

## Aspect and Voice Selection in Malagasy Initial Observations

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### Introduction

In Malagasy, a head-initial Austronesian language of Madagascar, basic clauses consist of a *predicate phrase* combined with a DP constituent which I will refer to here as the *trigger* (also known as the *subject*). When the predicate phrase is headed by a verb, that verb inflects for *voice* to indicate the grammatical function of the trigger. The examples in (1) below illustrate the various voice forms for the verb ‘kill’ (root *vono*), with the trigger of each clause shown in italics. If the verb’s external argument or *actor* (roughly, the highest argument on some participant hierarchy) functions as the trigger of the clause, then the verb appears in the *actor-trigger* (AT) voice (1a). If the trigger is the internal argument of a transitive verb, the verb appears instead in the *theme-trigger* (TT) voice (1b). Finally, the *circumstantial-trigger* (CT) form is used when the trigger bears a peripheral grammatical function such as instrument, beneficiary, location, or goal (1c).<sup>1,2</sup>

- (1) a. Namono ny akoho tamin’ ny antsy *ny mpamboly*  
Pst.AT.kill Det chicken with Det knife Det farmer  
‘The farmer killed the chicken with the knife’
- b. Novonoin’ ny mpamboly tamin’ ny antsy *ny akoho*  
Pst.TT.kill Det farmer with Det knife Det chicken  
‘The farmer killed the chicken with the knife’
- c. Namonoan’ ny mpamboly ny akoho *ny antsy*  
Pst.CT.kill Det farmer Det chicken Det knife  
‘The farmer killed the chicken with the knife’

As these examples show, the trigger has an invariant morphological form (the default form for DPs, traditionally labeled the *nominative*), and occurs at the end of the clause, following the predicate phrase. In non-AT clauses, the external argument appears immediately after the verb, and the two form a single phonological unit. Notice also that peri-

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<sup>1</sup> Note that the three-way voice contrast illustrated in (1) is something of an oversimplification. As discussed in Pearson (2001, 2005b), there are actually three different TT forms, where certain verbs can appear in more than one form. This is true especially of ditransitives, which tend to take one TT form when the primary object is the trigger and a different TT form when the secondary object is the trigger. For purposes of this paper, I set such complication aside.

<sup>2</sup> The following abbreviations are used in the examples: Acc: accusative, AT: actor-trigger, CT: circumstantial-trigger, Det: determiner, Foc: focus particle, Gen: genitive (clitic), Nom: nominative, Obl: oblique marker, Pst: past.

pheral participants are encoded as DPs when functioning as the trigger, but as obliques (headed by a preposition such as *tamin* ‘with’) when they appear in other positions.

The AT and TT forms are commonly referred to as the *active* and *passive*, respectively (Rajemisa-Raolison 1971, Keenan 1976). However, the form and distribution of TT clauses is quite distinct from that of passive clauses in English and other familiar languages. There is little or no evidence that the external argument in TT clauses (e.g., *ny mpamboly* in (1b)) has been demoted to oblique status. Moreover, the TT voice is less morphologically marked than the AT voice: for verbs such as *vono*, AT and TT voice are both expressed by affixes; but for other verbs only the AT voice is marked by affixation while the TT voice is expressed by the bare root. Finally, Keenan and Manorohanta (2001) report that the AT and TT forms of transitive verbs occur with roughly equal frequency in texts.

What conditions voice selection in Malagasy—that is, what determines which of the verb’s arguments will be selected as the trigger? In certain situations voice selection is clearly syntactically determined. As numerous authors have discussed, beginning with Keenan (1976), voice is restricted in contexts involving A’-extraction of a nominal dependent. An example of such a context is the cleft construction, used both to express constituent focus and to form *wh*-questions (see Paul 2001, Potsdam 2006 for discussion). The cleft construction is illustrated in (2)-(3) below, where the *remnant* (the non-focused material, introduced by the particle *no*) is bracketed, and the gap within the remnant (corresponding to the clefted constituent) is notated as [e]. As (2) shows, AT voice is required when the external argument is clefted, while TT voice is ungrammatical. Likewise, when the internal argument is clefted, TT voice is required while AT voice is ungrammatical, as shown in (3). In other words, the gap corresponding to the clefted constituent necessarily functions as the trigger of the clause.<sup>3</sup>

- (2) a. Ny mpamboly [ no namono ny akoho [e] ]  
 Det farmer Foc Pst.AT.kill Det chicken  
 ‘It’s the farmer who killed the chicken’
- b. \* Ny mpamboly [ no novonoina [e] ny akoho ]  
 Det farmer Foc Pst.TT.kill Det chicken  
 ‘It’s the farmer who killed the chicken’
- (3) a. \* Ny akoho [ no namono [e] ny mpamboly ]  
 Det chicken Foc Pst.AT.kill Det farmer  
 ‘The chicken is what the farmer killed’
- b. Ny akoho [ no novonoin’ ny mpamboly [e] ]  
 Det chicken Foc Pst.TT.kill Det farmer  
 ‘The chicken is what the farmer killed’

Outside of A’-extraction contexts, semantic and pragmatic factors play a role in voice selection. Consider again the sentences in (1) above. When presented with sets of sentences such as these, which differ only in the choice of trigger, native speakers generally report that they mean the same thing—in the sense of being truth-conditionally equivalent—but differ with regard to ‘aboutness’, or focus of attention: (1a) is interpreted as predicating a property of the farmer, namely that s/he killed the chicken; likewise, (1b)

<sup>3</sup> Clefting of PPs and adverbials presents further complications, which I set aside here. Cf. Paul (1999) and Pearson (2001) for some discussion.

predicates a property of the chicken, while (1c) predicates a property of the knife. This suggests that the choice of trigger depends on the information structure of the clause, with the trigger mapping to the *theme* (or *topic*) of the clause, and the predicate phrase mapping to the *rheme* (or *comment*).

The topic-like properties of the trigger account for an important constraint on trigger selection, namely that the trigger must be a formally definite expression—i.e., a pronoun, a proper name, or a DP headed by an overt determiner and interpreted as specific/referential, generic, or strongly quantificational (in the sense of Milsark 1977). Non-specific indefinites, which take the form of bare NPs, cannot function as triggers. Compare the following examples with an indefinite patient, where only the AT variant is possible:

- (4) a. Namono akoho ny mpamboly  
 Pst.AT.kill chicken Det farmer  
 ‘The farmer killed {a chicken/some chickens}’
- b. \* Novonoin’ ny mpamboly akoho  
 Pst.TT.kill Det farmer chicken  
 ‘The farmer killed {a chicken/some chickens}’

To account for the topic-like behavior of the trigger, along with various binding facts, I argue in Pearson (2001, 2005a) that the trigger is merged in a clause-peripheral A'-position (the specifier of TopP) and binds an operator within the predicate phrase. The verb agrees in Case features with the operator, as schematized in (5) below, and the voice morphology on the verb is an (indirect) spell-out of this agreement relationship (see Pearson 2005b for details). To account for the extraction restriction illustrated in (2)–(3), I argue that the gap [e] is a null operator coindexed with the clefted constituent, and that this null operator competes for the same landing site with the null operator that licenses a trigger. This accounts for why the gap determines the voice of the verb within the remnant, and why the remnant cannot contain a trigger.

- (5)  $[\text{PredP } Op_i \text{ V } \dots t_i \dots ] \text{ Trigger}_i$   
 $\quad \quad \quad \begin{matrix} z-m \\ \text{[Case]} \end{matrix}$

However, the theory presented in Pearson (2005a) does not provide a complete account of the Malagasy voice system. In certain cases that I have observed, voice selection in non-extraction contexts is not determined (solely) by which of the verb's arguments is most topical, but also reflects—or affects—the event-structure interpretation of the clause. In particular, the choice between AT and TT voice in transitive clauses often correlates with aktionsart or aspectual viewpoint. In some instances, AT voice is used when the focus is on the beginning point (or activity portion) of the event, while TT voice is preferred if the focus is on the endpoint of the event, or the event as a whole. In other instances, AT voice favors a durative and atelic interpretation of the predicate, while TT voice favors a punctual and telic interpretation. I provide some examples of this in the next section. Then in section 2 I present some initial speculations regarding the connection between voice and aspect.

## 1 Observations Regarding Voice and Aspect

Consider the sentences in (6) below, where the verb *tosek* ‘push’ (citation form *tosi-*

*ka*) selects the DP *ny vehivavy* ‘the woman’ as its external argument (agent), and the DP *ny sarety* ‘the cart’ as its internal argument (theme). Since both arguments are definite, either can function as the trigger of the clause. In (6a) the verb appears in the AT voice, marking the external argument as the trigger, while in (6b) the internal argument functions the trigger and the verb appears in the TT voice.

- (6) a. Nanosika ny sarety ny vehivavy  
 Pst.AT.push Det cart Det woman  
 ‘The woman {pushed/was pushing} the cart’ [activity]
- b. Natosiky ny vehivavy ny sarety  
 Pst.TT.push Det woman Det cart  
 ‘The woman gave the cart a push’ [achievement]  
 or ‘The woman {pushed/was pushing} the cart’ [activity]

Speakers I have consulted report that the AT clause and its TT counterpart differ not merely in the choice of trigger, but in the type of event they can refer to. Like its English counterpart, *tosek* ‘push’ can denote either a durative, atelic event (an *activity*, in the typology of Vendler 1967) or a punctual, telic event (what Vendler calls an *achievement*). Under the activity reading, the woman applies continuous force to the cart to move it forward; while under the achievement reading, the woman applies force to the cart to set it in motion, and it continues to move forward under its own momentum. According to my consultants, (6b) is ambiguous between the two interpretations, though most speakers showed a clear preference for the achievement reading. For (6a), however, only the activity reading was available. In other words, voice selection is conditioned in part by *aktionsart*: in cases where a predicate can be construed as denoting either a durative/atelic event or a punctual/telic event, AT voice forces the former interpretation while TT voice favors the latter.

In other cases, the *aktionsart* remains constant, and voice selection seems to reflect something like viewpoint aspect. Consider the examples in (7), where the clause denotes an event involving an incremental activity which culminates in an endpoint (what Vendler calls an *accomplishment*): Rakoto engages in the act of writing, which incrementally affects the letter and terminates when the letter is complete.

- (7) a. Nanoratra ny taratasy Rakoto  
 Pst.AT.write Det letter Rakoto  
 ‘Rakoto wrote the letter’
- b. Nosoratan-dRakoto ny taratasy  
 Pst.TT.write=Rakoto Det letter  
 ‘Rakoto wrote the letter’

With predicates of this sort, the choice of AT voice (7a) seems to focus attention on the inception or activity component of the event, while TT inflection (7b) places focus on the endpoint or result. This can be seen when a temporal measure phrase like *nandritra ny adiny roa* (lit. ‘lasted two hours’) is added to the clause, as in (8) below. Speakers consistently report that the interpretation of this measure phrase crucially depends on the voice of the main verb. The AT clause in (8a) receives an *imperfective* construal, such that the measure phrase specifies some subinterval of the letter-writing event, which need not include the inception or the endpoint: Rakoto spent two hours working on the letter, but did not necessarily finish it during that time (and may not have finished it at all). By

contrast, the TT clause in (8b) receives a *perfective* construal: here, the measure phrase specifies the duration of the letter-writing event from its inception to its culmination point—meaning that it took Rakoto two hours to finish the letter. Notice how this difference is reflected in the translation of the measure phrase: ‘for two hours’ in the former case, versus ‘in two hours’ in the latter.

- (8) a. Nanoratra ny taratasy nandritra ny adiny roa Rakoto  
 Pst.AT.write Det letter Pst.AT.lastDet hour two Rakoto  
 ‘Rakoto was writing the letter for two hours’
- b. Nosoratan-dRakoto nandritra ny adiny roa ny taratasy  
 Pst.TT.write=Rakoto Pst.AT.last Det hour two Det letter  
 ‘Rakoto wrote the letter in two hours’

If AT voice is associated with imperfectivity while TT voice is associated with perfectivity interpretation, this suggests an alternative way to conceptualize the contrast in (6) above: perhaps (6a) receives an imperfective interpretation while (6b) receives a perfective interpretation, and only the former is compatible with a punctual construal of the predicate ‘push the cart’ (punctual events cannot be ongoing).

Another way of expressing temporal measurement is illustrated in (9). Here the temporal measure phrase (*telo andro* ‘three days’) appears as the main predicate of the sentence, while an embedded clause introduced by the subordinator *vao* ‘before’ expresses the event being measured. As in (8) above, the interpretation of the measure phrase is determined by the voice of the embedded verb: when *vao* selects an AT clause (9a), the sentence means ‘It took him three days to start writing the letter’; but when *vao* selects a TT clause (9b), the sentence means ‘It took him three days to finish writing the letter’.

- (9) a. Telo andro vao nanoratra ny taratasy Rakoto  
 three day before Pst.AT.write Det letter Rakoto  
 ‘(It was) three days before Rakoto was writing the letter’
- b. Telo andro vao nosoratan=dRakoto ny taratasy  
 three day before Pst.TT.write=Rakoto Det letter  
 ‘(It was) three days before Rakoto {wrote/had written} the letter’

The construction in (9) may express either the amount of time required to accomplish the event, or the amount of time which elapses before the event is initiated.<sup>4</sup> When ‘write’ is in the TT form (9b), *telo andro* ‘three days’ specifies the duration of the letter-writing event—in other words, the end of the three days is associated to the endpoint of the event. By contrast, when the AT form is used, as in (9a), *telo andro* specifies the length of time between some contextually-determined reference point and the point at which the event of writing the letter begins—that is, the end of the three days is associated to the beginning point of the event. This appears to be consistent with the contrast in (8) above, where TT voice favors a perfective reading while AT voice favors an imperfective reading. It seems that in (9b), the ‘before’ clause refers to the event as a whole, including the endpoint; while in (9a) the ‘before’ clause refers to a sub-part of the event, excluding the endpoint. (The fact that that *telo andro* in (9a) is interpreted as measuring the time to the

<sup>4</sup> English exhibits a similar ambiguity with *in* phrases in future tense contexts. E.g., *We will climb the mountain in three days* may mean either ‘It will take us three days to climb the mountain’ or ‘Three days will elapse before we [begin to] climb the mountain’.

*beginning* point of the event might follow from an implicature: by asserting that three days separate some contextually-relevant time *t* from a point at which Rakoto is engaged in the letter-writing event, the speaker implies that Rakoto was not engaged in this event at any earlier point following time *t*.)

Consider also the contrast between AT and TT voice in sentences containing clauses headed by the subordinator *rehefa* ‘when’. In the examples in (10) below, the event denoted by the ‘when’ clause in (10a) sets up a temporal context for the event denoted by the main clause (10b,c). When (10a) is followed by the AT clause in (10b), it is understood that Rasoana was in the process of opening the window at the time when the speaker entered—in other words, the temporal point associated with the entering event is contained within the interval of the opening event. On the other hand, when (10a) is followed by the TT clause in (10c), there is no overlap between the events: it is understood that the opening event either properly precedes or properly follows the entering event.

- (10) a. Rehefa niditra      ao      an-trano aho...  
           when Pst.AT.enter in:there Obl-house 1sNom  
           ‘When I came into the house...’
- b. ... namoha      ny varavarankely Rasoana  
           Pst.AT.open Det window Rasoana  
           ‘... Rasoana was opening the window’
- c. ... novohain-dRasoana ny varavarankely  
           Pst.TT.open=RasoanaDet window  
           ‘... Rasoana (had) opened the window’

Note that the use of TT voice in (10c) merely indicates that the time of the entering event is not contained within the time of the opening event, without specifying the temporal order of the two events. According to my speakers, this is normally disambiguated by adding a preverbal particle to the main clause: *dia* ‘then’ specifies that the entering event precedes the opening event (11a), while *efa* ‘already’ can be used to indicate that the entering event follows opening event (11b):

- (11) a. ... dia novohain-dRasoana ny varavarankely  
           then Pst.TT.open=Rasoana Det window  
           ‘(When/once I came into the house,) Rasoana opened the window’
- b. ... efa novohain-dRasoana ny varavarankely  
           already Pst.TT.open=Rasoana Det window  
           ‘(When I came into the house,) Rasoana had already opened the window’

In (10), the event denoted by the ‘when’ clause establishes a reference time *t* for the event denoted by the matrix clause. Here we see the same relationship between voice selection and aspect as in earlier examples, where use of the AT voice yields an imperfective reading while TT voice yields a perfective reading. In the former case, *t* is understood to be internal to the matrix clause event time, while in the latter case *t* is external to the matrix clause event time.

Consider finally the construction in (12)–(15) below. Here again, the event denoted by an embedded clause (introduced in this case by the particle *no*) identifies a reference time for the event denoted by the matrix clause. When the main clause is in the AT voice, as in (12a), the reference time is located within the matrix event time: the harvesting

event is ongoing at the point when the raining event begins (the rain interrupts the harvesting event, and may actually prevent the harvesting event from reaching completion). However, when the main clause is in the TT voice, as in (12b), the reference time follows the matrix event time: it is understood that the farmer has already completed harvesting the rice (i.e., the harvesting event has reached its culmination point) at the time when the raining event begins. As the glosses indicate, a similar contrast obtains in (13a,b).

- (12) a. Nijinja vary ilay mpamboly no avy ny orana  
 Pst.AT.harvestrice that farmer when come 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 when come Det rain  
 ‘That farmer had (already) harvested the rice when it began to rain’
- (13) a. Nanasa ny lobaka izy no niditra aho  
 Pst.AT.wash Det shirt 3sNom when Pst.AT.enter 1sNom  
 ‘She was washing the shirt when I came in’
- b. Nosasany ny lobaka no niditra aho  
 Pst.TT.wash=3sGen Det shirt when Pst.AT.enter 1sNom  
 ‘She had finished washing the shirt when I came in’

Notice that in (12)–(13) the matrix clause denotes an accomplishment. When the matrix clause instead denotes an activity, the speakers I consulted generally reported a difference in acceptability or naturalness between the AT and TT variants. Consider the examples in (14) below. Speakers uniformly accepted (14a), with the matrix clause in the AT voice, and interpreted the sentence to mean that the ringing of the phone interrupted the event of Rakoto watching television. However, speakers hesitated to accept the TT variant in (14b). One speaker reported that the sentence was acceptable, but only if it was understood that Rakoto watched television only for a brief period, and that the television-watching event ended some time before the moment at which the phone rang.

- (14) a. Nijery fahitalavitra Rakoto no naneno ny telefaonina  
 Pst.AT.look:at television Rakoto when Pst.AT.ringDet telephone  
 ‘Rakoto was watching television when the phone rang’
- b. ? Nojeren-dRakoto ny fahitalavitra no naneno ny telefaonina  
 Pst.TT.look:at=RakotoDet television when Pst.AT.ring Det telephone  
 ‘Rakoto had (already) watched television when the phone rang’

The contrast between AT and TT voice is even starker for (14) below. The AT variant in (14a) was judged fully acceptable, and interpreted to mean that Rabe was interrupted in his search for the shoes by the phone ringing. However, its TT counterpart in (14b)—and other sentences of the same form—sounded very strange to my consultants. This might be for pragmatic reasons. From what I have been able to determine, (14b) seems to imply that Rabe had set aside a designated period of time to search for his shoes, but without necessarily intending to find them, and that he had carried out this task at the moment when the phone rang.

- (15) a. Nitady ny kirarony Rabe no naneno ny telefaonina  
 Pst.AT.look:for Det shoe=3sGen Rabe when Pst.AT.ringDet telephone  
 ‘Rabe was looking for his shoes when the phone rang’
- b. ?? Notadiavin-dRabe ny kirarony no naneno ny telefaonina  
 Pst.TT.look:for=Rabe Det shoe=3sGen when Pst.AT.ring Det telephone  
 (‘Rabe had [already] looked for his shoes when the phone rang’ ?)

For the *no* construction in (12)–(15), then, we find the following pattern: Speakers find such sentences uniformly acceptable when the matrix clause is in the AT voice, and interpret them to mean that the matrix event is ongoing at the time when the event denoted by the *no* clause occurs. When the matrix clause is instead in the TT voice, the construction is sometimes judged unacceptable; but when speakers accept the TT variant, they interpret it such that the matrix event is completed by the time the event denoted by the *no* clause occurs.

## 2 Speculations Regarding Voice and Aspect

The principal goal in this short paper has been to draw attention to certain situations in Malagasy where voice selection appears to have consequences for the aspectual interpretation of the clause. It remains an object of future research to account for the correlations between voice and aspect noted in the previous section. Here I confine myself to making some initial suggestions for the direction this research might take.

As noted above, I argue in Pearson (2001, 2005a/b) that Malagasy voice morphology expresses a kind of agreement relation, whereby the abstract Case feature of an A'-operator is realized on the verb (see (5) above; cf. Chung 1998 on wh-agreement in Chamorro, and Rackowski and Richards 2005 on voice as Case agreement in Tagalog). If the operator raises from the position where the external argument checks its Case feature, then the verb carries AT inflection; if it raises from the position where the internal argument checks its Case, then the verb carries TT inflection. I further argue that these Case positions are associated with the event structure of the clause. The internal argument checks its Case in the specifier of an aspectual projection AspP, located within the  $\nu$ P and associated with *inner aspect* (here I follow Travis 2010). The features of the inner aspect head distinguish telic from atelic events, accounting for the often-observed connection between telicity and object selection (e.g., the strong tendency for quantized objects of accomplishment predicates to be interpreted as incremental themes). The external argument checks its Case feature in a position above  $\nu$ P—the specifier of an *event* phrase, EP, associated with the event argument of the predicate.<sup>5</sup> This is schematized in (16). AT morphology spells out the head of EP, while TT morphology spells out the head of AspP, just in case their specifiers contain a trace of the operator bound by the trigger (see Pearson 2005b for details).

- (16) [TP T [EP *Ext.Arg*<sub>i</sub> E [ $\nu$ P t<sub>i</sub>  $\nu$  [AspP *Int.Arg*<sub>j</sub> Asp [ $\nu$ P t<sub>j</sub> V ... ]]]]]

It is possible that the correlations between voice and aspect noted above can be explained in terms of the relationship between argument structure and event licensing. Since

<sup>5</sup> Alternatively, the external argument might have its Case checked in the specifier of an *outer aspect* phrase (Travis 2010), whose head expresses a relationship between the event time and a reference time.



internal arguments are licensed in SpecAspP, promoting the internal argument to trigger function (TT voice) somehow places focus on the endpoint of the event, favoring a telic/perfective reading of the clause. Likewise, inasmuch as external arguments are licensed in SpecEP, promoting the external argument to trigger function (AT voice) places focus on the initiation point or activity component of the event, favoring an atelic/imperfective reading (at least for activity and accomplishment predicates). We might enshrine this connection in the form a specifier-head agreement requirement: suppose that the operator bound by the trigger (*Op* in (5)) has a [+topic] feature, and that the head in which it checks its Case must have a matching feature—i.e., the E head is [+topic] in AT clauses, while the Asp head is [+topic] in TT clauses.

At this point, however, this approach remains purely stipulative—and potentially problematic. The analysis outlined above implies a rather tight connection between voice selection and aspectual viewpoint. However, it is far from clear that AT clauses consistently receive an atelic/imperfective interpretation or that TT clauses consistently receive a telic/perfective interpretation. In fact, the aspectual contrast between these two forms is generally noticeable only in constructions where the event denoted by the AT/TT-alternating verb is anchored with respect to a *reference time*—e.g., in constructions containing a temporal measure phrase or a ‘when’ clause. Outside of these constructions, speakers do not generally report an aspectual contrast between AT clauses and their TT counterparts (the minimal pair in (6) is a rare exception). This suggests that the aspectual contrasts discussed here should receive a more construction-specific account.

As a final observation, it is worth noting that the apparent association of AT voice with imperfectivity and TT voice with perfectivity is reminiscent of the pattern found in languages which exhibit ergativity splits based on aspect. In such languages, imperfective clauses show a nominative-accusative case alignment while perfective clauses show an ergative-absolutive alignment. While Malagasy is normally analyzed as nominative-accusative, the AT/TT alternation shows at least superficial parallels to a split-ergative pattern when we compare transitive AT clauses and their TT counterparts to intransitive clauses (which lack a TT form). This is especially apparent when we consider pronominal arguments, which exhibit morphological case distinctions. In transitive AT clauses, the external argument patterns with the core argument of an intransitive clause, while the internal argument is marked differently: the former function as the trigger of the clause and take the default nominative form (cf. (18) and (19a)), while the latter appears inside the predicate phrase and takes the accusative form (19b). In transitive TT clauses, by contrast, it is the internal argument which patterns with the core argument of an intransitive, while the external argument patterns differently: again, the former appear in trigger function and take the nominative (cf. (18) and (20b)), while the latter appears inside the predicate and takes the ‘genitive’ form (20a).

(18) Natory        *aho*  
 Pst.AT.sleep 1sNom  
 ‘I slept / was sleeping’

(19) a. Namangy    *ny ankizy aho*  
 Pst.AT.visit Det children 1sNom  
 ‘I visited the children’

b. Namangy    *ahy ny ankizy*  
 Pst.AT.visit 1sAcc Det children  
 ‘The children visited me’

- (20) a. Novangiako ny ankizy  
Pst.TT.visit=1sGen Det children  
'I visited the children'
- b. Novangian' ny ankizy aho  
Pst.AT.visit Det children 1sNom  
'The children visited me'

While I am not suggesting that Malagasy should be analyzed as an aspect-based split-ergative language, it is interesting to note the parallels between them. It is possible that whatever analysis we propose for explaining the interaction between aspect and case alignment can be extended (perhaps with modifications) to account for the interaction between aspect and trigger selection found in languages of the Malagasy type.

## References

- Chung, Sandra. 1998. *The Design of Agreement: Evidence from Chamorro*. Chicago: University of Chicago Press.
- Keenan, Edward L. 1976. Remarkable subjects in Malagasy. In *Subject and Topic*, ed. Charles Li. New York: Academic Press.
- Keenan, Edward L. and Cécile Manorohanta. 2001. A quantitative study of voice in Malagasy. *Oceanic Linguistics* 40: 67-85.
- Milsark, Gary. 1977. Toward an explanation of certain peculiarities of the existential construction in English. *Linguistic Analysis* 3: 1-29.
- Paul, Ileana. 1999. Malagasy clause structure. Doctoral dissertation, McGill University.
- Paul, Ileana. 2001. Concealed pseudo-clefts. *Lingua* 111: 707-727.
- Pearson, Matt. 2001. *The Clause Structure of Malagasy: A Minimalist Approach*. Los Angeles: UCLA Dissertations in Linguistics 21.
- Pearson, Matt. 2005a. The Malagasy subject/topic as an A'-element. *Natural Language and Linguistic Theory* 23: 381-457
- Pearson, Matt. 2005b. Voice morphology, case, and argument structure in Malagasy. In *Proceedings of AFLA 11: The eleventh meeting of the Austronesian Formal Linguistics Association*, ed. Paul Law, 229-243. Berlin: Zentrum für Allgemeine Sprachwissenschaft.
- Potsdam, Eric. 2006. More concealed pseudo-clefts in Malagasy and the clausal typing hypothesis. *Lingua* 116: 2154-2182.
- Rackowski, Andrea, and Norvin Richards. 2005. Phase edge and extraction: A Tagalog case study. *Linguistic Inquiry* 36: 565-599.
- Rajemisa-Raolison, Régis. 1971. *Grammaire malgache*. Antananarivo: Fianarantsoa.
- Travis, Lisa. 2010. *Inner Aspect: The Articulation of VP*. Dordrecht: Springer.

Vendler, Zeno. 1967. Verbs and times. In *Linguistics and Philosophy*. Ithaca, NY: Cornell University Press.

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