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REMARKABLE SUBJECTS IN MALAGASY*

by

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The primary purpose of this paper is to exhibit a language, Malagasy (a Malayo-Polynesian language, spoken by c. 7 million people in various dialects throughout Madagascar) which is highly subject prominent in the sense that very many of the syntactic processes of the language distinguish subject from non-subject NPs.

Having established this in Section I, we show in Section II that Malagasy is distinct in its subject orientation from the Philippine languages (e.g., Tagalog, Cebuano, etc.) with which it is nonetheless closely related genetically and typologically. Indeed Schachter (this volume) argues that the notion of subject is not very useful in the description of the Philippine languages in that no consistently identifiable NP possesses those properties usually characteristic of subjects (see E.L. Keenan, Definition of Subject, this volume). We will show that with one partial exception the evidence adduced by Schachter does not obtain in the case of Malagasy.

Finally we will show in Section III that the NP we call subject in Malagasy has several of the critical properties which distinguish subjects from "mere" topics. Thus Malagasy will not be a "mere" topic prominent language in the sense of Li and Thompson (this volume). Malagasy subjects, however, will be shown to have certain characteristic topic properties, which makes Malagasy more topic prominent than, for example, English.

Finally, one general conclusion we wish to draw from this work is that the Malagasy data we present provide substantive support for a theory of universal grammar in which generalizations are stated in terms of notions like "subject of," "direct object of," etc. Specifically, the Accessibility Hierarchy (Keenan and Comrie, 1972) is supported by Malagasy; so is the Relational Succession Law (Perlmutter and Postal, 1974), and many (but not all!) of the word order universals in Greenberg (1966).

I. Grammatical Properties of Subjects in Malagasy

We shall consider first a variety of surface properties of subjects of "simple" sentences, and then the behavior of subjects under five major types of transformations: Advancements (e.g., Passive), Movement Rules, Topicalizations, Co-referential Deletions, and Raisings.

1. Surface syntactic properties of subjects

1.1 Position

In simple sentences the verb occurs first and the subject occurs in sentence final position.

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- 1 Nividy mofo ho'an'ny ankizy aho
bought bread for the children I
"I bought some bread for the children"

Word order after the verb is generally rigid as concerns the relative position of the direct object, the subject, and the major obliques (in contrast, e.g., to Tagalog).

- 2 *Nividy aho mofo ho an'ny ankizy
bought I bread for the children

*Nividy ho an'ny ankizy aho mofo
bought for the children I bread

If, however, a simple sentence presents several oblique NPs, Place and Time NPs having adverbial function (that is, ones which do not represent essential logical arguments of the predicate) may occur to the right of the subject.

- 3 Nividy mofo ho an'ny ankizy aho tamin'ny asa-botsy
bought bread for the children I on the saturday
"I bought bread for the children on Saturday"

Even here, however, it is also natural to put tamin'ny asa-botsy "on Saturday" immediately to the left of the subject aho "I." Further, an SVO order is sometimes encountered, but normally has a contrastive, emphatic, or subordinating effect. See Section 2.2.6 for discussion of this possibility. In isolation, then, a sentence like 4 would not be judged acceptable.

- 4 *Aho nividy mofo ho an'ny ankizy
I bought bread for the children

1.2 Verb agreement

Predicates, whether verbal, adjectival, or nominal, do not vary in form with the person, number, or noun class of their subjects or objects.

- 5 a. Nividy mofo ianao
bought bread you (sg)
"You bought bread"
b. Nividy mofo ianareo
bought bread you (pl)
"You bought bread"
c. Nividy mofo izahay
bought bread we (excl)
"We bought bread"
d. Nividy mofo izy
bought bread he/they
"He/they bought bread"

1.3 Case marking

The pronominal system distinguishes three cases: a nominative, used primarily to replace subject NPs; an accusative, which replaces direct objects and sometimes indirect objects (example 7); and a possessor form which occurs cliticly to NPs or verbs, according as it expresses possessors or non-subject agents (see 2.1, Advancement Rules, for examples of the latter usage). We give the singular forms here for later reference.

	Nominative	Accusative	Possessor
1sg	aho	ahy	-ko
2sg	ianao	anao	-nao
3sg/pl	izy	azy	-ny

Pronominal objects of prepositions in Malagasy are most commonly taken from the possessor series, and most prepositions can be seen historically as derived from a primitive preposition plus noun, to which the object is attached as a possessor. E.g., anilako "beside me" = an "at" + ila "side" + -ko "my." So "beside me" is literally "at my side." Some prepositions, however, take accusative objects. A few of these, like lavitra "far from," appear to be primitive prepositions, and the others appear to be verb derived, e.g., momba "to follow, accompany" as a verb, and "about, concerning" as a preposition. Two prepositions, afa-tsy "except" and noho "against, in comparison with," take their objects in the nominative.

As regards full NPs rather than pronouns, subjects are unmarked. Direct objects are often unmarked, but sometimes occur with a marker an- (1).

- 6 Nahita an-dRabe Rakoto
saw acc-Rabe Takoto
"Rakoto saw Rabe"

Notional indirect objects are sometimes introduced by the generalized preposition amina (past tense: tamina) but are often also presented as accusatives:

7. a. Nanome vola an-dRabe aho
gave money acc-Rabe I
"I gave money to Rabe"
b. Nanome azy an-dRabe aho
gave it (acc) acc-Rabe I
"I gave it to Rabe"
c. Nanome vola azy aho
gave money him (acc) I
"I gave money to him"

(But note that due to a like-form constraint, 7d is not grammatical):

- d. *Nanome azy azy aho
gave it him I
"I gave it to him"

1.4 Particle placements

A variety of sentence types in Malagasy separate the subject NP from the rest of the sentence by a grammatical particle. This suggests that in surface Malagasy simplex Ss have a Predicate Phrase which contains the objects and oblique NPs but not the subject. We give three independent examples: Questions, Exclamations, and "no-longer" Negations.

1.4.1 Sentential question formation (one version): Insert the particle ve just before the subject NP.

- 8 Nanome vola an-dRabe ve ianao?
gave money acc-Rabe ? you
"Did you give money to Rabe?"

1.4.2 Exclamation formation: Insert the particle anie before the subject NP and optionally put é after the subject NP.

- 9 a. manasa lamba Raso
washes clothes Raso
"Raso is washing clothes"
b. manasa lamba anie Raso (é)
washes clothes ! Raso
"Boy, is Raso ever washing clothes!"

1.4.3 No-longer negation: Put the negative particle tsy in front of the predicate and the particle intsony before the subject NP.

- 10 Tsy manasa lamba intsony Raso
not wash clothes longer Raso
"Raso is no longer washing clothes"

1.5 Surface semantically based properties of subjects

1.5.1 Definiteness: Surface subjects of Malagasy simplex Ss are necessarily definite. Semantically this means there are always objects which the subject phrase refers to, and further this referentiality is not lost when the sentence is negated or questioned. Thus 11a-11c all imply that there exists at least one student.

- 11 a. lasa ny mpianatra
gone the student(s)
"The student(s) left"

(Note that plurality is not marked on lexical NPs. In fact it is marked only in the pronoun system and in the demonstrative adjectives and pronouns. In translating common nouns, then, we shall henceforth pick singular or plural translations as seem appropriate, without noting the alternate possible translations.)

- Lasa ve ny mpianatra
gone ? the students
"Have the students left?"

- 11 b. Tsy lasa ny mpianatra
not gone the student(s)
"The students haven't left"

Syntactically speaking, the definiteness requirement on lexical NP subjects requires that they either be proper names, definite pronouns, or common nouns with demonstrative adjectives or definite articles. The normal way of making indefinite reference is to use a common noun without any determiners. Such NPs may occur as objects, but never as subjects.

- 12 *lasa mpianatra
gone students
"Some students left"
13 Nahita mpianatra Rabe
saw students Rabe
"Rabe saw some students"

The only way to express the indefinite specific reading of sentences like 12 in Malagasy is to use an Existential construction, which is usually complex and arguably subjectless (see 2.2.3).

We will assume for purposes of exposition in this paper that the definiteness requirement on subjects is a surface structure constraint. The main justification is that there appear to be cases where we need indefinite subjects in underlying structure, but where these cannot surface in subject position. The principal case is in the formation of existential sentences (ESs) of the sort "There are women who wash clothes" (see 2.2.3 for examples). The existential NP in such Ss, namely "women" above, must be understood as the subject of the verb "wash." Thus we cannot say "There are clothes that women wash" where the existential NP would be an object of the verb "wash" (but we can, of course, say "There are clothes that are washed by women"). But existential NPs are indefinite par excellence. So it appears that we must allow indefinite NPs as subjects in early stages of derivations but not allow them to surface in subject position.

1.5.2 Relative scope: Subjects generally have wider scope than objects in the paradigm case of indefinite objects and universally quantified subjects. Thus 14 is possibly true in a situation in which the students saw different birds.

- 14 Nahita vorona ny mpianatra rehetra
saw bird(s) the students all
"All the students saw some birds"

1.5.3 Dummies: Subjects are in general absolutely referential in Malagasy, so there are no dummy NPs. Weather expressions, the paradigm case of dummies in many languages, normally take the lexical NP ny andro "the day" as subject, and either verbal or adjectival predicates:

- 15 mafana ny andro
hot the day
"It's hot"
- 16 man-drivotra ny andro
vb prefix-wind the day
"It is windy" (lit: the day winds)

Occasionally other NP subjects are used:

- 17 avy ny orana
comes the rain
"The rain is coming"

The other major case where dummies occur across languages is in replacing what would otherwise be sentential subjects. But in Malagasy sentential subjects naturally occur after the other major constituents of the sentence and so do not present the perceptual problem which presumably accounts for their extraposition in languages in which subjects are usually initial.

- 18 mazava fa efa lasa ny mpianatra
clear that already gone the students
"That the students have already left is clear"

As long as the fa- clause in sentences like 18 is considered the subject (but for one objection to this analysis see 2.5.2), most sentence types in Malagasy have "full" subjects--either lexical NPs or nominalized Ss. In any case, it is clear that Malagasy possesses no dummy subjects.

The properties discussed in 1.1-1.5 are ones which distinguish surface subject NPs from others in simple sentences. They can thus be easily used as criteria for subjecthood in complex sentences.

2. Transformational properties of subjects

2.1 Advancement transformations

Malagasy verbs exhibit four distinct voices: active, circumstantial, goal, and intermediary. We shall consider first the formation of sentences whose main verbs present each of these voices and justify calling the last two voices considered collectively a passive voice. Then, despite the prominence of the Malagasy passive (compared with, e.g., European passives), we argue that sentences whose main verbs are active are the most basic sentence types in the language. Sentences in non-active voices then are to be derived by promoting to subject various non-subject constituents of active sentences (or of structures more directly underlying active sentences than non-active ones).

2.1.1 The four voices: The active voice is formed by prefixing verb roots in any of several ways. Most commonly a prefix mi- or man- is used. If a given root accepts both prefixes, then mi- forms intransitive verbs and man- forms transitive verbs. For example, from sasa "wash" we have misasa "to wash (oneself)" and manasa "to wash (someone/something)" (2). The initial m- of the prefixes indicates present tense (and is the form used normally in infinitival nominalizations; see 2.1.3). Replacing the m- by n- yields a past tense meaning; replacement by h- yields a future tense meaning.

- | | | |
|----|---------------------------------------|---------------|
| 19 | { Manasa
• Nanasa
Hanasa } | lamba Rasoa |
| | { is washing
washed
will wash } | clothes Rasoa |

Normally in active sentences, the semantic agent (if there is one) is the surface ^{subject} ~~subject~~, as illustrated in 19.

The circumstantial voice is formed from the active form by deleting the initial m- (for present tense forms) and adding a suffix (a)na, shifting the stress (phonemic in Malagasy) one syllable to the right. (The morphophonemics of this suffixation is again complex and will be ignored here.) The NP which has the surface properties of subjects, as presented in Sections 1-1.5, is an NP which would have an oblique case function in an active sentence. E.g.:

- 20 a. manasa lamba amin'ity savony ity Rasoa
+act
wash clothes with this soap this Rasoa
"Rasoa is washing clothes with this soap"

- b. anasan-dRaso lamba ity savony ity
+circ
wash-by-Raso clothes this soap this
"This soap is being washed clothes with by Raso"
- 21 a. mividy mofo ho'an ny ankizy aho
+act
buy bread for the child I
"I am buying bread for the child"
- b. ividiana-ko mofo ny ankizy
+circ
bought for by-me bread the child
"The child is bought bread for by me"
- 22 a. mitoetra amin'ity trano ity izahay
+act
live in this house this we (excl)
"We live in this house"
- b. itoerana + nay (= itoeranay) ity trano ity
+circ
live by us this house this
"This house is lived in by us"

In general, subjects of circumstantial sentences can express the instrument, benefactee, location, time, purpose, manner, ...of the action. (For discussion of 13 semantically distinct types of circumstantials which this voice subjectivizes, together with some discussion of certain restrictions on this process, see Rajemisa-Raolison (1966:111-118).)

We note further that the NP we are calling the subject of the circumstantial sentence does in fact possess the properties of subjects given in 1-1.5. Specifically: 1) It occurs in sentence final position. 2) It is constructed without a preposition and is replaced by nominative pronominal forms. (Thus 23 is the pronominal form of 21b above.)

- 23 ividiana-ko mofo izy
+circ
bought for by-me bread he (nom)
"He was brought bread for by me"

3) Particles are placed between it and the rest of the sentence:

- 24 a. anasan-dRaso lamba ve ity savony ity
+circ
wash-by-Raso clothes ? this soap this
"Is this soap being washing clothes with by Raso?"

- b. anasan-dRaso lamba anie ity savony ity
+circ
wash-by-Raso clothes ! this soap this
"Is this soap ever being washed clothes with by Raso!"

4) It is always definite. And 5), it has wider scope than objects. Thus 20b can easily be true if each child is having different ~~clothes washed~~ for him. *pieces of bread bought*

The goal voice is formed by directly suffixing the root form of the verb with -ana/-ina. (For a few verbs an infix form putting -in- after the initial consonant of the verb root is possible as well. E.g., from vaki "broken" we have either yakina "broken (by)" or vinaki "broken (by).") Semantically speaking, the subject NP of goal voice sentences (that is, that NP which presents in surface the properties 1-1.5) is best considered to be a kind of "endpoint" of the action. Thus it will be an (underlying) indirect object if the main verb normally takes one (but see the next section on the intermediary voice), but a patient NP if the verb does not normally take an indirect object. As an example of the latter case, consider:

- 24 a. manasa ny lamba Raso
+act
wash the clothes Raso
- b. sasan-dRaso ny lamba
+goal
washed-by-Raso the clothes
"The clothes are washed by Raso"

Finally, what I shall call the intermediary voice is formed by prefixing a- to the verb root. Subject NPs of intermediary voice sentences generally express intermediaries of actions. Thus they include patient NPs in sentences which have indirect objects, and often include certain types of "weak" instrumentals as well. Example 25 below illustrates how the goal and intermediary voice differ in a simple case. (The affixes indicating voice are underlined.)

- 25 a. manolotra ny vary ny vahiny aho
+act
offer the rice the guests I
"I offer the rice to the guests"
- b. atolo-ko ny vahiny ny vary
+intermediary
offered-by-me the guests the rice
"The rice is offered by me to the guests"

- c. tolorana + ko (= tolorako) ny vary ny vahiny
 +goal
 offered-by-me the rice the guests
 "The guests are offered the rice by me"

Thus in the act of offering, the person receiving the thing offered is the endpoint of the action, and is present as a subject in the goal voice form of the verb. The thing offered is considered an intermediary of the action and is thus present as a subject of an intermediary voice verb.

2.1.2 The concept of passive in Malagasy: We shall refer to the goal and intermediary voices collectively as Passive. This is largely a matter of shorthand, as the English translations of these voices are usually passives, and for most of our purposes we do not care which particular voice was used to subjectivize a given "object." However, the justification for this term does run deeper.

First, several very common verbs which take notional direct and indirect objects and would thus be expected to have both goal and intermediary voices have in fact only one or the other, and that form is used to present as surface subject either the direct or indirect object. Thus manome "to give" in practice has only the suffix "passive" (= goal voice), as illustrated in 26.

- 26 a. manome ny vola an-dRakoto aho
 +act
 give the money acc-Rakoto I
 "I am giving the money to Rakoto"

(Note that both the direct and indirect objects here are surface accusatives, either being replacable by the accusative form of the pronoun azy, and either being passivized by the suffix passive.)

- b. omena + ko (= omeko) ny vola Rakoto
 +goal
 given-by-me the money Rakoto
 "Rakoto was given the money by me"
- c. omena + ko (= omeko) an-dRakoto ny vola
 +goal
 given-by-me acc-Rakoto the money
 "The money was given by me to Rakoto"

Second, it appears that at least for some speakers, the use of the intermediary voice is being usurped by the circumstantial. Thus, while Rajemisa-Raolison (1966) cites the form in 28a as "passive" of 27, many informants simply use in its stead the circumstantial form, 28b.

- 27 manosotra menaka (amin') ny kanakana aho
 +act
 rub grease on the duck I
 "I am rubbing grease on the duck"
- 28 a. ahosotra + ko (= ahosotro) amin' ny kanakana ny
 +intermediary
 rubbed-by-me on the duck the
 menaka
 grease
 "The grease is rubbed on the duck by me"
- b. anosorana + ko (= anosorako) ny menaka ny kanakana
 +circumstantial
 rubbed-on-by-me the grease the duck
 "The duck had grease rubbed on it by me"

There may, then, be a growing tendency for verbs to take only one of the "passive" forms, using it to subjectivize either goal or intermediary NPs. We shall henceforth refer to these NPs simply as "objects" and any voice which subjectivizes them as a "passive" voice.

2.1.3 The active voice is grammatically the most basic: It is not obvious that passive and circumstantial sentences in Malagasy should be considered derived from active ones, or from structures more closely resembling the active forms than any others. In later sections we will present several cases where non-active forms of sentences are grammatically required. In addition, as with many Malayo-Polynesian languages, we find many grammatically neutral situations in which speakers show a marked preference for passive over active forms (a point discussed at length in E.O. Keenan, 1974). One such case is in imperatives. All four voices have distinct imperative forms.

Active imperatives are formed by shifting the stress in the active declarative form one syllable to the right. Thus, corresponding to the active 29a we have the imperative 29b (where ˘ marks stress).

- 29 a. manása lamba ianao
 wash clothes you
- b. manasá lamba
 wash clothes!

Such imperatives, however, are sociologically marked and tend to be used when the orderer is confronting the person ordered. By far the more normal way to order someone to wash clothes is to use the passive form 30b, which corresponds to the declarative 30a.

- 30 a. sasana + nao ny lamba
washed-by-you the clothes
"The clothes are being washed by you"
- b. sasao ny lamba
wash the clothes

Note that the subject of the imperative is ny lamba "the clothes." The addressee phrase is presented as a passive agent if present. We note as well that passive imperatives are the normally elicited translations of English transitive imperatives. On the other hand, if one wants to emphasize some circumstance of the act of washing, it is most natural to use the imperative form 31b of the circumstantial sentence 31a.

- 31 a. anasana + nao (= anasanao), lamba ity savony ity
+circ
wash-by-you clothes this soap this
"This soap is washed clothes with by you"
- b. anasao lamba ity savony ity
wash clothes this soap this
"Use this soap to wash clothes"

Despite the prevalence of non-active voices in Malagasy discourse, we still argue that, grammatically speaking, the active voice is the most basic of the voices, and that non-active sentences then should be derived from more active like underlying structures by any of a family of Advancement Transformations which create subjects from non-subjects and demote the original subject. The following criteria support the grammatical primacy of the active voice:

1) Morphological considerations. The active form of the verb is morphologically more primitive than the circumstantial form, as the latter is derived from the former; it uses the active prefix, omitting the initial m- in the present, and adds a suffix to the active form. As there are several active prefixes, those verbs which admit of more than one also have more than one circumstantial form. Thus from the root sasa "wash" we can form two actives: manasa "to wash (something)," and miasa "to wash (oneself)," and both active forms determine circumstantial forms: anasana and isasana. (Both these circumstantial forms have their own imperative forms as well.)

On the other hand, by and large the two passive forms are morphologically as primitive as the active, as all are formed by directly affixing the verb root (which may or may not occur independently as a word in the language. If it does, it is usually a stative adjective, a noun, or sometimes

an active intransitive verb).

However, there are a few cases where the passive form does retain the active prefix less the initial m-. Thus from the root halatra "stolen goods" we form the active mangalatra "to steal" and the passive angalarina. (The circumstantial is angalarana.) Further cases are cited in Rajemisa-Raolison (1966:102). Yet there are no cases where actives are formed from passives, so even here actives seem very slightly more basic than passives.

2) Distribution. Active based forms are more widespread than passive forms, since only verbs subcategorized for "goals" or "intermediaries" have passives, and while this class is much much larger than the class of natural passives in, for example, English, it is still smaller than the active based class. There are practically no verbs that have only a passive form, although there are a very few where the morphological active, in practice, only shows up in derived nominalizations. In main clauses the active and passive forms are identical in these cases.

3) Nominalizations. The major nominalizations of the language are limited to active and circumstantial (= active based).

a) Agent nominals. Restricted to actives. To form, replace the initial m- of the active form by mp-. For example, mividy "to buy" → mpividy "buyers"; mangalatra "to steal" → mpangalatra "thief."

b) "Infinitival" nominals. Restricted to actives and circumstantials. To form, simply add the definite article ny to the active based form. Thus from, for example, mitondra "carry, drive, wear" we have ny mitondra "the driving, carrying, wearing" as in:

- 32 Sarotra ny mitondra taxi
difficult the driving taxi
"It is difficult to drive a taxi"/"driving taxis is difficult"

When applied to circumstantial forms, this nominalization yields factive nominals, as in:

- 33 mahagaga ahy ny anasan-dRaso a lamba
+circ
surprises me the washing-by-Raso a clothes
"The fact that Raso a is washing clothes surprises me"

Note that both active and circumstantial forms of this nominalization are still inflected for tense. E.g.,

No
passives
also occur
ELK

- 34 Nahagaga ahy ny nanasan-dRaso lamba
surprised me the washed-by Raso clothes
"The fact that Raso washed clothes surprised me"

c) f-nominalizations. Restricted to active and circumstantial forms. To form, replace the initial m- of active present tense form by f-, or simply add f- to present tense circumstantial forms. The meanings of these nominals is quite diverse. They often refer to some object normally associated with the action (usually the instrument if the underlying verb is active, often the location as well if the underlying verb is circumstantial), never the agent. They also often refer to the manner of the action, or some abstract quality associated with the action, especially if the verb is circumstantial. Thus from mamaky "to cut (active)" we have famaky "hatchet"; from manjaitra "to sew (active)" we have fanjaitra "needle." From itiavana "to love (circ)" we have fitiavana "love," and from ifidianana "to elect (circ)" we have fifidianana "elections." Note the manner usages of the nominalized circumstantial verb in 35 as contrasted with the factive use in 33.

- 35 mahagaga ahy ny fanasan-dRaso lamba
+circ
surprises me the wash-by-Raso clothes
"The way Raso is washing clothes surprises me"

We should note that all three nominalizations referred to above apply to verb phrases, but never include the surface subject. They do, of course, include various objects, as in 34 and 35, and may include adverbial elements as well. E.g.,

- 36 mahamenatra ny tsy fitiavan-dRakoto an-dRaso
shameful the not love-by-Rakoto acc-Raso
"Rakoto's not loving Raso is shameful"
- 37 sosotra ny mpividy omby t-anya Betafo
angry the buyers cows past-there Betafo
"The buyers of cows in Betafo were angry"

Nominalizations, then, provide further evidence for the existence of a VP in Malagasy. Further, subjects are distinguished as being the only major NP that cannot survive under these nominalizations. And, of course, passives are distinguished as not undergoing any of these nominalizations (3).

4) Causatives. Causatives are formed by prefixing the active verb with mampa- or mampi-. Only active verbs undergo this prefixation.

- 38 a. mampa + manasa (= mampanasa) lamba an-dRaso aho
+act
cause + wash clothes acc-Raso I
"I make Raso wash clothes"
- b. *mampa + sasana (= ?mampasasana) ny lamba aho
+pass
cause + wash the clothes I
"I made the clothes washed"

5) Reflexivization. Control of reflexivization is largely limited to active subjects. Passive subjects never control reflexives.

- 39 a. namono tena Rabe
+act
killed body Rabe
"Rabe killed himself"
- b. *novonoin' (ny) tena- (ny) Rabe
+pass
killed-by- (the)-body- (his) Rabe
"Rabe was killed by himself"

Note as well that despite the VOS active word order, direct objects of active sentences cannot control the reflexivization of an active subject:

- 40 *namono an-dRabe ny tena-ny
+act
killed acc-Rabe the body-his
"He-self was killed by Rabe"

We should note that the use of tena "body, trunk (of person or tree)" as a reflexive pronoun is probably an innovation, and its privileges of occurrence are largely restricted to direct objects, and even there many uses of English reflexives do not translate directly into Malagasy. A preferred alternative, where it exists, is to use an appropriate intransitive form of the verb. Thus where we might expect manasa tena "wash self" we only get the intransitive form misasa "wash (oneself)."

2.1.4 Formulating the advancement transformations: On the basis of 1)-5) above, we take the active form of a sentence as closer to the basic form from which the non-active forms are to be transformationally derived. It might seem natural to posit then three advancement transformations: Goal, Intermediary, and Circumstantial. However, we prefer a more general formulation in which there is but a single advancement to subject transformation. It can subjectivize different constituent NPs, and the derived verb morphology is a

usage well affected in previous (E)

function of which NP has been subjectivized. A rough structural characterization of this transformation is given in 41.

41 Advancement-to-Subject (A-to-S)

$$\begin{matrix} V + X + (\text{Prep}) + NP_1 + Y + NP_2 & \Rightarrow \\ +\text{act} & \quad \quad +\alpha^1 & \quad \quad +\text{n\acute{o}m} \\ V + (NP_2) + X + Y + NP_1 \\ +\alpha & +\text{p\acute{o}ss} & \quad \quad +\text{n\acute{o}m} \end{matrix}$$

Conditions:

1. V, NP₁, and NP₂ are clausemates
2. α = intermediary, endpoint, locative, instrumental,...

Basically, 41 says that a non-subject NP gets moved to clause final position, losing its preposition if it had one and taking on the nominative case. The old subject, NP₂, is either eliminated or else attached to the end of the verb as a possessor NP. A morphological rule will later yield the correct shape of the derived verb. Note as well that 41 assumes the surface structure constraint requiring subjects to be definite. As formulated, then, 41 will generate Ss with indefinite subjects. An analogous, though less well motivated, approach could have been taken with regard to case assignment. As the later discussion of NP-Questions and Clefts shows, there is some motivation for allowing intermediate stages of derivations in which subjects carry prepositions. But such subjects cannot surface as such; rather, they must be moved out (e.g., by clefting or questioning). In a more detailed treatment, then, case reassignment would be an operation that would operate after A-to-S. But justification of this point goes beyond the concerns of this paper.

Our purpose in expressing A-to-S in structural terms is merely to express the generalization that all non-active forms behave the same with respect to the positioning and case marking of the major NPs. All that differentiates the non-active voices is the shape of the verb, and that can be given as a function of which NP has been advanced to subject. We are explicitly ignoring many problems in the formulation of this transformation: e.g., how to identify whether an NP is endpoint, locative, etc., whether the NPs in the input to A-to-S should be unordered, whether a relational formulation (Perlmutter and Postal, 1974) is more general (4), and the exact relation of A-to-S and whatever transformations are needed to derive simple active sentences.

2.2 Major movement transformations

Malagasy has a large number of complex constructions which may informally be thought of as being generated by moving an NP from a simpler construction. Movement is always leftward across the verb end, with a few partial exceptions discussed below, NPs which can move are restricted to subjects.

2.2.1 Relative clauses (RCs): RCs can be formed by moving an NP to the left of the verb and optionally inserting a morphologically invariable particle *izay*. Only subjects can be relativized. Thus from 42 we can form 43 but not 44.

42 manasa ny lamba ny zazavavy
+act
wash the clothes the girl
"The girl is washing the clothes"

43 ny zazavavy (izay) manasa ny lamba
the girl (that) wash the clothes

44 *ny lamba (izay) manasa ny zazavavy
the clothes (that) wash the girl

(44 could only mean here that the clothes are washing the girl.) To talk about the clothes that the girl is washing, we must first present "clothes" as a subject, which we can do by passivizing, and then relativize it. Thus from 45a we easily form 45b.

45 a. sasan'ny zazavavy ny lamba
+pass'
wash the girl the clothes
"The clothes are washed by the girl"

b. ny lamba (izay) sasan'ny zazavavy
the clothes (that) wash the girl
"the clothes that are washed by the girl"

And, in general, to relativize any NP it must first be promoted to subject using the elaborate voicing system and then relativized. Perceptually speaking, this means that it is the verb form that codes the underlying role of the head NP in the relative clause. That is, if the verb of the RC is, for example, in the goal voice, then the head of the RC is an underlying goal of the subordinate verb--for the goal voice had to be used to make it a subject. Note then that RCs whose subordinate verbs are in the circumstantial voice are potentially ambiguous, since the head NP could be an underlying instrumental, locative, benefactee, etc. In fact, this potential is not often realized, since NPs which reference,

for example, locations are not also likely to reference instruments or benefactees. Still some such ambiguities can be constructed, as in 46, which has either the locative or instrumental reading.

- 46 ny vato izay anasan-dRasoala lamba
+circ
the stone { where } wash-by-Rasoala clothes
with which
"the stone where/with which clothes are washed by Rasoala"

For more details on RCF in Malagasy, see Keenan (1972a).

2.2.2 Whatever-clauses (WCs): These can be formed by moving the NP to the left of the verb, inserting izay to the left of it, and then optionally deleting the moved NP. These clauses are the only means of expressing embedded (indirect) Wh-questions in Malagasy. They also cover the meaning of Wh-ever clauses like "Whatever you do, do it well," or "whoever comes, tell them to wait." These clauses occur in normal NP positions in Malagasy.

- 47 a. izay manasa lamba
+act
whoever washes clothes
b. izay zazavavy manasa lamba
whatever girl washes clothes
48 tsy fanta-dRakoto izay nanasa lamba omaly
not known-by-Rakoto who washed clothes yesterday
"Rakoto doesn't know who washed clothes yesterday"

The restrictions on which NPs can be moved to form WCs are exactly the same as on RCs: namely, only subjects.

- 49 a. *izay lamba manasa Rasoala
whatever clothes wash Rasoala
"whatever clothes Rasoala is washing"
b. izay lamba sasan-dRasoala
whatever clothes are washed by Rasoala

Note that WCs differ from RCs in that izay occurs to the left of the moved NP, not to the right as in the case of RCs. Further, the presence of izay is obligatory in WCs but only optional in RCs.

2.2.3 Existential sentences (ESs): To form, move the subject NP (and only the subject NP) to the left of the verb, insert misy "exist" to its left, and optionally delete the moved NP if it is animate. For example, from 50 we can form either 51a or 51b.

- 50 mitomany ny zaza
cries the child
51 a. misy zaza mitomany
exist child cry
"Some child is crying"
b. misy mitomany
exist cry
"Someone is crying"

We note that misy is a full verb, taking normal voice and tense inflections. This suggests that sentences like 51a are merely ones whose subject is an RC in which the optional izay is deleted. Indeed, 52 is well formed.

- 52 misy zaza izay mitomany
exist child who cry
"There exist children who cry"

But 52 differs in meaning from 51a in that it refers most naturally to a general state of affairs, not a specific instance of crying. Thus 53a is quite unnatural, while 53b and 53c are fine.

- 53 a. ??omaly hariva dia nisy zaza izay
yesterday evening topic existed child who
nitomany tao an-trano-ko
cried there at-house-my
"Yesterday evening there existed children who cried at my house"
b. omaly hariva dia nisy zaza nitomany tao
yesterday evening topic existed child cried there
an-trano-ko
at-house-my
"Yesterday evening there was a child crying at my house"
c. omaly hariva dia nisy nitomany tao
yesterday evening topic existed cried there
an-trano-ko
at-house-my
"Yesterday evening someone cried at my house"

We note that since subjects are obligatorily definite, the only way to express a sentence with all indefinite NPs is with the existential construction.

2.2.4 Cleft Sentences (CSs): To form a CS, move the NP to the left of the verb and insert the invariable particle no between the moved NP and the verb. So from 54a we can form 54b.

- 54 a. manasa ny lamba amin'ity savony ity Rasoa
+act
wash the clothes with this soap this Rasoa
"Rasoa is washing the clothes with this soap"
- b. Rasoa no manasa ny lamba amin'ity savony ity
Rasoa cleft wash the clothes with this soap this
"It's Rasoa who is washing clothes with this soap"

As with the other movement rules, direct objects cannot be directly moved. So to say "It was the clothes that Rasoa washed" we must passivize the underlying verb.

- 55 a. *ny lamba no manasa amin'ity savony ity
the clothes cleft wash with this soap this
Rasoa
Rasoa
- b. ny lamba no sasan-dRasoa amin'ity savony
the clothes cleft washed-by-Rasoa with this soap
ity
this
"It was the clothes that Rasoa washed with this soap"

As regards oblique case NPs, however, Cleft is more complex than the other movement transformations so far considered (5). As predicted, many types of obliques, e.g., benefactives, cannot cleft unless they are subjectivized by the circumstantial voice.

- 56 a. mividy mofo ho an'ny ankizy aho
+act
buy bread for the child I
"I am buying bread for the child"
- b. *ho an'ny ankizy no mividy mofo aho
+act
for the child cleft buy bread I
"It's for the child that I am buying bread"
- c. ny ankizy no ividiana-ko mofo
+circ
the child cleft bought me bread
"It is the child that is being bought bread for by me"

However, some oblique NPs can directly cleft, even though they are not subjects. This is so in general for instrumentals, locatives, and temporals. Thus from 54a above, we can form 57.

- 57 amin'ity savony ity no manasa lamba Rasoa
+act
with this soap this cleft wash clothes Rasoa
"It is with this soap that Rasoa is washing clothes"

Note that the verb remains active, and the preposition obligatorily remains on the circumstantial NP. However, 57 admits of an interesting and commonly occurring variant, 58.

- 58 amin'ity savony ity Rasoa no manasa lamba
+act
with this soap this Rasoa cleft wash clothes

Example 58 has the same meaning as 57, and differs in form only in that the real subject has been moved along with the oblique NP, for protection so to speak. We shall refer to this phenomenon as the Bodyguard Condition. Whenever a non-subject is moved, it may always be optionally accompanied by the real subject. Some informants, however, but not all, prefer to restrict the Bodyguard Condition to active subjects.

- 59 a. amin'ity savony ity no sasan-dRasoa ny lamba
+pass
with this soap this cleft wash-by-Rasoa the clothes
"It was with this soap that the clothes were washed by Rasoa"
- b. (?)amin'ity savony ity ny lamba no
with this soap this the clothes cleft
sasan-dRasoa
wash-by-Rasoa

"It was with this soap that the clothes were washed by Rasoa"

2.2.5 NP-questions (NP-Q): The NP to be questioned is replaced by an appropriate interrogative word and then generally moved to the front of the sentence followed by the particle no. The conditions on movement are exactly the same as for Clefts, including the Bodyguard Condition, and so will not be discussed in detail. The only variant is that if the NP to be questioned is an oblique case NP, then the movement is optional. Thus from 54a we can form all of the following synonymous questions:

- 60 a. manasa lamba amin'inona Rasoa?
+act
wash clothes with what Rasoa?
- b. amin'inona no manasa lamba Rasoa?
with what cleft wash clothes Rasoa?
- c. amin'inona Rasoa no manasa lamba ?
with what Rasoa cleft wash clothes
- d. inona no anasan-dRasoa lamba?
+circ
what cleft wash-by-Rasoa clothes
"With what were clothes washed by Rasoa?"

2.2.6 Subordinate fronting: In certain types of subordinate clauses, particularly of an adverbial sort, the subject, preferably an active subject, may move to the left of its verb with no intervening particle. The result is a stylistic variant of the first, so this transformation is the only movement process we have considered which is, at least nearly, paraphrastic.

- 61 a. tsy miasa androany Rabe satria marary ny vadi-ny
not work today Rabe because sick the wife-his
"Rabe isn't working today because his wife is sick"
- b. tsy miasa androany Rabe satria ny vadi-ny marary
not work today Rabe because the wife-his sick
"Rabe isn't working today because his wife is sick"

It is also possible for certain locative and temporal NPs to front in this way even though they are not subjects. In these cases the movement accepts the Bodyguard Condition.

The full range of contexts in which Sub-Fronting applies has not been determined. In texts the use of this transformation is not very apparent. It appears more natural in adverbial clauses than in complements, and will not survive at all under any of the nominalizations discussed in 2.1.3. It is not clear, however, whether the domain of Sub-Fronting should include the contrastive fronting illustrated in 62b considered as an answer to 62a. Here it appears that a main clause subject has been fronted. However, on hearing the fronted subject, a hearer expects some sort of contrastive clause to follow, so perhaps these types of clause pairs, constructed without overt conjunction in distinction to the normal Malagasy manner of joining clauses of any sort, are best considered a particular type of subordinate construction.

- 62 a. Inona no ataon'ny ankizy?
What cleft done-by-the children
"What are the children doing?"

- b. ny zazalahy miasa, ny zazavavy matory
the boys work the girls sleep
"The boys are working, the girls are sleeping"

Finally, to conclude this section, we observe that structures generated by movement transformations, as we have been using that term, are islands with respect to other movement transformations. This almost follows from the fact that by and large, only subjects move and the plausible assumption that a given constituent can't move twice. Nonetheless, even in cases where a non-subject is moved, we cannot afterwards apply a movement transformation to the real subject (with the exception of the Bodyguard Condition, if that is formulated as a separate transformation). Thus from 63a we cannot form 63b.

- 63 a. amin'ity savony ity no manasa lamba ny
+act
with this soap this cleft wash clothes the
vehivavy
woman
"It is with this soap that the woman is washing clothes"
- b. *ny vehivavy izay amin'ity savony ity no
the woman that with this soap this cleft
mansas lamba
wash clothes
"The woman who it is with this soap that washes clothes"

2.3 Topicalization transformations

In addition to the topicalization inherent in the voicing system, Malagasy possesses two ways of more overtly topicalizing a constituent.

2.3.1 Strong topicalization (S-Top): S-Top copies an NP to the front of the sentence, obligatorily preceding it with *raha* "when, if" and following it with the invariable particle *dia*. In addition, the occurrence of *raha* may optionally be followed by either *ny momba* "the (things) concerning" or *ny amina* "the with." Further, the occurrence of *dia* may optionally (and in some cases obligatorily) be preceded by adverbs of emphasis. The original position topicalized obligatorily retains a pronoun if that position was not the subject. If it was the subject, then sometimes no pronoun is retained (there appears to be significant "stylistic" variation across speakers concerning the preference for retaining

subject pronouns here). It is only in this optional deletion that S-Top distinguishes subjects from non-subjects.

- 64 a. raha ny momban-dRaso a aloha dia mbola manasa
if the around Raso a ahead top still washes
lamba izy/? \emptyset
clothes she/ \emptyset

"If it's a question of Raso a, well she's still washing clothes"

- b. raha io lamba io (aloha) dia mbola manasa
if that clothes that ahead top still wash
azy /* \emptyset Raso a
it \emptyset Raso a

"As for those clothes, well Raso a is still washing them"

2.3.2 Weak topicalization (W-Top): W-Top merely copies an NP to the front of the S, obligatorily inserting *dia* between it and the main verb. As with S-Top if the NP copied was not a subject a pronominal copy is left behind. If the copied NP is subject normally no pronoun is left, although informants will generally accept sentences with the pronoun present.

- 65 Raso a dia manasa lamba (\emptyset / ?izy)
Raso a top wash clothes \emptyset / she
"Raso a, she's washing clothes"

It is not impossible that W-Top should be considered some sort of reduced form of S-Top. However, there are some differences, both syntactically and semantically. As regards the former, we have already noted the preference for deleting subject pronouns under W-Top and the reluctance to do so under S-Top. On the other hand, the positions that can be topicalized by either transformation are the same, and the privileges of occurrence of the resulting sentences are also identical.

Semantically, however, the differences are greater. S-Top seems really to define a topic of importance for the current conversation. We expect a sentence which follows a strong topic to really be about that topic. Weak topics, on the other hand, are rather items which have some momentary importance in the conversation, but are not perhaps true topics of conversation. Thus W-Top is very frequently used to highlight certain place and time adverbials. For example,

- 66 a. Ho any Antsirabe rahampitso izahay
fut there Antsirabe tomorrow we (excl)
"We will go to Antsirabe tomorrow"
b. rahampitso izahay dia ho any Antsirabe
tomorrow we top fut there Antsirabe
"Tomorrow, we'll go to Antsirabe"

Note that W-Top, as well as S-Top, accepts the Bodyguard Condition.

Using Top as a cover term for either form of topicalization, note that despite some formal similarities between them and Cleft, the differences are considerable. Thus it is not possible to embed topicalized sentences under certain sentence operators (which are constructed without a complementizer) whereas Clefts accept such embedding freely.

- 67 a. tsy Raso a no manasa lamba
not Raso a cleft wash clothes
"It's not Raso a who is washing clothes"
(it's someone else)
b. *tsy Raso a dia manasa lamba
not Raso a top wash clothes
68 a. toa Raso a no manasa lamba
seem Raso a cleft wash clothes
"It seems that it is Raso a who is washing clothes"
b. *toa Raso a dia manasa lamba
seem Raso a top wash clothes

On the other hand, Top being primarily a copying rule, it is not subject to the islandhood of structures generated by movement transformations.

- 69 ity radary ity dia ny Rosiana no nanao azy
this radar this top the Russians cleft did it
"As for this radar, it was the Russians who built it"

In general, then, Top is more rootish than Cleft. However, it can be embedded in adverbial clauses of various sorts as well as in sentence complements, in contrast to "as for" type topicalizations in English.

- 70 a. manantena Rabe fa Raso a dia efa nanasa lamba
hopes Rabe that Raso a top already washed clothes
b. faly be Rabe satria Raso a dia efa nanasa
happy great Rabe because Raso a top already washed
lamba
clothes

2.4 Coreferential deletions

We consider here three types of coreferential deletion: NP Drop, Conjunction Reduction, and several types of Equi-NP deletion. The last two processes are sensitive to the subject-hood of the NPs involved. NP Drop is discussed because it provides information that may influence our understanding of these processes.

2.4.1 NP Drop: It is common in Malagasy discourse to omit NPs whose referents have been established earlier in the discourse. Subject NPs are particularly prone to be omitted, but the process is not limited to subjects.

- 71 tonga nitady an-dRaso'a Rabe fa tsy nahita
came looked-for acc-Raso'a Rabe but not saw
"Rabe came looking for Raso'a but (he) didn't see (her)"

We note that fa above is a very general sentential connective in Malagasy. It is often used with contrastive effect, like but in English, but also serves to introduce sentential complements of verbs of thinking, saying, etc., and as well serves as a largely contentless discourse connective. Speakers may often finish a clause with fa, drawing out the intonation, thereby indicating that something more is coming but without making explicit its semantic relation to the preceding clause. The possibility of dropping NPs as in 71 is largely limited by pragmatic factors--the plausibility that the addressees can reconstruct the referent. A more complete analysis of NP Drop is not available at the moment. However, on further analysis, it is possible that certain coreferential deletions, noted below, could be analyzed as due to NP Drop.

2.4.2 Conjunction Reduction (CR): In one type of CR, hereafter CR-1, the subject NP of the first conjunct of a sentence of the form "S₁ and S₂" deletes, and the resulting conjunction is expressed with the phrasal conjunction sy, which is never used to conjoin full Ss, rather than the sentential conjunction ary.

- 72 a. misotro taoka Rabe ary mihinam-bary Rabe
drinks booze Rabe and eats rice Rabe
b. [misotro taoka sy mihinam-bary] vp Rabe
drinks booze and eats rice Rabe
"Rabe is drinking booze and eating rice"

Note that CR-1 cannot function to delete objects.

- 73 a. Nividy ny omby Rabe ary namono ny omby Rakoto
bought the cow Rabe and killed the cow Rakoto

- b. *nividy Rabe sy/ary namono ny omby Rakoto
bought Rabe and killed the cow Rakoto
"Rabe bought and Rakoto killed the cow"

CR-1, however, is fed by the Advancement-to-Subject (A-to-S) rule, and the semantic effect of 73b can be expressed by 74b.

- 74 a. novidin-dRabe ny omby ary novonoin-dRakoto ny
+pass +pass
bought by-Rabe the cow and killed by-Rakoto the
omby
cow
b. [novidin-dRabe sy novonoin-dRakoto] vp ny omby
bought by-Rabe and killed by-Rakoto the cow
"The cow was bought by Rabe and killed by Rakoto"

Furthermore, CR-1 feeds the other cyclic rules which are sensitive to subjects. That is, the subject NP remaining in S₂ after the deletion of the subject of S₁ comes to function as the subject of the derived S. Thus it can relativize, cleft, question, etc., and it is this that justifies introducing a derived VP node in 72 and 74 and entails the right node raising of the original subject of S₂. For justification of this note that 75 is the well formed result of applying Cleft to 72b, and 76 the well formed result of relativizing the derived subject in 74b.

- 75 Rabe no misotro taoka sy mihinam-bary
Rabe cleft drinks booze and eats rice
"It's Rabe who is drinking booze and eating rice"
76 ny omby i^zay novidin-dRabe sy novonoin-dRakoto
the cow that bought by-Rabe and killed by-Rakoto
"the cow that was bought by Rabe and killed by Rakoto"

(We note in passing that CR-1 does not feed the A-to-S rule. Thus no NP in the derived VP of 72b or 74b can be advanced to subject. But this problem is probably universal, and will not be discussed further here.)

Malagasy may have a second type of CR, CR-2, in which the subject of the second sentential conjunct deletes and the sentential conjunction does not become phrasal. Thus from 72a, repeated as 77a below, we can form 77b.

- 77 a. misotro taoka Rabe ary mihinam-bary Rabe
drinks booze Rabe and eats rice Rabe
b. misotro taoka Rabe ary mihinam-bary
drinks booze Rabe and eats rice
"Rabe is drinking booze and (he) is eating rice"

Rather than posit a second type of CR, however, it is possible that Ss like 77b are the result of NP Drop (assuming the conditions on that discourse operation could ever be formally stated). This would justify the intuition of some speakers at least that 77b represents a kind of after-thought deletion. Note further that CR-2, if it exists, does not feed any other of the major transformations we have discussed. In particular, it is not possible to cleft, question, or relativize it.

78 *Rabe no misotro taoka ary mihinam-bary
Rabe cleft drinks booze and eats rice
"It is Rabe who is drinking booze and eating rice"

(Note that the only difference between 78 and the well formed 75 is that in the former we use a sentential conjunction ary whereas in the latter we have the phrasal conjunction sy.)

2.4.3 Equi NP Deletion: The variety of surface paradigms plausibly involving some type of Equi are enormously varied in Malagasy. A full analysis would be of dissertation proportions, so we shall here mention only a few of the types which are clearly sensitive to subjecthood in one way or another.

2.4.3.1 Equi-1. In Equi-1 the subject NP of verbs of thinking and saying controls the deletion of a coreferential NP in the complement S, as illustrated in 79.

79 a. mihevitra Rabe_i fa handeha ho any Antsirabe
+act
thinks Rabe_i that will-go fut there Antsirabe
rahampitso Rabe_i
tomorrow Rabe_i ==>

b. mihevitra Rabe_i fa handeha ho any Antsirabe
thinks Rabe_i that will-go fut there Antsirabe
rehampitso \emptyset_i
tomorrow

"Rabe thinks that (he) will go to Antsirabe tomorrow"

Note first that the surface order of Ss with sentential objects is VSO. VOS order is generally unacceptable here.

80 a. *mihevitra fa mitady ny zaza Rasoa Rabe
thinks that looks-for the child Rasoa Rabe
"Rabe thinks that Rasoa is looking for the child"

b. mihevitra Rabe fa mitady ny zaza Rasoa
thinks Rabe that looks-for the child Rasoa
"Rabe thinks that Rasoa is looking for the child"

We would posit nonetheless an underlying VOS order for three reasons: 1) Informants understand such VOS sentences easily, but simply say that it is too heavy to have a sentential object preceding the subject. 2) If VOS is taken as the underlying order, then the A-to-S transformation works as usual, yielding, for example, 81 from 80.

81 heverin-dRabe fa mitady ny zaza Rasoa
+pass
thought by-Rabe that looks-for the child Rasoa
"It is thought by Rabe that Rasoa is looking for the child"

The use of such passives is extremely common. And 3), all matrix verbs of thinking, saying, etc., allow the embedded subject to be raised to the object position of the matrix verb (see 2.5), in which case the underlying subject remains in sentence final position. If VSO order were adopted as underlying, then an otherwise unmotivated transformation would be needed to move the subject to the otherwise "normal" position in this case.

The major properties of Equi-1 are the following:

1) Only subjects of active verbs can trigger the deletion. Thus corresponding to 79 we do not have:

82 *heverin-dRabe fa handeha ho any Antsirabe
+pass
thought by-Rabe that will-go fut there Antsirabe
rehampitso
tomorrow

"It is thought by Rabe that he will go to Antsirabe tomorrow"

2) The complementizer fa "that" cannot be deleted, and the complement S remains tensed. In simple cases at least only subjects can undergo the deletion; objects and non-subject agents cannot.

83 mihevitra Rabe_i fa mitady azy_i / * \emptyset_i Rasoa
thinks Rabe_i that looks-for him_i \emptyset_i Rasoa
"Rabe thinks that Rasoa is looking for him"

84 milaza Rabe_i fa ho-tadiavi-ny_i / *ho-tadiavina- \emptyset_i Rasoa
+act +pass +pass
says Rabe that fut-look for by-him_i / fut-look for by
"Rabe says that Rasoa will be looked for by him"

3) The A-to-S rules feed Equi-1. Thus the sense of 83 can be expressed by 85.

85 mihevitra Rabe_i fa tadiavin-dRaso_a \emptyset _i
 thinks Rabe_i that looked for by-Raso_a

"Rabe_i thinks that (he_i) is being looked for by Raso_a"

4) It is not fully clear whether Equi-1 is obligatory. Certainly a pronoun can appear in the embedded subject position, but in such cases informants prefer a reading on which it is not coreferential with the matrix subject. For some informants this preference is absolute, but others are more hesitant.

86 ??mihevitra Rabe_i fa tadiavin-dRaso_a izy_i

"Rabe_i thinks that he_i is being looked for by Raso_a"

This hesitancy on the judgment of coreference suggests that Equi-1 might be considered a special case of NP Drop, although the use of A-to-S to feed the deletion, thus making the pattern of coreference clear, argues against this.

2.4.3.2 Equi-2. Equi-2 is distinguished from Equi-1 in that no complementizer can be present and the subject of the derived S normally occurs in sentence final position (though some matrix predicates also admit that the subject can occur immediately following the matrix predicate).

87 a. manaiky [manasa ny zaza Raso_a]_S Raso_a
 +act
 agree wash the child Raso_a Raso_a ==>

b. manaiky manasa ny zaza Raso_a
 agree wash the child Raso_a
 "Raso_a agrees to wash the child"

As with Equi-1 only subjects can trigger this deletion, passive agents cannot (although the matrix verbs generally have commonly used passive forms); only subjects undergo the deletion (but see below), objects never. Moreover, the deletion is obligatory and is fed by the A-to-S rule.

88 a. manaiky [sasan-dRaso_a ny zaza]_S ny zaza
 +pass
 agree wash by-Raso_a the child the child ==>

b. manaiky sasan-dRaso_a ny zaza
 agree wash by Raso_a the child
 "The child agrees to be washed by Raso_a"

Further, the originally embedded verb can in surface still be inflected for tense, although the semantically permissible possibilities are much more restricted here than for Equi-1. Example 89 illustrates a future tense lower verb and contrasts in meaning with the otherwise identical 87 in which the

initial m- marks the lower verb for present tense. Example 89 might easily be used if, for example, Raso_a was making a contract to wash the children over a future period.

89 manaiky h- anasa ny zaza Raso_a
 agrees fut- wash the child Raso_a
 "Raso_a agrees to wash the child (in the future)"

Note finally that the controller of Equi-2 is clearly the subject of the derived S. It has the coding properties, e.g., sentence final position, nominative case, definiteness, takes particles immediately before it, etc.

90 hanaiky hanasa ny zaza ve Raso_a
 fut-agree fut-wash the child ? Raso_a
 "Will Raso_a agree to wash the child (in the future)?"

These facts argue that Ss derived from Equi-2 have the surface structure VP-NP, where NP is the subject and VP is the derived predicate, e.g., "agrees to wash the child." Note further that the derived subject has the transformational properties of subjects so far discussed. Thus it relativizes, clefts (example 91), and may itself undergo Equi-2 (example 92).

91 Raso_a no manaiky manasa ny zaza
 Raso_a cleft agrees washes the child
 "It is Raso_a who agrees to wash the child"

92 a. [tia [hanaiky [hanasa ny zaza Raso_a] Raso_a]
 want fut-agree fut-wash the child Raso_a Raso_a

Raso_a] fa tsy afaka
 Raso_a but not able

b. [tia [hanaiky hanasa ny zaza \emptyset Raso_a]
 Raso_a] fa tsy afaka

c. [tia hanaiky hanasa ny zaza \emptyset \emptyset
 Raso_a] fa tsy afaka

= te-hanaiky hanasa ny zaza Raso_a fa tsy afaka
 want agree wash the child Raso_a but not free (to
 do so)

"Raso_a wants to agree to wash the child but (she)
 isn't free (to do so)"

Note that the higher verb tia cliticizes to the lower verb hanasa giving further (weak) support for the existence of a surface VP in this case.

Of the verbs which govern Equi-2 there is an interesting subclass which behaves in one respect differently from our example manaiky "agree to." This class includes mikasa

"intend," tia "want," and mahazo "can, be able to" (6). Example 93 below illustrates a straightforward application of Equi-2 with mikasa "intend." Example 94 shows that passive may apply in the lower S, feeding Equi-2 with this verb. Example 95 shows that passive cannot apply unilaterally on the matrix verb. In all these respects mikasa behaves like the paradigm case manaiky. However, 96 shows that in distinction to manaiky, mikasa can passivize in the higher class if (and only if) the lower clause is passive and the agents of the matrix and embedded verbs are identical.

- 93 mikasa hanasa ny zaza Rasoa
+act +act
intend fut-wash the child Rasoa
"Rasoa intends to wash the child"
- 94 a. mikasa [_S ho- sasan- dRasoa ny zaza] ny zaza
+act +pass
intend fut-wash by-Rasoa the child the child
- b. [mikasa ho-sasan-dRasoa]_{VP} ny zaza
intend will-be washed by Rasoa the child
"The child intends to be washed by Rasoa"
- 95 *kasain-dRasoa hanasa ny zaza
+pass +act
intend by-Rasoa fut-wash the child
"It was intended by Rasoa to wash the child"
- 96 a. kasain-dRasoa_i sasana- ∅_i ny lamba
+pass +pass
intended by-Rasoa_i washed by -(her_i) the clothes
"It was intended by Rasoa that the clothes be washed by her"
- b. *eken-dRasoa_i sasana- ∅_i ny lamba
+pass
agreed by-Rasoa_i washed by (her_i) the clothes
"It was agreed by Rasoa that the clothes would be washed by her"

Note that 96a clearly means that Rasoa intended to wash the clothes herself, not merely that the clothes get washed.

Generating sentences like 96a poses several difficult problems if A-to-S and Equi-2 are cyclic in the ordinary sense. Using 97 as a rough representation of the underlying structure for 96, consider:

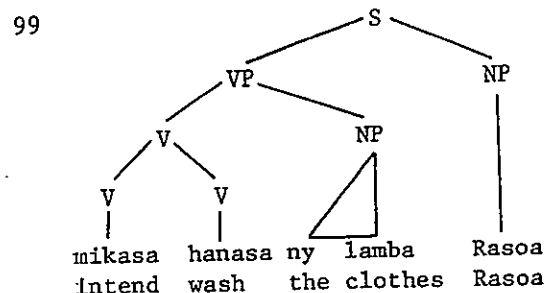
- 97 [_S₁ mikasa [_S₀ hanasa ny lamba Rasoa]_{S₀} Rasoa]_{S₁}
+act +act
intend fut-wash the clothes Rasoa Rasoa

If Passive applies first on the S₀ cycle, then Equi on S₁ must delete a non-subject agent phrase--something which would make Malagasy resemble Philippine languages (Schachter, this volume) but which otherwise appears unmotivated in Malagasy. Further, if Passive applies on the higher cycle before Equi, then we have a case where non-subject agents control Equi--again a similarity with Philippine languages but not something that is terribly well motivated in Malagasy (but recall that an exhaustive study of a large class of Equi-predicates with respect to all voicing possibilities remains to be done). And even if Passive applies after Equi on the higher cycle, its application would have to be made contingent on the prior application of Passive on the lower cycle in order not to generate, for example, 95. And a condition of that sort is unusual and in need of explanation to be justified. Furthermore, application of Passive on the higher clause would have to be made obligatory if Passive had applied on the lower clause, and Equi had deleted the passive agent, since 98 is clearly ungrammatical.

- 98 *mikasa sasana ny lamba Rasoa
+act +pass
"Rasoa intends the clothes to be washed by her"

In no other case could Passive apply in the higher S.

An alternative analysis we propose is as follows: Passive does not apply on the lower cycle at all; Equi applies on the higher cycle and then a derived VP is created as argued above. We suggest that this process should be formulated so that the lower verb forms a kind of compound verb with the higher verb, and the lower direct object, if present, is understood as the direct object of the derived verb. Thus 97 after Equi and "VP creation" would have the following form:



Now A-to-S can apply, promoting ny lamba "the clothes" to

subject and demoting the old subject Rasoa. A-to-S would have to be extended so that when the underlying verb was compound the voice affixes attach to both parts of the derived verb, but the demoted subject still attaches to only the first part of the derived verb. This last fact is unpleasant, in this approach, but certainly do-able.

One very important advantage of our proposal is that it automatically accounts for why ny lamba "the clothes" in 96, repeated as 100 below, behaves like a subject, e.g., it takes question particles, relativizes, etc.

- 100 kasain-dRasoa_i sasana- \emptyset _i ny lamba
 +pass +pass
 intended by-Rasoa_i washed by-(her_i) the clothes
 "It was intended by Rasoa that the clothes be washed by her"
- 101 kasain-dRasoa sasana ve ny lamba
 intend by Rasoa washed ? the clothes
 "Was it intended by Rasoa that the clothes be washed by her?"
- 102 ny lamba izay kasain-dRasoa sasana
 the clothes that intended by-Rasoa washed
 "the clothes that were intended by Rasoa to be washed by her"

(NB: The more natural translations of these sentences in English would, of course, be active.)

If, on the other hand, Passive were to apply first on the lower cycle and then Equi delete a passive agent on the higher cycle, there is no reason to believe that the original direct object of the lower S has been raised to subject status of the derived VP, and hence the original direct object should not be subject to those transformations which are sensitive only to subjects.

A final piece of support for our analysis, which does not, however, distinguish it from the alternative proposed, is that if the direct object of the compound verb is indefinite, as illustrated in 103a, then we cannot put the compound verb in the passive, 103b. This result is accounted for on our approach since 103b would be derived by passivizing 103a, thereby creating an indefinite subject, and subjects must, of course, be definite.

- 103 a. [_{VP} [_v mikasa hanasa] lamba] Rasoa
 intend wash clothes Rasoa

- b. *kasain-dRasoa ho sasana lamba
 +pass +pass
 intended by-Rasoa fut washed clothes
 "It was intended by Rasoa that clothes be washed by her"

2.5 Raising

In general, Malagasy is rich in Raising processes. Raising to Object (R-O) is very productive, applying in a uniform way to a large class of predicates and satisfying the Relational Succession Law (RSL) discussed below. Raising to Subject (R-S) is more restricted in application, although two and possibly three sub-types must be distinguished. R-S also generally satisfies the RSL. And third, a restricted type of raising applies to possessor NPs (Poss-R). Poss-R appears to violate the RSL. Both R-O and R-S apply only to subjects, and Poss-R applies only to possessors of subjects.

2.5.1 Raising to Object (R-O): From an underlying structure like 104a, R-O may derive 104b.

- 104 a. nanantena [_Sfa nanasa ny zaza Rasoa] Rabe
 +act
 past-hope that washed the child Rasoa Rabe
- b. nanantena an-dRasoa ho nanasa ny zaza Rabe
 hoped acc-Rasoa comp washed the child Rabe
 "Rabe hoped that Rasoa washed the child"

R-O has a great many structurally interesting properties:

1) The underlying subject is clearly the surface subject. Thus in 104b "Rabe" satisfies the subject properties discussed so far:

- 105 nanantena an-dRasoa ho nanasa ny zaza ve Rabe
 hoped acc-Rasoa comp washed the child ? Rabe
 "Did Rabe hope that Rasoa washed the child?"
- 106 Rabe no nanantena an-dRasoa ho nanasa ny zaza
 Rabe cleft hoped acc-Rasoa comp washed the child
 "It was Rabe who hoped that Rasoa washed the child"

2) Clearly, only subjects undergo R-O. Thus 107 could only mean that Rabe hoped that the child washed Rasoa, and even there "Rasoa" should be preceded by the object particle an- (though some speakers accept omitting it).

- 107 *nanantena ny zaza ho nanasa Rasoa Rabe
 hoped the child comp washed Rasoa Rabe
 "Rabe hoped that Rasoa washed the child"

3) A-to-S feeds R-O. Thus the effect of 107 is obtained

by first passivizing the embedded S in 104, shown in 108a below, and then applying R-O, as in 108b.

108 a. [nanantena [fa sasan-dRasoa ny zaza] Rabe]
hoped that washed by-Rasoa the child Rabe

b. nanantena ny zaza ho sasan-dRasoa Rabe
hoped the child comp washed by-Rasoa Rabe
"Rabe hoped that the child was washed by Rasoa"

4) R-O feeds A-to-S. Thus in 108b, "Rabe" is the subject and "ny zaza" is the direct object. That Passives applies to such Ss is illustrated in 109.

109 nantenain-dRabe ho sasan-dRasoa ny zaza
+pass
hoped by-Rabe comp washed by-Rasoa the child
"It was hoped by Rabe that the child was washed by Rasoa"

And by the tests established earlier "ny zaza" is clearly the subject of 109. It takes question particles (example 110) and relativizes (example 111). And for some speakers, but not all, it even re-raises to object (example 112b) (7).

110 nantenain-dRabe ho sasan-dRasoa ve ny zaza
hoped by-Rabe comp washed by-Rasoa ? the child
"Was it hoped by Rabe that the child was washed by Rasoa"

111 ny zaza izay nantenain-dRabe ho sasan-dRasoa
the child that hoped by-Rabe comp washed by-Rasoa
"the child that was hoped by Rabe to have been washed by Rasoa"

112 a. [Nilaza [_Sfa nantenain-dRabe ho sasan-dRasoa
+act
said that hoped by-Rabe comp washed by-Rasoa
ilay zaza] Rakoto]
that child Rakoto

b. ??Nilaza an'ilay zaza ho nantenain-dRabe ho
said acc-that child comp hoped by-Rabe comp
sasan-dRasoa Rakoto
washed by-Rasoa Rakoto

"Rakoto said that that (aforementioned) child was hoped by Rabe to have been washed by Rasoa"

The facts in 108 and 109 present the classical sandwich type arguments showing that A-to-S is cyclic. Those in 112 that R-O is cyclic.

5) In partial distinction to English, however, R-O does not feed Reflexivization. Thus 113b is not well formed. The way to express that idea is to apply Equi-1 first, as in 114.

113 a. {manantena} [fa hanasa lamba Rabe] Rabe
{milaza
{ hopes } that fut-wash clothes Rabe Rabe
{ says

b. { *manantena } tena hanasa lamba Rabe
{ *milaza
{ hopes } self fut-wash clothes Rabe
{ says

"Rabe hopes/says himself to wash clothes"
= "Rabe hopes/says that he will wash clothes"

114 {manantena} Rabe fa hanasa lamba
{milaza
{ hopes } Rabe that fut-wash clothes
{ says

"Rabe_i hopes/says that (he_i) will wash clothes"

6) Note finally that R-O in Malagasy clearly supports the Relational Succession Law (RSL) which states that a raised NP takes over the function (subject of, object of, etc.) relative to the matrix predicate that the clause out of which it was raised originally had. Thus NPs raised by R-O are raised only from object clauses and are presented as surface objects (taking the object marker *an*, being replaced by accusative pro-forms, and undergoing A-to-S via Passive).

2.5.2 Raising to Subject (R-S): There appear to be three sub-types of R-S in Malagasy. The most productive is illustrated by 115b.

115 a. nantenain-dRabe [_{NP}fa nanasa lamba Rasoa]
+pass +act
hoped by-Rabe that washed clothes Rasoa
"It was hoped by Rabe that Rasoa washed clothes"

b. [_{VP} nantenain-dRabe fa nanasa lamba] Rasoa
hoped by-Rabe that washed clothes Rasoa
"Rasoa was hoped by Rabe to have washed clothes"

This type of R-S requires some justification, particularly since it does not introduce any new grammatical material, delete, or reorder any part of the structures it applies to. It merely reorganizes the constituent structure. So to justify the transformational status of R-S in this case, we

note:

First, the clause marked NP in 115a does appear to satisfy the relevant requirement to be a subject. It occurs in sentence final position, it can be questioned (example 116a), whereas the active counterpart of 115a cannot have its object clause questioned (example 116b), and it undergoes What-C1 formation (example 117).

116 a. Inona no nantenain-dRabe?
What cleft hoped by-Rabe
"What was hoped by Rabe?"

b. *Inona no nanantena Rabe
+act
what cleft hoped Rabe
"What did Rabe hope?"

117 izay nantenain-dRabe
what hoped by-Rabe
"whatever is hoped by Rabe"

We note, however, that many of the subject tests either do not apply when the subject is sentential or else they give new results. Thus sentential subjects simply cannot be relativized or cleft. And the pro-forms for sentential subjects (izany "that") are not marked for case and occur equally well as subjects or objects. And sentential subjects do not Raise to Object.

And second, if the structure in 115b is correct, then "Raso" should behave as a derived subject, and it does. It can, for example, be cleft (example 118), takes question particles, etc., and can even raise to object (example 119).

118 Raso no nantenain-dRabe fa nanasa lamba
Raso cleft hoped by-Rabe that washed clothes
"It was Raso that was hoped by Rabe to have washed clothes"

119 a. [Nilaza [fa nantenain-dRabe fa nanasa lamba
+act
said that hoped by-Rabe that washed clothes
Raso] Rakoto]
Raso Rakoto

b. ?Nilaza an-dRaso ho nantenain-dRabe fa nanasa
said acc-Raso comp hoped by-Rabe that washed
lamba Rakoto
clothes Rakoto
"Rakoto said Raso was hoped by Rabe to have washed clothes"

(Note that 119b, like 112b, is complicated and rejected by some informants. On reflection, however, some of those informants accept them (and some don't), so we consider their difficulties to reflect performance and allow them marginal grammatical status.)

Note that if we do not posit a R-S to relate 115a and 115b, then the definition of those transformations which are sensitive to subjecthood will have to be modified to apply to subjects or to subjects of sentential subjects...ad infinitum. This is in fact the alternative taken in Keenan (1972).

Regardless of which of these approaches is taken, however, one troublesome fact would have to be accounted for. Namely, sentential subjects introduced by the fa complementizer admit of R-S only if they are derived subjects, as in 115a. If they are underlying subjects, however, as in 120, then most speakers reject R-S.

120 a. tsara fa efa lasa ny mpianatra
good that already left the students
"It's good that the students have already gone"

b. *ny mpianatra izay tsara fa efa lasa
the students that good that already gone
"The students that it's good have already left"

The fact that we cannot relativize (or cleft, or question, or raise to object, etc.) ny mpianatra "the students" in 120a indicates that the subject of the embedded S cannot be treated as a subject of the entire S. The only explanation of this fact we can think of is that the embedded S in 120a is in fact a subordinate clause introduced by fa in its meaning of "for, because (Fr. car).". Quite generally, NPs cannot be raised out of subordinate clauses:

121 a. faly Rabe fa / satria efa lasa ny mpianatra
happy Rabe for/ because already gone the students
"Rabe is happy because the students have already gone"

b. *ny mpianatra izay faly Rabe fa / satria efa
the students that happy Rabe for/ because already
lasa
gone
"the students that Rabe is happy that've already gone"

There is, however, another, restricted, class of predicates which might be thought to take sentential subjects and which do admit of R-S. This class includes toa "seem," tsy

"not," and *tsy maintsy* "it is necessary that" (lit: "not able not"). Thus from 122a we can form 122b.

122 a. *toa manasa lamba Raso*
seem wash clothes Raso
"Raso seems to be washing clothes"

b. *Raso no toa manasa lamba*
Raso cleft seem wash clothes
"It's Raso who seems to be washing clothes"

This class, however, is quite small compared to those constructed with *fa* complements (8). (In addition to *tsara* "good," that class includes emotive predicates generally, e.g., *ratsy* "bad" and several "cognitive" predicates like *marina* "true," *mazava* "clear" and *azo antoko* "is certain.") Note that if the complements of these predicates are interpreted as subordinate clauses of a *because* sort, then the sentences they form, like 120a, will have no subjects and the subject-sensitive transformations we have discussed will be, correctly, predicted not to apply to them. This would, however, give us one class of primitively subjectless Ss in Malagasy. (Note that Existential Sentences (Section 2.2.3) are also subjectless by our criteria.)

Note finally that, as we have given it, R-S clearly applies only to subjects of sentential subjects. Thus any attempt to raise *lamba* "clothes" (even making it definite) from 115 or 122 yields clearly ungrammatical sentences, 123 and 124 respectively.

123 **nantenain-dRabe fa nanasa Raso ny lamba*
hoped by-Rabe that washed Raso the clothes

124 **toa manasa Raso ny lamba*
seems wash Raso the clothes

Finally, there appears to be a third class of predicates, very restricted indeed, which govern a slightly different kind of R-S. Thus from the hypothetical underlying source 125a we can form either 125b directly or 125c by first passivizing and then raising.

125 a. *sarotra [mamaky ity boky ity Δ]*
difficult cut this book this Δ

b. *sarotra ny mamaky ity boky ity*
+pres+act
difficult the cut this book this
"It is difficult to read this book"

c. *sarotra vakina ity boky ity*
+pass
difficult cut this book this
"This book is hard to read"

In 125b the underlying clause minus its subject takes a definite article in surface and clearly seems to function as the subject of the entire S. It can, for example, be cleft and questioned.

126 *ny mamaky ity boky ity no tena sarotra mihitsy*
the read this book this cleft very difficult indeed
"To read this book is very difficult indeed"

Example 125c, on the other hand, illustrates that the derived subject of the embedded clause has been raised to subject. Thus "this book" is clearly the subject of 125c, as it can cleft (example 127), relativize, take question particles, etc.

127 *ity boky ity no sarotra vakina*
+pass
this book this cleft difficult read
"It is this book which is difficultly read"

At the moment, however, it seems that the class of verbs which accept this raising is quite small. It includes *sarotra* "difficult" and *mora* "easy," but to our (current) knowledge has no further members. Further, if R-S does apply in these cases, it would have to be made obligatory, since the passive clause out of which raising occurs does not itself appear to have much independent subject status. Thus it will not cleft (example 128a) or take question particles (example 128b). On the other hand, the raising, if it exists, does satisfy the RSL, since direct objects cannot be so raised (example 129). Clearly, more work needs to be done here before the status of R-S is clear in these cases.

128 a. **vakina ity boky ity no sarotra*
+pass
read this book this cleft difficult
"It's this book's being read that is difficult"

b. **sarotra ve vakina ity boky ity*
difficult ? read this book this
"Is it difficult for this book to be read?"

129 **ity boky ity no mamaky sarotra*
this book this cleft cut difficult
"It is this book which is difficult to read"

2.5.3 Possessor Raising (Poss-R): Example 130 below illustrates a much more unusual type of raising--one in which

the possessor NP of a subject raises and in fact incorporates into the surface VP.

- 130 a. marary ny zanan- dRabe
sick the child of Rabe
"The child of Rabe is sick"
- b. marary zanaka Rabe
sick child Rabe
"Rabe has a sick child"

In 130a it is clearly ny zanan-dRabe "the child of Rabe" which is the subject: It relativizes, takes question particles, etc. In 130b, on the other hand, it is clearly Rabe which is subject:

- 131 marary zanaka ve Rabe
sick child ? Rabe
"Does Rabe have a sick child?"

- 132 Rabe no marary zanaka
Rabe cleft sick child
"It is Rabe who has a sick child"

This type of raising exhibits several interesting properties. First, the raised NP satisfies most of the criteria for incorporation (see Mardirussian, 1975 for justification). Thus the raised NP is not referential: It cannot take definite determiners (example 133a), nor can it be a definite pronoun (example 133b).

- 133 a. *marary ny zanaka Rabe
sick the child Rabe
- b. *marary azy Rabe
sick him Rabe

Further Ss generated by Poss-R sometimes have an idiomatic flavor.

- 134 a. lava ny tongon-dRabe
long the foot of Rabe
"Rabe's feet are long"
- b. lava tongotra Rabe
long foot Rabe
"Rabe walks a lot"

Second, the raised NP apparently does not have to be in an inalienable possession relation to its head, although most of the natural examples found are of that sort.

- 135 a. nianjera ny tranon-dRabe
fell the house of-Rabe
"Rabe's house fell down"
- b. nianjera trano Rabe
fell house Rabe
"Rabe had his house fall"

It may be the case, however, that the derived subject must be in some kind of "affective" relation to the predicate, somewhat as in the case of affective passives in, for example, Japanese (McCawley, N. 1972). Thus, although a detailed investigation of a large class of examples would be needed to substantiate this claim, 136b, in which the subject Rabe bears no obvious affective relation to the predicate, is rejected by informants even though it appears to be formed from 136a just as 135b was formed from 135a.

- 136 a. mihira ny zanan-dRabe
sings the child of-Rabe
"Rabe's child is singing"
- b. *mihira zanaka Rabe
sings child Rabe

Third, only possessors of subjects undergo Poss-R.

- 137 a. manadino ny anaran' ny mpianatra aho
forget the names of the students I
"I forget the names of the students"
- b. *manadino anarana mpianatra aho
forget name student I

Fourth, the VP into which the raised NP is incorporated must be intransitive.

- 138 a. manadino boky ny zanan-dRabe
forget books the child of Rabe
"Rabe's child forgets books"
- b. *manadino boky zanaka Rabe
forget books child Rabe
- c. *manadino zanaka boky Rabe
forget child books Rabe

Fifth, the VP may, however, be a derived intransitive. Thus the semantic effect of 137b above is obtained by first passivizing, as in 139a, and then raising, 139b.

- 139 a. hadino-ko ny anaran' ny mpianatra
 +pass
 forgotten by-me the names of the students
 "The names of the students are forgotten by me"
- b. hadino-ko anarana ny mpianatra
 forgotten by-me name the students
 "The students had their names forgotten by me"

These data suggest, then, that the NPs which undergo Poss-R must not only be possessors of surface subjects, but that those subjects must be underlyingly absolutive, that either subjects of intransitive predicates or direct objects of transitive predicates. This claim receives support from the fact that underlying possessors of instrumentals (example 140a), even when advanced to subject of an intransitive verb (example 140b), still cannot undergo Poss-R (example 140c).

- 140 a. misasa amin'ny savonin-dRabe aho
 +act
 +intrans
 wash with the soap of- Rabe I
 "I wash with Rabe's soap"
- b. isasa-ko ny savonin-dRabe
 +circ
 +intrans
 wash by-me the soap of- Rabe
- c. *isasa-ko savony Rabe
 +circ
 +intrans
 wash by-me soap Rabe

Again, a larger range of circumstantial constituents would have to be tested with circumstantial verbs to fully substantiate that only underlying possessors of absolutives undergo Poss-R, but at least it is clear that underlying possessors of instrumentals cannot undergo Poss-R, and instrumentals are among the prime NPs which can be advanced to subject by the circumstantial voice.

Finally, as regards the Relational Succession Law, it appears that Poss-R violates it since an NP is raised from subject but does not itself become a subject. Note, however, that despite its position, the raised possessor does not become an object. It cannot, for example, be advanced to subject (example 141b). Rather, it simply incorporates into the VP, which remains intransitive.

- 141 a. nianjera trano Rabe
 fell house Rabe
 "Rabe had his house fall"
- b. *nianjeranan-dRabe trano
 fell by-Rabe house

There are perhaps two ways the RSL might be modified to account for Poss-R. On the one hand, as suggested by Perlmutter and Postal, "partitive" raisings may simply have to be distinguished from non-partitive raisings. This seems to me reasonable in that generally the most productive raisings are from clauses. Raisings from NPs with lexical heads is very likely an ontologically different being. On the other hand, perhaps operations in which a raised NP does not take on any grammatical relation to the verb, as is the case in Poss-R in Malagasy, should be distinguished from raisings which do feed the system of grammatical relations. Thus, perhaps, the RSL could simply be weakened to read "A raised NP takes on the grammatical relation borne by the NP out of which it is raised, if it takes on any grammatical relation at all."

II. Malagasy Compared with Philippine Languages

Philippine languages (Tagalog, Cebuano, Kalagan, etc.) are genetically related to Malagasy and their surface syntactic organization appears similar to that of Malagasy. In particular, they are verb initial, and verbs are marked according to which of the underlying NPs is "in focus." E.g., from Tagalog we have:

- 142 a. sumampal ng babae ang lalake
 +actor
 strike obj woman man
 "The man struck a woman"
- b. sinampal ng lalake ang babae
 +object
 strike by man woman
 "The woman was struck by a/the man"

The NP which is in focus according to the form of the verb is marked by ang. And as ang-NPs have many properties which subjects usually have, it is tempting to consider the ang-NP as a basic subject in 142a and a derived subject in 142b. The object focus form of the verb in 142b would then be a passive form. However, Schachter (this volume) has argued that ang-NPs cannot be consistently identified as subjects. Rather, the properties usually characteristic of subjects are divided fairly evenly between surface ang-NPs on the one hand and non-

focus actors (e.g., "man" in 142b) on the other. Here we shall summarize Schachter's evidence for his claim and then show that by and large this division of properties does not occur in Malagasy. As the relevant examples from Philippine languages are given in Schachter (this volume), we will not repeat them here.

First, ang-NPs are like subjects in that 1) they are always definite; 2) they are the most necessary (very few sentence types occur without any ang-NP); 3) they are the only relativizable NP in a S, and 4) only ang-NPs launch floating quantifiers. Further, ang-NPs may control Equi-NP deletion and may in certain cases control reflexivization, and may in those languages where relevant (Kampampangan) control verb agreement.

On the other hand, non-focus agents (hereafter simply "agents") are like subjects in that 1) they express the addressee phrase of imperatives, regardless of the focus form of the verb; 2) they may control Equi-NP deletion (9); 3) they are the preferred controllers of reflexivization (for many Philippine languages, in simple cases of reflexivization like "The man struck himself" surface control of the reflexive pronoun is restricted to non-focus actors and the reflexive pronoun itself takes the ang marker); 4) they may undergo Equi-NP deletion; 5) they have a fixed position in the sentence in those Philippine languages with fairly fixed word order (Cebuano, Kalagan, but not Tagalog), again regardless of the focus of the verb (thus word order is expressed as V + Actor + Other); 6) they also trigger verb agreement (in Kampampangan) (see E.L. Keenan, 1975 for example). Finally, Schachter notes that certain simplex sentences occur only in non-actor focus forms, making the actor focus form appear less basic than Ss with actor subjects in Malagasy.

In Malagasy we find, however, that the NP we have been calling the subject possesses the subject-like properties of ang-NPs in Philippine languages, but the non-subject agents in Malagasy by and large do not have the subject-like properties of agents in Philippine languages. Thus, on the one hand, subjects in Malagasy are always definite, they are the most necessary (with the possible exception of the sentences cited in Sections 2.2.3 and 2.5.2, all Ss in Malagasy have surface subjects), and they are the only relativizable NPs. Quantifier placement in Malagasy is a complex phenomenon, but quantifiers do not appear to "float" in any simple way in Malagasy, so that possible point of similarity between Malagasy subjects and ang-NPs does not apply.

On the other hand, non-subject agents in Malagasy do not control Equi-NP deletion. Nor do they undergo Equi.

Further, they generally do not control reflexives, and subjects never get reflexivized in Malagasy. Agents do not have a fixed position in that the position varies according to whether the actor is subject or not. Subjects, of course, do have a fixed position. There is, of course, no verb agreement (which is the norm as well for Philippine languages), and as we have argued, the sentence form with actor subjects is the most basic. There are basically no verbs which only exist only in non-agent "focus" forms (though there are a very few in which the root form of the verb functions as both the active and passive form, e.g., tia "to love," but in which the "real" active form shows up in certain nominalizations, e.g., fitiaviana "love."

There is one point, however, where underlying agents in Malagasy resemble underlying agents in Philippine languages. Namely the underlying agent expresses the addressee of imperatives, regardless of the voice of the imperative verb (see Section 2.1.3). Despite this fact, however, it is clear that the NP we have been calling subject in Malagasy possesses an overwhelming abundance of properties characteristic of subjects generally, so the division of subject properties in the Philippine languages is overall not present in Malagasy.

III. Subject Prominence vs. Topic Prominence in Malagasy

Li and Thompson (this volume and 1974) have attempted to characterize certain languages as topic prominent in opposition (at least partial opposition) to languages which are subject prominent. We have already shown that Malagasy is subject prominent in any intuitive understanding of that term. However, many of the properties which positively characterize topics are also characteristic of Malagasy subjects. Hence, it might be the case that Malagasy is, in addition, a topic prominent language.

We shall group the large number of criteria used by Li and Thompson to determine their typology in two groups: General properties and Specific properties. General properties are those which concern the overall syntactic organization of a language, and specific properties are those which characterize the specific relation the topic NP of a sentence bears to the rest of the sentence. Needless to say, the division between the two categories is somewhat arbitrary, and we adopt it largely for purposes of exposition.

1. General properties of topic prominent languages

Following Li and Thompson we list seven general properties of topic prominent languages (TPL). Of these, Malagasy

does not possess the first five. The sixth is not very criterial since many non-TPL also possess it. But Malagasy does possess the seventh.

1) TPLs do not have passives, or if they do, they are restricted in usage. Malagasy clearly has very productive passives.

2) In TPLs Topicalization is not a marked process, if indeed it is a "process" at all. In Malagasy, however, there are at least two topicalization processes, S-Top and W-Top (Sections 2.3.1 and 2.3.2, respectively). Further, the A-to-S rule is a topicalizing process to some extent, and it is clearly marked on the verb.

3) In TPLs, the topic does not play a major role in cyclic transformations. But in Malagasy, the most topic-like NP in most sentences, namely the subject, does play a critical role in the cyclic processes, as we have shown. It is the case, of course, that NPs topicalized by S-Top and W-Top do not play any serious role in cyclic transformations.

4) In TPLs the topic NP is not overtly coded as such in surface. It may have a characteristic position, but does not have a characteristic case marking or verb agreement paradigm. But in Malagasy, subjects do have a characteristic position and to a lesser extent case marking. They do not, however, trigger verb agreement, as there is none. Topics generated by S-Top or W-Top are, furthermore, overtly marked.

5) TPLs often have the so-called "double subject" construction. Malagasy does not.

6) TPLs do not have dummy subjects. This is also the case in Malagasy. But it is also the case in many rather subject prominent languages, as indeed relatively few languages have dummy subjects.

7) TPLs exhibit common discourse deletion of topic NPs when the referent is clear from context. As for our discussion of NP-Drop in Malagasy, Malagasy seems to have this property to some extent, though it appears not to be limited to deletion of topics.

As regards these general properties, then, Malagasy does not appear to be very topic prominent, although it is perhaps somewhat more topic prominent than, for example, English.

2. Specific properties of topic NPs

Of the properties specific to topic NPs, we distinguish two "positive" properties and three "negative" ones.

2.1 Positive properties

1) The topic is old information, and so obligatorily definite.

2) The topic is in some sense the center of attention.

The subject NP in Malagasy appears to have both these properties in main clauses. The restriction that many major syntactic processes apply only to subjects, however, does mean that the choice of subject is governed by additional principles other than merely being the center of attention. Thus, while we may raise an embedded subject to object, the principle center of attention may still be the subject of the matrix verb. Nonetheless, restricted to main clauses, Malagasy subjects are topics.

2.2 Negative properties

1) Topics do not trigger verb agreement. And Malagasy subjects do not, as noted above.

2) Topics do not necessarily bear selectional restrictions to the verb. Since locatives, instrumentals, benefactives, and temporals, etc., can be advanced to subject in Malagasy, it is clear that surface subjects do not necessarily bear any selectional restriction to the verb.

3) The "role" of the topic NP cannot be predicted by the verb form. By and large, not so in Malagasy. The verb form does tell us whether the subject NP is an underlying actor, goal, intermediary, or "circumstantial" complement. Thus, up to a tolerable level of ambiguity, the verb form does allow us to predict the underlying role of the derived subject.

With regard to the specific properties of topics, then, it appears that Malagasy subjects are rather topic like, though clearly less so than in the paradigm cases (e.g., Lisu) cited by Li and Thompson. We conclude, somewhat weakly, then, that while Malagasy is clearly less topic prominent than, for example, Lisu, it is probably more topic prominent than in languages like English.

Notes

1. For many informants, an- is obligatory before proper name direct objects. It also usually occurs with objects beginning with /i/. (/i/ itself functions in a few cases as a proper name marker, namely for those which are not constructed with Ra-. The use of Ra- may be largely restricted to the major dialect, merina, from which all the data in this paper are drawn.

Interestingly, an- also functions as a locative marker meaning "at" and occurs very frequently in place names. Thus Antsirabe is morphemically an- "at" + sira "salt" + be "big" = "at the place of great salt" (there are many mineral springs in Antsirabe, which was used as a spa by the French).

an- also functions as the predicate of possession, as in (i).

- (i) an-dRabe io
at Rabe that
"That is Rabe's"

2. We will ignore in this paper the considerable morphophonemic complexity involved in adding the man- prefix. For a thorough discussion of Malagasy morphology, see Rajemisa-Raolison (1966).

3. We can, however, correctly form an NP by adding a definite article ny "the" to a passive VP. But the result is semantically a relative clause, not a nominalized VP.

- (i) ny angalarina
+pass
the stolen
"the stolen ones/things"

This type of NP formation can occur with any intransitive stative predicate.

- (ii) ny eto
the here
"the ones (who are) here"
- (iii) ny mena
the red
"the red ones"

4. The formulation of Passive as Direct Object ==> Subject (Perlmutter and Postal, 1974) is obviously not general enough. It would require at least another transformation "Circumstantial ==> Subject" which would replicate most of Passive. Further, it is not easy to see how the "endpoint" vs. "intermediary" distinction would be made.

A more general formulation would be to specify a universal hierarchy of accessibility to advancement to subject, advancement to object, etc. Universal constraints on the interaction of these advancement possibilities would have to be given. (For one such suggestion, see Trithart 1975.) Then there would be only one advancement rule, "Advance(X)." Which positions X were advancable would vary with the language, though where they would advance to would be predictable, or at least constrained, by universal principles. And the language specific features of an advancement would (hopefully) be predictable from the role that the advancee, X, played. At the moment, however, these universal formulations remain to be worked out.

5. The cleft construction in Malagasy presents an additional complication pointed out in Gross (nd). It is possible for a cleft subject to be apparently indefinite, or at least to occur without a definite determiner. Thus from (i) we can apparently form (ii) (but not (ii)).

- (i) manasa lamba Raso
+act
wash clothes Raso
"Raso is washing clothes"
- (ii) lamba no sasan-dRaso
clothes cleft wa
- (ii) lamba no sasan-dRaso
+pass
clothes cleft wash by-Raso
- (iii) *lamba no manasa Raso
+act
clothes cleft wash Raso
"clothes are being washed by Raso/clothes are what Raso is washing/clothes are what Raso is washing"

Thus the underlying object lamba "clothes" must be a subject when cleft, but it seems to violate the general requirement that subjects are definite. The meaning of (ii), however, is somehow generic. That is, "clothes" does not have the specific indefinite reading. Rather it answers a question like "What sort of thing is Raso washing?" The most natural pronominal form of (ii) would be (iv), which uses the "impersonal" pronoun izany "that" rather than the definite pronoun izy "it," or izy-io "it-inanimate"

- (iv) izany no sasan-dRaso
that cleft wash by-Raso
"That is what Raso is washing"

This fact is further support for the claim that the requirement that subjects be definite is a surface constraint. See Existential Sentences, Section 2.2.3, for additional support for this claim.

6. One informant in fact included *manaiky* itself in this sub-class. Clearly the limits of the sub-class must be further researched, but its existence is not in doubt. All that is in doubt is whether the sub-class is coextensive with the entire class or not.

7. We cannot tell to what extent the difficulty with 113b is one of "mere" performance or not. Clearly R-O should be cyclic, as it feeds other cyclic transformations, e.g., Passive. But note that 113b does contain two *ho-* phrases. Now the *ho-* complementizer is clearly homophonous with the benefactive marker (as well as the future tense marker--indicating not yet realized action?). It may be the case, then, that the remainder of the clause from which the NP was raised is itself being assimilated to an NP position in the sentence. (Note that such clauses in English are preceded by an item homophonous to the indirect object marker, e.g., "John believes Fred *to* have signed the petition.") But in Malagasy a sentence cannot contain two benefactives.

- (i) *manasa lamba ho an'i Bosy ho an-dRabe aho
wash clothes for Bosy for Rabe I
"I am washing clothes for Bosy for Rabe"

Thus, according to informants, (i) cannot be forced to mean "At Rabe's request, I washed clothes for Bosy (who was sick)."

8. Furthermore, the putative underlying sentential subject of 123a does not in any way behave like a subject, even by the limited tests that usually apply to sentential subjects. Thus it cannot take question particles (i), it cannot be questioned (ii), and it cannot form What-Cls (iii).

- (i) *toa ve manasa lamba Raso
seem ? wash clothes Raso
"Does it seem that Raso is washing clothes?"
- (ii) *Inona no toa
what cleft seems
"What seems?"
- (iii) *izay toa
what seems
"whatever seems"

R-S on this formulation would appear to be obligatory, to say the least. But this rather looks like a rationalization for a bad analysis to begin with. A preferable analysis, in our

opinion, would be one in which the small class of words including *toa*, etc., are not underlyingly verbs with sentential subjects (note that as verbs they would be highly anomalous--taking no tense marking, no voicing distinctions, no imperatives, etc.) but rather are some kind of adverb or verb operator. Thus the underlying structure would be [*yptoa manasa lamba*] Raso, and so *Raso* would be an underlying subject and have the subject properties as predicted.

9. As examples of agent control of Equi in Philippine languages are not given in Schachter (this volume), we illustrate this point here (examples from Schachter, personal communication).

- (i) binalak ng babae-ng mamalengke
+goal focus +actor focus
planned agent woman-linker go-marketing
"A/the woman planned to go marketing"

The corresponding sentence in which an *ang*-NP controls Equi is:

- (ii) nagbalak ang babae-ng mamalengke
+actor focus +actor focus
planned foc woman-linker go-marketing
"The woman planned to go marketing"