

STATES, ABILITIES, AND ACCIDENTS*

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In this paper I present four types of passive in Malagasy and compare them with four similar constructions in English. After proposing a syntactic analysis for the Malagasy and English constructions, I turn to a remaining semantic problem. More specifically, I address the question of why the same type of morpheme might produce a different interpretation depending on the root to which it attaches. I suggest that the relevant morphemes, in fact, contain the same information and that the differences in interpretation are due to those parts of the meaning that are **not** encoded in the root itself.

1. States

1.1 Four Malagasy passives

To set the stage to investigate several types of states in Malagasy, we look at four constructions that are presented in traditional grammars (e.g. Rajemisa-Raolison 1971) as four types of passive. Examples of these are given below.

- (1) SUFFIX passive¹
Sitranana ny aretinao √SITRANA-*V-na*
Cure.PASS DET illness.2SG
'Your illness was cured (by someone).'
- (2) *VOA* passive
Voatapaka ny tady *voa*-√TAPAKA
VOA.cut DET cord
'The cord was cut (by someone).'
- (3) *TAFA* passive
Tafatsangana ny ankizy *tafa*-√TSANGANA
TAFA.stand DET child
'The child stood up.'

* This paper benefited from comments from the CLA audience, the audience at the Argument Structure Workshop in Tromsø in November 2004, as well as discussions with, in particular, Peter Hallman and Jillian Mills. I am grateful for all of this input, as well as research funding from SSHRCC 410-2004-0966. I am particularly grateful to Ed Keenan for continually raising the question of the interpretation of *tafa* in Malagasy. Further, I appreciate the insights and the patience of my native language consultants both in Canada and in Madagascar. All mistakes are my own.

¹ There is a lively debate about the status of these 'passives' in this language family. I ignore the debate here and gloss them as passives.

(8)		External argument	Manner adverb
	EVENTIVE	verbal	change of state
	RESULTATIVE	adjectival	
STATE			state

1.3 Malagasy tests

The Malagasy constructions can also be distinguished through tests. Here I give just a summary (see Travis in press for more detail). First we note that tense is exhibited differently depending on whether the passive is a suffix passive or one of the other three types. The paradigm is given below.

(9) SUFFIX vs. others

	SUFFIX	VOA	TAFa	ROOT
Present	0-	0	0	0
Past	<i>no-</i>	0	0	0
Future	<i>ho-</i>	<i>ho</i>	<i>ho</i>	<i>ho</i>

Like adjectives, the *VOA*, *TAFa*, root passives have only a future/non-future distinction; like verbs, the suffixed passives have a three-way tense distinction.

We can distinguish the root passive from the other three by using the adverb *tsy ela* ‘not long ago’. As shown in the table and examples below, *tsy ela* can be used with every passive except the root passive.

(10) Others vs. ROOT

	SUFFIX	VOA	TAFa	ROOT
<i>Tsy ela</i>	Yes	Yes	Yes	No

- (11) a. Notapahina tsy ela ny tady
 PST.cut.PASS NEG long.ago DET cord
 ‘The cord was cut not long ago.’
- b. Voatapaka tsy ela ny tady
 VOA.cut NEG long.ago DET cord
 ‘The cord was cut not long ago.’
- c. Tafapetraka tsy ela ny sari-vongona
 TAFa-stand NEG long.ago DET statue
 ‘The statue was stood up not long ago.’
- d. * Tapaka tsy ela ny tady
 cut NEG long.ago DET cord
 ‘The cord was cut not long ago.’

The distinctions above give us the following picture of Malagasy (I leave aside the difference between *VOA* and *TAFa* passive till later).

(12) Malagasy

	Tense realization	<i>Tsy ela</i> 'not long ago'
SUFFIX	verbal	change of state
<i>VOA</i>	adjectival	
<i>TAFA</i>		state
ROOT		

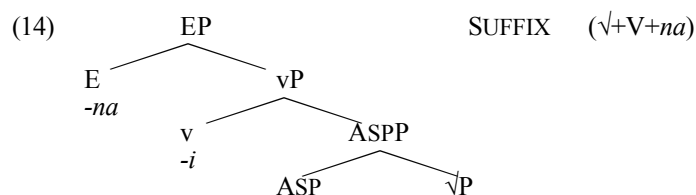
Comparing Malagasy and English, I suggest the following correlation.

(13)

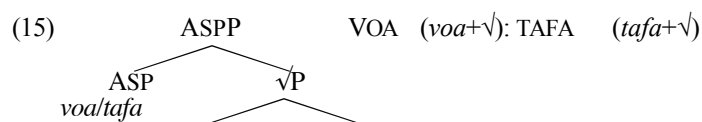
English		Malagasy	
EVENTIVE	<i>opened</i>	SUFFIX	<i>tapahina</i> 'was cut'
RESULTATIVE	<i>opened</i>	<i>VOA</i>	<i>voatapaka</i> 'was cut'
??	??	<i>TAFA</i>	<i>tafavory</i> 'gathered'
STATE	<i>open</i>	ROOT	<i>tapaka</i> 'cut'

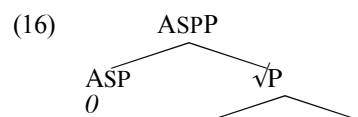
1.4 The structures

Embick (2004) proposes certain structures for the three English constructions. Elsewhere (Travis in press), I discuss his structure and suggest some modifications that are more in line with the Malagasy data. Using some of Embick's observations and certain details of phrase structure that I have argued for independently (see e.g. Travis 2000), I arrive at the following structures for Malagasy. The verbal nature of the suffix passive (as evidenced by the tense morphology) is encoded in the v node above ASP(ect).



The other passives pattern with adjectives because of the lack of this node. To get a distinction between the root passive and the others, I assume that ASP selected by v as well as *voa* and *tafa* ASP all encode a change of state while an unselected zero ASP (as in (16)) does not.





2.1 Telicity and external arguments

Now we turn to the task of distinguishing the *VOA* and the *TAFa* passives. In order to do this, we have to understand two Malagasy particular facts. The first is that Malagasy is an ‘atelic’ language and the second is that external arguments occur in many environments that are not possible in English.

To show that Malagasy is atelic, we turn to the examples below. Here we see that endpoints are defeasible in Malagasy. This is true for transitives, suffix passives, and marginally possible for unaccusatives.

- (17) a. Nisambotra ny alika ny zaza TRANSITIVE
 PST./I.captive DET dog DET child ACTIVE
 ‘The child caught the dog.’ (Phillips 2000: 22)
- b. ... nefa faingana loatra ilay alika
 but quick too that dog
 ‘... but the dog was too quick.’
- (18) a. Nosamborin'ny zaza ny alika SUFFIX PASSIVE
 PST.captive.GEN'DET child DET dog
 ‘The dog was caught by the child.’
- b. ... nefa faingana loatra ilay alika
 ‘... but the dog was too quick.’
- (19) a. Nivory ny olona UNACCUSATIVE
 PST./I.meet DET people
 ‘The people met.’
- b. ? nefa tsy nanana fotoana izy
 but NEG PST.have time 3
 ‘.... but they didn't have time.’

In order to insist on the endpoint of the event, Malagasy uses a different set of verbal morphemes. The paradigm is given below.

(20) Telicity marking

	ATELIC	TELIC
TRANSITIVE	<i>an-/i-√</i>	<i>aha-√</i>
SUFFIX PASSIVE	<i>√-V-na</i>	<i>voa-√</i>
UNACCUSATIVE	<i>i-√</i>	<i>tafa-√</i>

Once these morphemes are added, the endpoint is no longer defeasible. As we can see in the example below, an unaccusative with the telic marker *tafa-* is not defeasible at all (as compared to the simply awkward result of (19b) above).

- (21) a. tafavory ny olona. b. * nefa tsy nanana fotoana izy.
*TAF*A.meet DET people '.... but they didn't have time.'
 'The people met.'

It is important to note that in the chart in (20) we see three of the four passives (shown in the grey areas), and we can now see the difference between the *VOA* and the *TAF*A passives. The *VOA* passive is the telic version of the suffix passive and the *TAF*A passive is, in fact, the telic version of an unaccusative.

This last observation raises the question of why the *TAF*A passive is considered a passive at all and not just a telic version of the unaccusative. Most likely this is due to the fact that telic unaccusatives (as opposed to other unaccusatives) may realize an external argument. This is shown below. First we see that normal (atelic) unaccusatives, not surprisingly, do not allow external arguments.

- (22) a. * Nivory ny mpampianatra ny ankizy.
 PST.I.meet DET teacher DET children
 (an attempt at: 'The teachers managed to gather the children.')
- b. * Nivorin'ny mpampianatra ny ankizy.
 PST.I.meet'DET teacher DET children
 (an attempt at: 'The teachers managed to gather the children.')

What is surprising, however, is that the telic form of the unaccusative verb (*TAF*A+ ν) can optionally realize an external argument.

- (23) Tafavory ny mpampianatra ny ankizy.
*TAF*A.meet.GEN DET teacher DET children
 'The teacher managed to gather the children.'

When compared side by side without explicit external arguments, however, we can see the difference between the *VOA* and the *TAF*A passives. In the case of the *VOA* passive, there is an implicit external argument, but not so in the case of the *TAF*A passive.

- (24) a. Voatsangana ny sari-vongona
VOA.stand DET statue
 'The statue was stood up (by someone).'
- b. Tafatsangana ny ankizy
*TAF*A.stand DET child
 'The child stood up.'

In terms of the structures, we can say that the *voa* ASP selects a complement with an external argument in its lexical entry, while the *tafa* ASP selects a complement with no external argument in its lexical entry.³

Now that I have sketched how the different passives are distinguished syntactically, I turn to some residual semantic issues. Telicity brings with it not only the possibility of realizing an external argument in unaccusatives, it also carries some special meanings. Some of these are indicated below. As we see in (25), all three telic prefixes in certain situations will express ability.

- (25) a. Mahateny Rabe Phillips 1996:32
 PRES.*a.ha*.speak Rabe
 ‘Rabe can talk.’
- b. Tsy voabatako ity entana ity R-R 1971:95
 NEG *VOA*.lift this suitcase this
 ‘I cannot lift this suitcase.’
- c. Tafiditra tao an-tanana ny fahavalo R-R 1971:96
TAFa.enter PST.in *an*.city DET enemy
 ‘The enemy was able to enter the city.’

Tafa, in addition, may have a meaning of suddenness, or accidental occurrence, or imply a certain amount of effort.

- (26) a. Tafapetraka aho nahare ilay vaovao R-R 1971:96
TAFa.sit 1SG PST.*A.HA*.hear that news
 ‘I sat in spite of myself on hearing the news’

I spend the rest of the paper suggesting how these different meanings come about.

2. Abilities

The abilitative meaning is the most common one that appears. I follow Bhatt (1999) in assuming that the abilitative meaning is one that is parasitic on the meaning of actuality of the event endpoint. We see a similar effect in the English examples of the predicate ‘able’ below. In Bhatt’s terms, (27a) gives a past episodic reading while (27b) gives a past generic reading.

- (27) a. Yesterday, John was able to eat five apples in an hour.
 b. In those days, John was able to eat five apples in an hour.

While it might seem in English that the ability is being asserted and that the actuality is an implicature, Bhatt shows convincingly that, in fact, it is the actuality that is being asserted. One example he gives is provided below.

³ This raises many questions about the nature of lexical entries and external arguments that I do not have space to explore here.

- (28) a. Yesterday, Brown hit three bulls-eyes in a row. Before he hit three bulls-eyes, he fired 600 rounds, without coming close to the bulls-eye: and his subsequent tries were equally wild.
- b. Brown was able to hit three bulls-eyes in a row.
- c. Brown had the ability to hit three bulls-eyes in a row.

Bhatt points out that given the situation in (28a) one can conclude (28b) but not (28c). He concludes, then, that the assertion has to do with actuality rather than ability.

Using data from a range of other languages, Bhatt shows that the ability reading is due to the context. In particular, generic contexts produce the ability reading. This is clearly seen in languages with an imperfective/perfective distinction such as the one in Modern Greek given below (Bhatt 1999:175).

- (29) a. Borusa na sikoso afto to trapezi
CAN.impfv.1s NA lift.non-pst-pfv.1s this the table
- ala [en to sikosa
but NEG it lift.impfv
'(In those days), I could lift this table but I didn't lift it.'
- b. Boresa na tu miliso
CAN.pst-pfv.1s NA him talk.non-pst.pfv.1s
- (#ala [en tu milisa)
but NEG him talk.pst-pfv
'I was able to talk to John (but I did not talk to him).'

The imperfective form of CAN in Greek produces the ability reading (as in (29a)) while the perfective form produces the actuality reading (as in (29b)).

This finding reproduces itself in other languages with a slight twist. It is not so much perfective/imperfective that gives the contrast but bounded/unbounded.⁴ Two other languages illustrate this. In Chichewa and St'at'imcets the appearance of the abilitative meaning is determined by the lexical (situation aspect) of the predicate. Dubinsky and Simango (1996) discuss a stative passive construction exemplified below.

- (30) Nyemba zi-na-phik-ika
AGR-PAST-cook-STAT
'The beans were cooked.'

In the body of the paper they assert that the stative passive is possible only with change of state verbs. However, in a footnote, they point out that the stative passive morpheme may attach to non-change of state verbs but in this case it

⁴ I treat bounded/unbounded as a more general term that encompasses boundedness as well as telicity.

gives an abilitative meaning (a meaning also available to change of state verbs). The example given is *lum-ika* ‘bite-STAT’ which cannot be ‘bitten’ but can mean ‘biteable’.

We also find an abilitative construction in St’at’imcets as documented by Davis and Demirdache (2000). They show the relation of the abilitative to another construction, the Out-of-Control (OOC) construction. As in Chichewa, the same morpheme gets interpreted differently depending on what sort of root it attaches to. When the OOC morpheme attaches to a telic root, we get an accidental reading as show below.

- (31) [ka-sék’w-s-as-a [ti nk’wan’ústen-a]
 OOC-broken-CAU-ERG-OOC DET window-DET
- [ti swáycw-a]
 DET man-DET
 ‘The man accidentally broke the window.’

When the same morpheme attaches to an atelic root, we get the abilitative reading. An example paradigm is given below.

- (32) telic: *sék’w-s* ‘break’ *ka-sék’w-s-a* ‘to accidentally break’
 atelic: *sék-cal* ‘to hit (people/things) *ka-sék-cal-a* ‘to be able to hit ...’

While I leave a characterization of the generalization for future work, there seems to be a common denominator in the examples we have seen. The ability reading comes about in particular contexts, sometimes determined by grammatical aspect, sometimes determined by the nature of the root. The ability reading is available in unbounded situations. This is summed up in the table below. We will turn to the case of Malagasy in the next section.

(33)

	-BOUNDED	+BOUNDED
Greek, etc.	IMPERFECTIVE <i>ability</i>	PERFECTIVE <i>result</i>
Chichewa	NO CHANGE OF STATE <i>ability</i>	CHANGE OF STATE <i>state</i>
St’at’imcets	ATELIC <i>ability</i>	TELIC <i>accidental</i>
Malagasy	ATELIC <i>ability</i>	TELIC <i>result/accidental/effort?</i>

3. Accidents

Now we are left to account for the other meanings that these telic affixes bring with them. These meanings show up most often with the *TAFa* passives. Recall that all four Malagasy passive constructions can appear with overtly

realized external arguments. This means that there are minimal pairs formed between the *VOA* and the *TAFa* passives (the telic versions of a suffix passive and an unaccusative respectively).

- (34) a. Voatsangan-dRakoto ny sari-vongona
VOA-stand-Rakoto DET statue
 ‘The statue was stood up by Rakoto.’
- b. Tafatsangan-dRakoto ny sari-vongona
TAFa-stand-Rakoto DET statue
 ‘The statue was stood up by Rakoto.’
 ... suddenly/out of the blue/in spite of it being difficult

When presented these structures, especially side by side, consultants (and grammar books) stress extra meanings that come with *tafa*. For example, there is a sense of suddenness, or accidental result, or extra effort. Some of these meanings show up in Bhatt’s discussion. First, he points at that in the scenario in (28) above, “Brown could have hit the target three times in a row by **pure chance** ...” (Bhatt 1999:180 emphasis mine). The second point that Bhatt makes is that ‘able’ does not simply indicate that an event took place as the following example shows.

- (35) #A woman in Watertown was able to win 3 million dollars in the lottery yesterday.

Bhatt argues that ‘able’ indicates non-minimal effort (via conversational implicature). Compare (35) to the sentence below.

- (36) After buying lottery tickets regularly for several years, a woman in Watertown was finally able to win 3 million dollars in the lottery yesterday.

Once there is some effort involved, the predicate ‘able’ becomes appropriate.

The accidental meaning is even more clear in the St’at’imcets OOC examples where the reading of the morpheme when attached to a telic root produces an accidental interpretation.

What I suggest for Malagasy is that the telic markers assert actuality and have the same conversational implicatures of effort and accident as in English. These additional meanings arise most noticeably in the case of *tafa*, because this is the morpheme that attaches to roots that resist defeasibility as I have shown in (19b) above. Since these roots, on their own, are the most telic, what becomes salient with the additional morphology is the bundle of conversational implicatures.

4. Conclusion

My aim in this paper was to better understand the syntax and semantics of four passives in Malagasy. Through a comparison to similar constructions in English and some Malagasy specific tests, I developed a structural account of

the four passives. This, however, left however a semantic problem. The interpretation of two of these passives is quite different from the parallel constructions in English. A closer parallel, semantically, are *ABLE TO* constructions in English. Using observations of Bhatt (1999), I argue that while the main purpose of these passive morphemes is to assert actuality, in certain environments they receive an ability reading. Further, depending on the type of root they attach to, certain conversational implicatures may become salient.

Much work clearly still needs to be done to understand the Malagasy structures and interpretations as well as the cross-linguistic generalizations. One particular issue is raised: what is the relation between grammatical aspect and lexical aspect. Bhatt (1999) proposes that the ability reading is introduced by a generic operator that is linked to the imperfective morphology. This works well for languages where the ability reading comes from additional grammatical aspect. In Chichewa and St'at'imcets, however, the ability reading comes from the lexical aspect of the root. In fact, in St'at'imcets, we can see that both the lexical aspect and the grammatical aspect enter into the computation as shown in the example below.

- (37) a. [ka-kwis-a] [ti k'ét'h-a]
 OOO-fallen-OOO DET rock-DET
 'The rock accidentally fell'
- b. wa7 [ka-kwis-a] [ti k'ét'h-a]
 PROG OOO-fallen-OOO DET rock-DET
 'The rock can fall'
 '*The rock is accidentally falling'

When OOO morphology is added to the telic root, as expected, the construction receives an 'accidental' reading. However, when progressive aspect is added to this, the accidental reading is no longer possible, and only the ability reading remains. I leave such questions for future research.

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