.1s 3Acc Top this ring this
‘What I gave to her is this ring’

- c. [**Ny** nomeko azy] **dia** ity peratra ity
Det Pst.TT.give.1s 3Acc Top this ring this
‘What I gave to her is this ring’

In fact, this inability to undergo topic-fronting makes temporal *no*-phrases look more like complement clauses than adjunct clauses (cf. Law 2005, who analyzes the *no*-phrase in the FC as the complement of a null copula BE, with the focus merging as the specifier of BE). I intend to pursue this possibility in future research.

4. Conclusion: Where Do Things Stand?

Paul (1999, 2001), Potsdam (2006a,b), and others have presented good evidence for treating the Malagasy FC as a type of pseudo-cleft, where the focus behaves as the main predicate, while the *no*-phrase patterns as a headless relative containing a null wh-operator chain. In this respect, the Malagasy FC closely resembles its counterpart in Tagalog. However, there are some important

differences between the two constructions: [i] Unlike the Tagalog focus marker *ang*, *no* does not show the distribution of a determiner or (the usual) relative clause marker. [ii] Unlike *ang*, *no* can introduce the presupposition in adjunct focus sentences, where it heads (what appears to be) a covert headless relative denoting an event. [iii] Finally, unlike *ang*, *no* can introduce an extra-posed constituent in non-focus contexts (the TC), where it functions much like a temporal ('when') clause. As in adjunct focus contexts, the *no*-phrase in TC contexts identifies an event as part of the presupposition (though with additional semantic restrictions: e.g., the event must be construed as punctual/perfective relative to the main predicate).

It is my hunch that the properties in [i]-[iii] are related. This suggests that additional exploration of the temporal *no* construction—particularly in relation to the adjunct focus construction—has the potential to shed new light not only on the identity of *no*, but on the parametric differences among Austronesian languages regarding the use of (pseudo-)clefting to mark focus.

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