

An explanation of extraction asymmetries in Malagasy*

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This paper investigates one aspect of cross-linguistic variation in extraction patterns. Data from Malagasy have posed a problem for ECP-based accounts of A-bar movement. This variation is shown to stem from fundamental differences in how arguments are licensed. In Malagasy, for example, objects are licensed in-situ and never escape vP. Since vP is a strong phase, objects can never be a target for A-bar movement. In languages such as English, however, objects must be licensed by some head external to the vP. Movement to the edge of vP in English allows for further A-bar movement. Also discussed is how the proposed analysis applies to other languages with similar extraction patterns (e.g. Tagalog and Indonesian).

Keywords: Malagasy, A-bar movement, object, adjunct, extraction, phase

1. Background

Certain western Austronesian languages such as Malagasy and Tagalog are famous for their reversal of typical extraction asymmetries. It is well known that in English, the A-bar movement of objects is less restricted than the A-bar movement of subjects or adjuncts (e.g. Cinque 1990).

- (1) *wh*-islands
 - a. ?What do you wonder whether Sandy read?
 - b. *Who do you wonder whether read War and Peace?
 - c. *When do you wonder whether Sandy read War and Peace?

As the *wh*-questions below illustrate, Malagasy exhibits a very different asymmetry: only subjects and (certain) adjuncts can undergo A-bar movement (Keenan 1972, 1976).¹

- (2) a. *Iza no namaky ilay boky?*
 who FOC PST.AT.read DEF book
 “Who read the book?”
- b. *Oviana no namaky ilay boky i Soa?*
 when FOC PST.AT.read DEF book Soa
 “When did Soa read the book?”
- c. **Inona no namaky i Soa?*
 what FOC PST.AT.read Soa
 “What did Soa read?”

The ungrammaticality of (2c) shows that an object cannot undergo A-bar movement in Malagasy.² Instead, the object must first be promoted to subject, as in (3). In (3), the verb is marked with Theme Topic morphology, similar in some respects to English passive.

- (3) *Inona no novakin'i Soa?*
 what FOC PST.TT.read.GEN Soa
 “What was read by Soa?”

The above data illustrate the strikingly different *wh*-movement patterns in Malagasy and English.

Comparing English with Malagasy, the question arises as to why languages vary in this respect. Under ECP-based accounts of extraction asymmetries in English, the Malagasy facts are surprising and difficult to account for. Assuming a universal base, direct objects in all languages should be generated in a properly governed position, which should allow for extraction. Before proposing an analysis, it is necessary to determine the locus of variation. For example, Pearson (2001) suggests that the subject position in Malagasy is an A-bar position. In other words, he ties the extraction asymmetry to special properties of the subject. In this paper, however, I argue that the ungrammaticality of (2c) is due to the fact that there is no derived object position in Malagasy. In other words, Malagasy and English differ in how arguments are licensed, a fundamental distinction between the languages. In Section 5, I examine Pearson's proposal and argue that the subject is not in an A-bar position and hence Pearson's account is not tenable. In Section 6, I look at two western Austronesian languages that apparently share the Malagasy extraction pattern: Tagalog and Indonesian. I show that the 'special objects' analysis proposed in this paper applies to Tagalog, but not to Indonesian and I provide some suggestions to account for this variation.

2. Extraction patterns

The above example from Malagasy illustrates *wh*-movement, a kind of focus movement. Non *wh* focus movement patterns in the same way, as shown in (4).

- (4) a. *Rasoa no namaky ilay boky.*
 Rasoa FOC PST.AT.read DEF book
 “It was Rasoa who read the book.”
- b. *Omaly no namaky ilay boky Rasoa.*
 yesterday FOC PST.AT.read DEF book Rasoa
 “It was yesterday that Rasoa read the book.”
- c. **Ilay boky no namaky Rasoa.*
 DEF book FOC PST.AT.read Rasoa
 “It was the book that Rasoa read.”

Topicalization has the same extraction pattern as focus (see Section 4.3 for examples). Relativization, however, displays a stricter restriction on movement: only subjects (not objects or adjuncts) can be relativized.³

- (5) a. *ny vehivavy izay namaky ilay boky*
 DET woman REL PST.AT.read DEF book
 “the woman who read the book”
- b. **ny andro izay namaky ilay boky Rasoa*
 DET day REL PST.AT.read DEF book Rasoa
 “the day when Rasoa read the book”
- c. **ny boky izay namaky Rasoa*
 DET book REL PST.AT.read Rasoa
 “the book that Rasoa read”

I take the *wh*-movement facts to illustrate the true restriction on (A-bar) movement. Relativization is subject not only to constraints on movement but also to a category-matching requirement between the head noun and the empty operator. In (5b), the head of the relative clause is a noun (*andro* ‘day’) but the operator is of category PP (see Paul 2000 for details).

3. On objects

In this section, I explore some special properties of objects in Malagasy. I then show how these special properties can explain the extraction pattern exemplified

above. (For the moment, I discuss the position of the object, in Section 4 I address the issue of Case assignment.)

3.1 Derived objects in Malagasy

Travis (2000) has argued that there is no derived object position in Malagasy. I briefly summarize Travis' evidence against object shift and then show how her account neatly provides the starting point for the present analysis. Travis notes that Malagasy lacks certain typical derived object constructions. For example, although Malagasy has apparent raising-to-object, it can be shown that the final position is not the object of the matrix clause. Consider the contrast between the RTO example in (6a) and a standard transitive clause in (6b).

- (6) a. *Mino azy_i ho tsara tarehy i Koto_r.*
 AT.believe 3(ACC) PRT good face Koto
 "Koto believes himself to be beautiful."
 b. *Namitaka azy_r i Koto_r.*
 PST.AT.lie 3(ACC) Koto
 "Koto lied to him."

The grammaticality of (6a) shows that a pronoun in the apparently derived object position can be coindexed with the matrix subject. This is not possible for standard direct objects (as shown by (6b)), hence the pronoun in (6a) is not in the direct object position.⁴

Travis also notes that where most languages have constructions that target a derived object position, Malagasy targets the subject position. For example, instead of having a typical applicative (promotion from adjunct to object, or 3-to-2 in Relational Grammar terminology), Malagasy has the Circumstantial Topic (promotion from adjunct to subject, 3-to-1). Consider first the Indonesian data in (7).

- (7) a. *Orang itu masak ikan untuk perempuan itu.*
 man the cook fish for woman the
 "The man cooked fish for the woman."
 b. *Orang itu me-masak-kan perempuan itu ikan.*
 man the TRANS-COOK-BEN woman the fish
 "The man cooked the woman fish."
 c. *Perempuan itu di-masak-kan ikan oleh orang itu.*
 woman the PASS-COOK-BEN fish by man the
 "The woman was cooked fish by the man." [Chung 1976]

In (7a), *perempuan itu* “the woman” is the object of the preposition. In (7b), however, it is a direct argument of the verb. Passive can apply, promoting *perempuan itu* “the woman” to subject, as in (7c). Compare now the Indonesian paradigm in (7) with the parallel examples from Malagasy in (8).

- (8) a. *Nahandro ny trondro hoan’ny vehivavy ny lehilahy.*
 PST.AT.COOK DET fish FOR.GEN.DET woman DET man
 “The man cooked fish for the woman.”
- b. **Nahandro ny vehivavy ny trondro ny lehilahy.*
 PST.AT.COOK DET woman DET fish DET man
- c. *Nandrahoan’ny lehilahy ny trondro ny vehivavy.*
 PST.CT.COOK.GEN.DET man DET fish DET woman
 “The woman was cooked fish by the man.”

The object of the preposition, *ny vehivavy* “the woman” in (8a), cannot appear as a direct object; (8b) is ungrammatical. Instead, the benefactive is promoted directly to subject position with Circumstantial Topic morphology, as shown in (8c).⁵ The gap in the Malagasy paradigm suggests that there is no derived object position, such as is available in Indonesian.

Similarly, Travis shows that possessor raising is only from the subject position, never from the object.⁶ The examples below are from Perlmutter and Postal (1983). (9b) illustrates possessor raising from the subject position.

- (9) a. *Nantsoin-dRakoto ny anaran’ny olona.*
 PST.TT.call.GEN.Rakoto DET name.GEN.DET people
 “The names of the people were called by Rakoto.”
- b. *Nantsoin-dRakoto anarana ny olona.*
 PST.TT.call.GEN.Rakoto name DET people
 “The people were name-called by Rakoto.”

(9b) contrasts with the ungrammatical possessor raising from the object in (10b).

- (10) a. *Niantso ny anaran’ny olona Rakoto.*
 PST.AT.call DET name.GEN.DET people Rakoto
 “Rakoto called the names of the people.”
- b. **Niantso anarana ny olona Rakoto.*
 PST.AT.call name DET people Rakoto

As we saw for applicatives, typical possessor raising occurs from the object position. Compare the Chichewa example in (11) with the Malagasy in (10).

- (11) a. *Fisi a-na-dy-a nsomba za kalulu.*
 hyena SP-PST-eat-ASP fish of hare
 “The hyena ate the hare’s fish.”
- b. *Fisi a-na-dy-er-a kalulu nsomba.*
 hyena SP-PST-eat-APPL-ASP hare fish
 “The hyena ate the hare’s fish.” [Baker 1988: 11]

Once again, where we expect movement to an object position, there is only raising to subject in Malagasy.

Finally, although Malagasy does have object shift, it does not pattern with object shift in Germanic languages. The movement is always optional and never to a fixed position. Travis refers to this as ‘focus scrambling’, borrowing the term from Bobaljik (1995). An example from Travis’ article is given below which shows the variable position of the object with respect to the VP adverbs *tsara* ‘good, well’ and *intsony* ‘anymore’.

- (12) a. *Tsy manasa ny lamba tsara intsony Rakoto.*
 NEG AT.wash DET cloth good anymore Rakoto
 “Rakoto no longer washes clothes well.”
- b. *Tsy manasa tsara ny lamba intsony Rakoto.*
 NEG AT.wash good DET cloth anymore Rakoto
 “Rakoto no longer washes clothes well.”
- c. *Tsy manasa tsara intsony ny lamba Rakoto.*
 NEG AT.wash good anymore DET clother Rakoto
 “Rakoto no longer washes clothes well.”

Importantly, although the object has a fairly free placement, there are certain adjuncts around which it cannot shift. These are the clausal adjuncts: locative adverbials and the exclamative particle *anie* (see Rackowski 1998 for more examples).

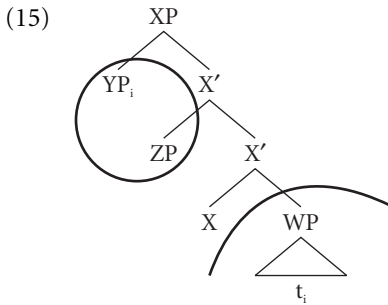
- (13) a. *Nanasa ny lamba tao an’ny tokotany Rabe.*
 PST.AT.wash DET cloth PST.there ACC’DET yard Rabe
 “Rabe washed the clothes in the yard.”
- b. **Nanasa tao an’ny tokotany ny lamba Rabe.*
 PST.AT.wash PST.there ACC’DET yard DET cloth Rabe
- (14) a. *Manasa ny lamba anie Rabe!*
 AT.wash DET cloth EXCL Rabe
 “Is Rabe ever washing the clothes!”
- b. **Manasa anie ny lamba Rabe!*
 AT.wash EXCL DET cloth Rabe

The examples above show that object shift is limited in its rightward movement. Note moreover that unlike Germanic object shift, Malagasy object scrambling is not determined by the semantics of the NP.⁷ Travis concludes that the object never raises out of the verbal projection.

3.2 Immobility of objects

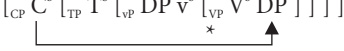
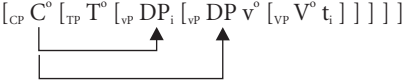

Although Travis does not discuss the *wh*-movement facts, her conclusions provide a simple solution to the problem of extraction in Malagasy. Let us assume that the derived object position and the position for true object shift is SpecvP, as claimed by Chomsky (1995, 1999). If there is no derived object position outside of the verbal projection (e.g. SpecvP is unavailable), the object remains ‘trapped’ in VP. This account crucially rests on the phase theory of Chomsky (1999).

Chomsky (1999) proposes that syntactic derivations can be divided into phases. Spell-Out is cyclic at the phase level: semantic and phonological interpretation occurs at each phase level. Phases (to be precise, ‘strong’ phases) are headed by C, D and v (the top layer of a VP shell). Once a phase is complete, it is opaque to further movement processes, except for the head and elements at its ‘edge’: adjuncts and specifiers. Constituents in the ‘domain’ of a phase are not accessible to extraction at the next phase level. This can be seen in the following diagram, where YP and ZP are at the edge of the phase XP and WP is the domain.



In order for the constituent YP within WP to be accessible to extraction, it must first move to the edge of the phase. This movement is effected with EPP features (or, simply, P-features), which may be freely generated. For example, Chomsky suggests that Object Shift targets the edge of vP and from this position, further movement is possible. See McGinnis (2001) on how phase theory accounts for extraction asymmetries in Bantu applicatives.

This view of syntactic structure has important implications for the Malagasy facts. Assuming Travis (2000) to be correct, the object in Malagasy is never at the edge of vP. Hence no object A-bar movement will ever be possible. The labelled brackets below illustrate this restriction. In the clause structure I assume the logical subject is merged in SpecvP and the logical object in VP (either as sister to V⁰ or as a specifier).

- (16) a. $[_{CP} C^0 [_{TP} T^0 [_{vP} DP v^0 [_{VP} V^0 DP]]]]]$ Malagasy

- b. $[_{CP} C^0 [_{TP} T^0 [_{vP} DP_i [_{VP} DP v^0 [_{VP} V^0 t_i]]]]]]$ English

- c. $[_{CP} C^0 [_{TP} DP_i T^0 [_{vP} DP v^0 [_{VP} V^0 t_i]]]]]$ Malagasy


Since vP is a phase, any elements within the domain of the phase (anything other than the specifier and the head) are invisible for extraction at the next phase level, i.e. CP. As illustrated in (16a), the object is ineligible for attraction by a [+wh] C⁰. For languages such as English that allow object *wh*-movement, the object must first adjoin to vP, as shown in (16b). From this position, the subject and the object are at the edge of a phase and hence visible at the next phase level (CP). In Malagasy, the only ‘escape hatch’ for object extraction is the grammatical subject position, SpecTP. Unlike CP, TP is not a phase and consequently elements in VP are visible to a T probe. The object must therefore be promoted to subject with Theme Topic morphology before any subsequent movement to SpecCP, as illustrated in (16c).⁸ This analysis of extraction in Malagasy correctly accounts for adjunct extraction and long-distance *wh*-movement, as I discuss in the following two sub-sections. In Section 4, I address the consequences of this analysis for objects and their licensing conditions.

3.3 Adjuncts

As mentioned earlier, some but not all adjuncts can undergo movement (see Rabenilaina 1998 for relevant discussion and further data). Instruments, benefactives and indirect objects, unlike most other adjuncts, resist movement. This contrast can be explained if the first set of adjuncts is generated within the lower VP, as seems reasonable to assume. The second set is generated higher: adjoined to TP. The examples below illustrate topicalization, which is subject to similar constraints as focus movement.

- (17) a. **Amin'ny marary dia mitsiky ny dokotera.*
 P.GEN.DET sick TOP AT.smile DET doctor
 “At the patient, the doctor smiles” [Rabenilaina 1998: (23)]
- b. *Isan'andro dia mikapoka mpianatra Rabe.*
 each'day TOP AT.hit student Rabe
 “Every day, Rabe hits students.” [Rabenilaina 1998: (24)]

If, as I have suggested, there is no position at the edge of vP for elements to adjoin to, VP adjuncts (such as indirect objects) should pattern with objects. In other words, like objects, VP adjuncts are ‘trapped’ within the verb phrase. TP adjuncts, on the other hand, are accessible as they are generated outside of the verb phrase. In order to extract a ‘low’ adjunct, Circumstantial Topic must be used to promote the adjunct to subject (similar to Theme Topic for objects).

- (18) *Amin'ny marary dia itsikian'ny dokotera.*
 P.GEN.DET sick TOP CT.smile.GEN.DET doctor
 “At the patient, the doctor smiles”

Intuitively, VP is opaque to extraction of all elements: complements and adjuncts alike. The system of phases outlined above provides a simple account of this opacity.

3.4 Long-distance extraction

Under the above analysis, it should be impossible to extract out of an embedded clause. A CP complement to the verb will be opaque to extraction as it remains within VP. In order for long-distance movement to be possible, the CP must be promoted to subject. The subject of this clause is then eligible for extraction.⁹ The example below illustrates long-distance movement (note that CP complements appear to the right of the matrix subject).

- (19) a. **Iza_i no nilaza i Soa [_{CP object} fa milomano haingana t_i]?*
 who FOC PST.AT.say Soa that AT.swim quick
- b. *Iza_i no nolazain'i Soa [_{CP subject} fa milomano haingana t_i]?*
 who FOC PST.TT.say.GEN Soa that AT.swim quick
 “Who did Soa say swims quickly?”

In (19a), the subject of the embedded clause is extracted and the result is ungrammatical. This result is explained if the matrix vP blocks extraction and there is no intermediate position for the embedded subject to move through. In

(19b), on the other hand, the complement CP is in the subject position. The embedded subject can now be extracted and (19b) is grammatical.

4. On objects and little *v*

In this section, I explore some consequences of the current proposal. In particular, I look at Case assignment in Malagasy. I suggest that unlike in other languages, the Malagasy *v* does not license accusative Case. Instead the object receives Case within the lower VP.

Within current syntactic assumptions, verbs are built up of two parts: the VP, headed by a root and containing any internal arguments, and *v*P, where agents are merged. This layered view of the VP began with work by Larson (1988) on double object verbs. Generalizing this approach, Kratzer (1996) proposes that the higher verbal layer is where agents are projected and she labels this projection VoicePhrase. Moreover, according to Kratzer, since Voice is a functional category it is also the locus of accusative Case. Recent work by Chomsky (1995) has adopted this view of phrase structure, though he labels the higher verbal head ‘*v*’. Along with Kratzer, Chomsky assumes that *v* is responsible for the projection of agents and accusative Case checking. In this way, *v* subsumes the role of AgrO of early Minimalist work. Case is either checked under movement of the object to the outer Spec*v*P or under the Agree relation between *v* and the object (no movement, overt or covert).

Following Marantz (1999), we can think of the role of *v* as being two-fold. On the one hand it creates a verb and provides certain semantic properties (event, agentive). On the other hand, it merges with an external argument and enters into an Agree relation with the object. This second characteristic makes *v* the ‘Burzio head’, capturing Burzio’s Generalization (which correlates the external argument and accusative Case).

- (20) Burzio’s Generalization (Burzio 1986: 178):
- a. A verb which does not take an external argument does not assign accusative Case.
 - b. A verb which does not assign accusative Case does not take an external argument.

We can explain (20) by stating that *v* is simply lacking in certain verbs (e.g. passives and unaccusatives).

Despite the attractiveness of (20), I would like to suggest that Burzio’s

Generalization is incorrect. Malagasy provides an example of a language where the projection of an external argument and accusative Case do not correlate. This can be seen in non-active examples: (21a) is a Theme Topic example, with no accusative Case, but the agent is still projected; (21b), a Circumstantial Topic example, exhibits both accusative case and an external argument.

- (21) a. *Novakin-dRabe tany an-dakozia ny boky.*
 PST.TT.read.GEN.Rabe PST.there ACC-kitchen DET book
 ‘The book was read by Rabe in the kitchen.’
 b. *Namakian-dRabe boky ny lakozia.*
 PST.CT.read.GEN.Rabe book DET kitchen
 ‘The kitchen was where Rabe read the book.’

One could claim that in (21a), there is no agent projected, that the genitive NP *Rabe* is an adjunct (similar to the English ‘by’-phrase). As a result, there is no accusative Case. Under this view, however, (21b) is a mystery as there is accusative Case, but the genitive agent has exactly the same form and distribution as in (21a).

I propose that in Malagasy, the object does not enter into an Agree relation with *v*.¹⁰ The object instead receives Case within VP, along the lines of accusative Case assignment proposed by Woolford (1997). This Case relates to theta-roles (theme) and is therefore similar to what we think of as inherent Case. This is not, however, the inherent Case of Belletti (1988), where inherent Case imposes a definiteness effect (although indefiniteness or nonspecificity is a property of objects in Tagalog, as will be discussed in the next section). In sum, *v* in Malagasy has a purely argument structure role: introducing the external argument.

5. A-bar subject

One prominent analysis of the extraction asymmetry in (2) has invoked the A-bar status of the subject position (e.g. Pearson 2001; see also Soh 1998 on Malay).¹¹ On this view, (2c) is ungrammatical due to a Relativized Minimality violation when the object A-bar moves past the subject.¹² I show, however, that this analysis is not tenable for Malagasy as the subject is an A, not an A-bar, position. To support my conclusion, I draw on data from binding.

Traditionally, the A/A-bar distinction is used to distinguish argument positions (subject and object) from adjunct positions (topics and *wh*-elements).¹³ One typical property of A-bar elements is that they undergo reconstruction:

they ‘move back’ to their base (theta) position. This can be seen in the following examples from English topicalization and *wh*-movement.

- (22) a. [These pictures of himself_i], Alex_i really wants to buy t.
 b. [Which pictures of herself_i] does Sandy_i really want to sell t?

I do not address the different possible analyses of reconstruction (e.g. the chain binding of Barss 1986 or the copy theory of Chomsky 1995). It is enough to recognize that A-bar movement is associated with reconstruction, which affects binding possibilities.¹⁴ In the next sections, I first show that despite claims to the contrary, Condition A in Malagasy does not provide any evidence for reconstruction. I then provide data from Condition C that argues against reconstruction.

5.1 Condition A

Data from the binding of reflexives are often cited as evidence for the A-bar status of the subject (e.g. Pearson 2001). Consider the following:

- (23) a. *Manaja tena_i i Sahondra_i.*
 AT.respect self Sahondra
 “Sahondra respects herself.”
 b. *Hajain’i Sahondra_i ny tenany_i.*
 TT.respect.GEN.Sahondra DET self.3(GEN)
 “Sahondra respects herself.”

If, as generally assumed, reflexives require a c-commanding antecedent, the grammaticality of (23b) suggests that the subject can reconstruct.¹⁵ Since reconstruction is a hallmark property of A-bar positions, the datum in (23b) fits with an A-bar analysis of the subject position.

As the reader may have noticed, the examples in (23a,b) are not a minimal pair. Note, for example, that the reflexive in (23a) is a ‘bare’ reflexive, *tena* ‘body’. In (23b), on the other hand, the reflexive is the morphologically complex *ny tenany* ‘his body’. As a first observation, unlike *ny tenany*, *tena* cannot appear in the subject position. (24a) can be ruled out due the Definiteness Requirement on the subject position (see Keenan 1976). In (24b), however, I have presented a focus construction, which allows indefinite subjects to appear in the clefted position. Nevertheless, (24b) is ungrammatical.¹⁶

- (24) a. **Hajain’i Sahondra tena.*
 TT.respect.GEN.Sahondra self
 “Herself is respected by Sahondra.”

- b. **Tena no hajain'i Sahondra.*
 self FOC TT.respect.GEN.Sahondra
 “It is herself who is respected by Sahondra.”

If indeed subjects could reconstruct, (24b) would be grammatical. The A-bar analysis must explain why reconstruction is possible in (23b), but ruled out in (24b).

Second, it can be shown that *ny tenany* does not require c-command and may even take a discourse antecedent not syntactically present.¹⁷ The examples in (25) partially illustrate the distribution of *ny tenany*.¹⁸ Note that *tena* would be ungrammatical in place of *ny tenany* in (25).

- (25) a. *Mandresy ny tenany_i ny alahelon-dRabe_i.*
 AT.defeat DET self.3(GEN) DET sadness.GEN.Rabe
 “Rabe’s sadness defeats him.”
- b. *Nandeha tany amiko Rabe_i ary nisambotra*
 PST.AT.GO PST.there P.1SG(GEN) Rabe and PST.AT.stop
ny tenany_i ny polisy.
 DET self.3(GEN) DET police
 “Rabe went to my house and then the police arrested him.”
- c. *Sambatra Rabe_i Notoloran-dRakoto valisoa*
 happy Rabe. PST.TT.offer.GEN.Rakoto present
ny tenany_i.
 DET self.3(GEN)
 “Rabe is happy. Rakoto offered him a present.”

Since *ny tenany* does not pattern with standard reflexives, the grammaticality of (23b) does not provide convincing evidence in favour of reconstruction. Although I do not have a complete analysis of *ny tenany*, it is possible that whatever accounts for the grammaticality of (25c) can extend to examples such as (23b). In other words, if *ny tenany* does not require a c-commanding antecedent, the grammaticality of (23b) can be accounted for without invoking reconstruction. Reconstruction, on the other hand, can only account for (23b); an additional mechanism would be required for (25).

5.2 Condition C

Clear evidence against the A-bar status of subjects in Malagasy comes from Condition C. Setting aside the caveats mentioned in footnote 14, if the subject is indeed in an A-bar position, there should be reconstruction effects. (26) and

(27) show that this is not the case. If the subject did reconstruct, (26b) should have the same status as (26a), which is not the case. The pronoun in the subject position in (26b) c-commands the proper name within the genitive agent, giving rise to a Condition C effect. In other words, movement to the subject position can ‘create’ binding violations that cannot be undone by reconstruction.

- (26) a. *Nanamby azy_i ny rain-dRakoto_i.*
 PST.AT.hire 3(ACC) DET father.GEN.Rakoto
 “Rakoto’s father hired him.”
- b. **Notambazan’ny rain-dRakoto_i izy_i.*
 PST.TT.hire.GEN.DET.father.GEN.Rakoto 3(NOM)
 “He was hired by Rakoto’s father.”

Similarly, with reconstruction, (27a) and (27b) should have the same status. In (27b), however, the binding violation is ‘fixed’ by movement of the NP containing the proper name to the subject position.

- (27) a. **Nanamby ny zana-dRakoto_i ariary folo izy_i.*
 PST.AT.hire DET child.GEN.Rakoto ariary ten 3(NOM)
 “He hired Rakoto’s child for 10 ariary.”
- b. *Notambazany_i ariary folo ny zana-dRakoto_i.*
 PST.TT.hire.GEN.3 ariary ten DET child.GEN.Rakoto
 “Rakoto’s child was hired by him for 10 ariary.”

The data in this section have shown that reconstruction is not obligatory nor even an option. Since reconstruction is the standard test for A versus A-bar positions, we can conclude that the subject is an A position.

5.3 Summary

Data from binding (Condition A and Condition C) indicate that there is no reconstruction from the subject position.¹⁹ Since there is no evidence for the A-bar status of the subject, we cannot claim that (2c) is a Relativized Minimality violation. I note that in languages that have been argued to have A-bar subjects, the subject does not block A-bar movement of other elements in the clause (see e.g. Diesing 1990 on Yiddish). It is therefore not clear that claiming the subject to be an A-bar position actually solves the extraction puzzle. Therefore although it may turn out that the A/A-bar status of the subject in Malagasy remains a subject of debate, it still would need to be shown that this status has a direct effect on extraction.

6. Cross-linguistic variation

As mentioned in the introduction, certain other Western Austronesian languages have the same extraction pattern as Malagasy. I now show that in some cases, the account presented in this paper extends to these languages. In other cases, however, a different analysis is required. I will not look at all languages that share the extraction asymmetry. Instead I focus on two types: the Tagalog type and the Indonesian type.

6.1 Tagalog

Tagalog has a very similar extraction pattern to Malagasy: only subjects can be relativized.²⁰

- (28) a. *ang bata ng nanuksu kay Josie*
 NOM child LNK PERF.AV-tease DAT Josie
 “the child who teased Josie”
- b. **ang bata ng nanuksu si Josie*
 NOM child LNK PERF.AV-tease NOM Josie
 “the child who Josie teased”
- c. *ang bata ng tinuksu ni Josie*
 NOM child LNK PERF.OV-tease GEN Josie
 “the child who was teased by Josie” [Kroeger 1993:211]

Will the analysis presented in the previous section account for Tagalog? As a first observation, Tagalog presents a better case for A-bar subject. Richards (2000) and Sells (2000) argue very convincingly that what is called the nominative NP in Tagalog patterns with topics. Hence the nominative NP is in an A-bar position. Interestingly, Tagalog also appears to lack a derived object position. The Tagalog data are in fact more striking than the Malagasy. It has long been recognized that except under very particular conditions, direct objects in Tagalog are indefinite (see e.g. Adams and Manaster-Ramer 1988 for a thorough discussion of the data).

- (29) **Gumawa ng sapatos na iyon si Bing*
 AV.PERF-make GEN shoe LNK that NOM Bing
 “Bing made those shoes.” [Kroeger 1993:63]

Like Malagasy, Tagalog lacks subject-to-object raising and typical applicatives. Moreover, only possessors of the nominative NP may undergo possessor

raising. Drawing on a range of data, Maclachlan and Nakamura (1997) provide strong arguments that in Tagalog, the direct object is assigned inherent Case and remains within VP.

At this point, we have two possible explanations for extraction in Tagalog. First, the subject is an A-bar position, hence any A-bar movement over the subject creates a Relativized Minimality violation. Second, the object is too ‘low’ in the VP to allow extraction. These two accounts are clearly not incompatible with each other. The ‘low’ position of the object accounts for unusual object properties and the A-bar status of the subject accounts for special subject properties. Note, however, that the A-bar status of the subject in Tagalog is argued for based mainly on data from binding. If, as I have suggested, we need to reconsider binding data from these languages, the case for an A-bar subject is potentially weakened. In the final analysis, Tagalog and Malagasy share some important basic properties that affect *wh*-movement in the same way. It would be important to closely study other Philippine languages to see what the range of data truly is.²¹

6.2 Indonesian/Malay

At first glance, Indonesian resembles both Malagasy and Tagalog.²² The Indonesian voice system is different, but in certain contexts similar extraction restrictions obtain. I present data from two voice forms: the bare verbs and the *meN*-verbs. With bare verbs, either the subject or the object can be extracted freely, as shown in (30). (Data are adapted from Cole and Hermon 1998.)

- (30) a. *perempuan yang pergi itu*
 woman that leave that
 “that woman who left”
 b. *perempuan yang dia lihat itu*
 woman that he see that
 “that woman that he saw”

With *meN*-verbs, however, an extraction asymmetry obtains, as can be seen by comparing (30b) and (31), where object relativization is ungrammatical.

- (31) **perempuan yang dia me-lihat itu*
 woman that he *meN*-see that
 “that woman that he saw”

When Indonesian verbs bear the *meN*-prefix, object *wh*-movement is blocked in a similar way to what we have seen for objects in Malagasy and Tagalog.

What accounts for the Indonesian data? Are objects in Indonesian subject to the same restricted distribution as seen in Malagasy? In fact, in Indonesian there is a productive process of applicative (see (7)). In other words, the object of a preposition may be promoted to direct object. Thus it appears that there is a derived object position in Indonesian. The lack of object movement therefore cannot be linked to special properties of the object itself. Indonesian therefore poses a problem for my analysis: if a language has derived objects, it should also have A-bar movement of objects.

It could be that the A-bar analysis is the correct one for Indonesian. As initial evidence, reflexives are permitted as the subject of *di* verbs (\approx passive).

- (32) *Dibandingkannya dirinya dengan raja.*
 DI.compare.3SG self with king
 “He compared himself with the king.” [Sneddon 1996:256]

The grammaticality of the above example suggests that there is reconstruction of the subject, hence it is an A-bar position (see Soh 1998 for a similar conclusion). But recall that I have challenged similar data from Malagasy.

Alternatively, the data in (30) could be taken as central, showing that both subject and object extraction is possible (see Cole and Hermon 1998). The ungrammaticality of (31) is morphological: *meN-* deletes when NP or operator movement passes over the verb (Saddy 1991; Cole and Hermon 1998). In other words, contrary to what is traditionally assumed, Indonesian exhibits no extraction asymmetry at all.

The conclusion that Indonesian is somehow ‘different’ from Malagasy and Tagalog fits with the view that the subject-initial Austronesian languages have very different properties from the verb-initial ones. If indeed the extraction restriction in Malagasy and Tagalog relates to argument licensing, it is not surprising that in an SVO language like Indonesian, the licensing conditions for arguments are very different and in fact more like English.

6.3 Summary

In this section, I have considered two different languages that appear to share the Malagasy extraction asymmetry. Objects are more restricted for *wh*-movement than subjects in both Tagalog and Indonesian. I have suggested, however, that only in Tagalog does the analysis proposed in this paper apply. The extraction facts in Indonesian are in fact quite different, despite initial appearances. It is possible that there is a single historical origin of the restriction on

movement in this language family. Synchronically, however, the different languages exhibit distinct grammatical systems. The clues to these differences are overtly encoded for the child in such aspects as word order.

7. Conclusion

In this paper, I have argued that the famous ‘subjects only’ restriction on A-bar movement in Malagasy is related to special properties of the object. More precisely, objects in Malagasy can never escape VP and are therefore inaccessible to A-bar movement over a subject. For an object to undergo A-bar movement, it must be promoted to (grammatical) subject via Theme Topic voice morphology. From the subject position, the logical object is structurally ‘high’ enough to be accessible to a C^0 probe. The ‘low’ position of the object correlates with a general lack of derived objects in this language.

Returning to the question of variation, the analysis in this paper suggests that there is an important difference between Malagasy-type languages and English-type languages. The variation in extraction can be linked to variation in how arguments are licensed. The special nature of objects in Malagasy may in turn be connected to word order, as is proposed by Travis (2000). Drawing on work by Massam and Smallwood (1996) on Niuean, Travis suggests that certain verb-initial languages such as Malagasy are predicate-moving languages rather than argument-moving. Arguments are not licensed by displacement as is commonly assumed for English. Instead, arguments (such as objects) can be licensed in-situ. I have shown how this proposal neatly ties in with facts from A-bar movement. We therefore have a cluster of properties predicted to pattern together. Whether or not this prediction can be confirmed cross-linguistically is a matter of future research.

Notes

* I first express my appreciation to Saholy Hanitriniaina, Jeannot-Fils Ranaivoson and Haritantly Rasolondraibe for their judgments on the Malagasy data. Unless otherwise indicated, all Malagasy data are from these speakers. I would like to thank the audience at AFLA VIII and especially Alec Marantz, Norvin Richards and Lisa Travis for their comments. Comments from a reviewer were extremely helpful in clarifying my analysis. Any errors remain my own responsibility. This research was funded by an FCAR post-doctoral fellowship to the author and by a SSHRC grant (#412-97-0016) to Anne-Marie di Sciullo of UQAM.

1. As we will see in Section 3.3, only IP-level adjuncts may directly extract. VP-adjuncts must be promoted to subject with Circumstantial Topic prior to *wh*-movement.
2. In Malagasy, *wh*-questions are clefts. In Paul (2001), I show that clefts involve operator movement rather than displacement of the *wh*-element. For simplicity, however, I will refer to the *wh*-element itself as the ‘moved’ item.
3. The restriction in (5) holds for Raising to Object (RTO): only subjects can be ‘raised’ to the object position of verbs like *mino* ‘believe’.

- (i) a. **Mino an’ily boky ho namaky Raso Rabe.*
 AT.believe ACC’DEF book PRT P ST.AT.read Raso Rabe
 b. *Mino an’ily boky ho novakin-dRaso Rabe.*
 AT.believe ACC’DEF book PRT PST.TT.read.GEN.Raso Rabe
 ‘Rabe believes the book to have been read by Raso.’

The fact that RTO patterns with relativization suggests that there is A-bar movement in (i). Pearson (2001) argues that the ‘derived’ object is in fact base-generated in the matrix clause and that there is operator movement in the lower clause, giving RTO its A-bar properties. I discuss RTO in more detail in section. See Nakamura (2000) for similar arguments for Tagalog.

4. The data in (6) suggest that the ‘raised’ object is not in the matrix clause, as argued in Massam (1984), and contra Pearson (2001), who argues for base-generation.
5. Examples parallel to (8c) are often cited in the Philippine literature as evidence in favour of an ergative analysis.
6. The possessor raising data are in fact more complex than the following discussion may suggest. Travis considers the full range of data and concludes that true possessor raising is indeed limited to the subject position.
7. Non-specific objects, however, cannot shift. See Rackowski (1998).
8. Object *wh*-elements may remain in-situ, however.

- (i) *Namaky inona i Koto?*
 PST.AT.read what Koto
 ‘What did Koto read?’

The licensing for *wh* in-situ is not sensitive to the same locality conditions as overt movement (e.g. unselective binding (Baker 1970)). This is an area which clearly requires further research, but see Simpson (1995) for relevant data from a range of languages which support the distinction between overt *wh*-movement and in-situ licensing.

9. Here arise questions about the status of the CED in Malagasy. Extraction out of sentential subjects is perfectly grammatical, as seen in (19b). Pearson (2001) argues for clausal pied-piping. Nakamura (2000) suggests that the subject position in Tagalog is properly governed. Davies and Dubinsky (1999a,b) propose that sentential subjects are islands only when they are DPs. They argue that in languages like Malagasy, sentential subjects are CPs and therefore transparent to extraction. I leave this problem for future research.
10. One could save Burzio’s Generalization by claiming that in Malagasy there is no accusative Case at all and (20) holds vacuously. There are various other ways of implementing the idea that objects do not Agree with the verb in Malagasy. For example, vP has only

one specifier (for the agent) hence no position for the object to move into. Alternatively, adjunction to vP is barred. Or, if one assumes that accusative Case is checked in a distinct projection (e.g. AspP of Travis (1991)), then it would suffice to say that this head is ‘inactive’. See Maclachlan and Nakamura (1997) for an analysis of Tagalog along the lines of the latter proposal. See also Zwart (2001) for arguments against multiple specifiers and for a separate projection for object Case checking.

11. There are, of course, other possible analyses of the extraction asymmetry (see e.g. Nakamura 1996 for a Global Economy account of Tagalog; Chung 1998 suggests that the subject position in Malagasy is properly governed). I address the A-bar subject analysis as it seems to be the one the most strongly argued for in the literature.

12. Some researchers have argued for the A-bar status of the subject without invoking Relativized Minimality (RM) to explain extraction. For example, Pearson (2001) argues that the subject in Malagasy is a topic, an A-bar position. He does not, however, rule out object movement with RM, *per se*, but he does invoke a kind of blocking effect: *wh*-movement and topicalization target the same (intermediate) position. My arguments against the A-bar status of subjects apply equally to Pearson’s analysis and the RM analysis. Note that simple RM or blocking is problematic as it predicts no difference between the extraction of adjuncts and objects, *contra* the data in (2). Finally, any RM analysis can be reformulated with reference to the Minimal Link Condition of Chomsky (1995).

13. Chomsky (1995) replaces the A/A-bar distinction with L- vs. non-L relatedness. I will continue to use the former terminology in this paper.

14. There are arguments in the literature that A movement may reconstruct under certain conditions (Boeckx 2000). Further complicating the issue, as pointed out to me by Matt Pearson (p.c.), English topicalization has mixed reconstruction properties. In (ia), reconstruction is obligatory, leading to a Condition A violation, while in (ib), reconstruction is impossible, creating a Condition C violation.

- (i) a. *Sam_i pictures of himself_i hit in the head.
 b. *Her_i Sandy’s mother likes.

Jackendoff (1972: 129–130) discusses the following examples, where A-bar movement does not reconstruct.

- (ii) a. Who that Mary_i knew do you think she_i visited? (*wh*-movement)
 b. The girl who kicked John_i Mary thinks he_i secretly loves. (topicalization)

Reconstruction, *contra* what is traditionally assumed, is not the best test for A/A-bar status.

15. The status of (23b) is in fact not clear. Keenan (1976: 294–295) states “non-subject agents ... do not control reflexives, and subjects never get reflexivized in Malagasy”. During my fieldwork, I have noted that consultants often describe examples like (23b) as ‘emphatic’ in some respect. For the sake of argument, I accept (23b) as grammatical.

16. *Tena* normally surfaces immediately next to the verb, as in (23a). It is not an affix, however, as it can be separated from the verb by the genitive agent.

- (i) *Amonoan’ny reny tena ny zanany.*
 CT.kill.GEN.DET mother self DET child.3(GEN)
 “Mothers kill themselves for their children.”

Note also that the focus position reconstructs for binding purposes: (ii) is a Condition C violation.

- (ii) *Tany amin'ny renin'i Koto_i no misakafo izy*_i isan'andro.*
 PST.there P.GEN.DET mother.GEN.Koto FOC AT.eat 3(NOM) each'day
 "It is at Koto's mother's house that he eats every day."

As pointed out by the reviewer, (24b) may be ungrammatical due to reconstruction to the subject position, which results in a Definiteness Requirement violation.

17. The contrast between *tena* and *ny tenany* is similar to the bare and complex reflexives in Balinese, as discussed in detail by Arka (1998).

18. One important restriction on *ny tenany* is that it cannot be the agent of a verb:

- (i) **Novonoin'ny tenany i Saholy.*
 PST.TT.kill.GEN.DET self.3(GEN) Saholy
 *"Saholy was killed by herself."

Note, however, that the English translation is also ungrammatical (Jackendoff 1972).

19. Similarly, there are no weak crossover effects in Malagasy.

- (i) *Norohan'ny reniny_i ny zaza tsirairay_i.*
 PST.TT.kiss.GEN.DET mother.3(GEN) DET child each
 "Each child was kissed by his mother."

The absence of weak crossover, however, does not prove the subject to be in an A position since (i) could be an example of 'weakest crossover' (Lasnik and Saito 1991). See Pearson (2001) for some discussion of weak crossover in Malagasy.

20. Adjunct clefting is not always possible in Tagalog (and several other languages in this family). Instead, adjuncts are simply fronted (Kroeger 1993). If this fronting is a type of A-bar movement, as seems likely, then Tagalog and Malagasy share the same extraction pattern: adjuncts and subjects can undergo A-bar movement while objects cannot.

21. Richards (2001) present a phase theory account of Tagalog that is essentially the inverse of the one presented in this paper. According to Richards, voice morphology is an overt reflex of movement to the edge of vP. I refer the reader to his paper for more details.

22. According to Davies (1999), the extraction facts that I describe for Indonesian/Malay hold for Madurese, another language spoken in Indonesia.

Abbreviations

3 = third person	EXCL = exclamative	PERF = perfective
ACC = accusative	FOC = focus	PRT = particle
ASP = aspect	GEN = genitive	PST = past
APPL = applicative	LNK = linker	REL = relative marker
AT = Actor Topic	NEG = negation	SG = singular
AV = Actor Voice	NOM = nominative	SP = subject prefix
BEN = benefactive	OV = Object Voice	TOP = topic
CT = Circumstantial Topic	P = preposition	TRANS = transitivity marker
DEF = definite	PASS = passive	TT = Theme Topic
DET = determiner		

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