Extraposition Patterns in Malagasy*

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SUMMARY

Malagasy is a predicate-initial, subject-final language; however, various elements can appear after the subject, in an extraposed position. This paper documents syntactic and semantic restrictions on extraposition. A wide range of elements can appear in this position, with only objects being excluded. Extraposition serves to background the extraposed constituent.

RÉSUMÉ

Le malgache est une langue à prédicat initial et à sujet final; cependant, divers éléments peuvent apparaître après le sujet dans une position extraposée. Cet article décrit des restrictions syntaxiques et sémantiques sur l'extraposition. Une large gamme d'éléments peuvent apparaître dans cette position; seuls les objets en sont exclus. L'extraposition sert à contextualiser le constituent extraposé.

1 Introduction

Malagasy, the native language of the island of Madagascar, spoken by over 17 million people, is traditionally described as having basic predicate-initial, subject-final word order, or VOXS order in verbal clauses. In fact, however, it is often the case that elements in the X slot follow the subject, yielding VOSX word order. I will call this alternation EXTRAPOSITION, without making a claim regarding the analysis. While the existence of extraposition in Malagasy is widely recognized, there is very little discussion in the literature regarding the details (but see Pearson 2001). This paper aims to provide a preliminary description of the syntax and semantics of

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^{*} It is a pleasure to dedicate this paper to Lisa for all her insightful theoretical and descriptive work on Malagasy, and of course for being the "donna" of the Malagasy mafia for longer than I have been working on the language. I would also like to take the opportunity to extend a warm thank you to my Gainesville Malagasy consultants, Bodo and Voara Randrianasolo, for many enjoyable and profitable sessions over the last decade. The data here are based on their judgments. Glossing follows Leipzig glossing conventions with the addition of AT for actor topic voice, TT for theme topic voice, and CT for circumstantial topic voice. All verbs are in the AT form unless otherwise indicated.

extraposition: what kinds of elements can, must, or cannot extrapose (section 2) and restrictions on their discourse status (section 3).

2 EXTRAPOSITION PATTERNS

Extraposition in Malagasy is generally quite free. The table in (1) summarizes those constituents which cannot be extraposed, those that must be extraposed, and those which may be extraposed. Data follow below, with constituents of interest in extraposed or unextraposed positions coloridentified.

Table 1: Malagasy extraposition options

(1)

IMPOSSIBLE	OBLIGATORY	OPTIONAL
objects	dependent clauses with an overt subject	PP complements
		PP adverbials
		VP adverbs
		S adverbs
		dependent clauses without an overt subject

As the table indicates, only nominal objects are prohibited from extraposing. This includes all kinds of objects—not only direct objects as in (2a), but also "fake" objects, (2b), causees, (2c), and possessees from which the possessor has raised to subject position (see Keenan and Ralalaoherivony 1996), (2d). 1

- (2) a. Namono (ny akoho) Rasoa (*ny akoho)
 PAST.kill DET chicken Rasoa DET chicken
 'Rasoa killed the chicken.'
 - b. Milanja (telopolo kilao) Rabe (*telopolo kilao)
 PRES.weigh thirty kilo Rabe thirty kilo
 'Rabe weighs 30 kilos.'
 - c. N-amp-ianjera (ny latabatra) Rabe (*ny latabatra)
 PAST-CAUS-fall DET table Rabe DET table
 'Rabe caused the table to fall.'
 - d. Maty (vady) tampoka Rabe (*vady) dead spouse suddenly Rabe spouse 'Rabe's spouse died suddenly.'

¹ It is possible that "heavy" objects may extrapose, yielding VSO word order. I have not systematically investigated this option.

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In contrast to nominal objects, full clausal objects must extrapose (Keenan 1976, Pearson 2001, Potsdam and Polinsky 2007). By full clause, I mean a finite clause that contains an overt subject. (3) illustrates complement clauses introduced by the complementizers *fa* 'that', *raha* 'if', and *hoe* 'COMP.WH'.

- (*fa hividy fiara aho) Rabe hividy fiara aho) (3) a. Manantena (fa PRES.hope that buy car 1sg.nom Rabe that buy car 1sg.nom 'Rabe hopes that I will buy a car.'
 - b. Nanotany (*raha nihomehy Rabe) ny mpampianatra (raha nihomehy Rabe)
 PAST.ask if PAST.laugh Rabe DET teacher if PAST.laugh Rabe
 'The teacher asked if Rabe laughed.'
 - c. Nanotany (*hoe iza no nihomehy) ny mpampianatra PAST.ask COMP.WH who FOC PAST.laugh DET teacher (hoe iza no nihomehy)
 COMP.WH who FOC PAST.laugh 'The teacher asked who laughed.'

Full clausal adverbials introduced by subordinating conjunctions such as *satria* 'because', *raha* 'if', or *rehefa* 'when', as in (4), also must extrapose. This includes adjunct clauses which exceptionally show SVO word order, (5), such as those following the subordinators *satria* 'because', *noho* 'due to', *nony* 'when', and *dieny*, *fony* 'while' (see Keenan 1976). None of these clausal adjuncts may appear in a position to the left of the subject.

- (4) Handeha (*rehefa tafaverina Rasoa) aho (rehefa tafaverina Rasoa) FUT.go when return Rasoa 1SG.NOM when return Rasoa 'I will leave when Rasoa returns.'
- (5) Tsy nianatra Rabe (*satria ny vadiny narary) because DET spouse.3SG NEG PAST.study PAST.sick Rabe (satria vadiny ny narary) because DET spouse.3SG PAST.sick 'Rabe didn't study because his wife was sick.'

What has not been previously documented in full is that clausal extraposition is optional if the clausal constituent, both complements and adjuncts, lacks an overt subject. I illustrate below for a range of cases: controlled clauses, existential clauses, and topic drop clauses.

The canonical case of subjectless clauses is controlled clauses (see Law 1995, Paul and Ranaivoson 1998, Polinsky and Potsdam 2003, 2005, Potsdam and Polinsky 2007, Potsdam 2009, and others on Malagasy control). Malagasy does not have a dedicated infinitival verb form and instead typically uses an irrealis verb form with the prefix h- 'IRR' in control contexts. As numerous examples throughout the literature show, controlled clauses do not need to extrapose. (6) illustrates controlled complements. (7) illustrates a controlled adjunct.

- (6) a. Manantena (hianatra teny anglisy) Rabe (hianatra teny anglisy)
 PRES.hope IRR.learn language English Rabe IRR.learn language English
 'Rabe hopes to learn English.'
 - Nanontany ahy (hamaky ireo boky ireo) ny mpianatra 1sg.acc PAST.ask IRR.read DEM book student DEM DET (hamaky ireo boky ireo) IRR.read book DEM DEM 'The student asked me to read those books.'
- (7) mpianatra Mianatra mafy (mba hahazo karama be) ilay study hard COMP.IRR IRR.get student wages big DEM (mba hahazo karama be) COMP.IRR IRR.get wages big 'The student studies hard in order to earn a big salary.'

Some existential clauses lack a subject (Pearson 1996, Paul 2000b, Law 2011). Such clauses also do not need to extrapose when they are complements:

(8) Milaza gidro (fa expl) Rabe mis y an-tsena any lemur LOC PREP-market Rabe PRES.say that exist (fa mis y gidro any an-tsena expl) LOC PREP-market that exist lemur 'Rabe says that there are lemurs at the market.'

Keenan 1976 and Potsdam and Polinsky 2007 describe and analyze a construction in which the subject of a subordinate finite clause is missing but is interpreted as coreferential with the higher subject. Potsdam and Polinsky 2007 analyzes this as topic drop in an embedded clause. Such topic drop clauses need not extrapose.²

- (9)Milaza Rabe (fa nahita gidro an-tsena) tany lemur PRES.say Rabe that PAST.saw LOC PREP-market nahita gidro (fa tany an-tsena) that PAST.saw lemur LOC PREP-market 'Rabe says that he (Rabe) saw a lemur at the market.'
- (10)Marary Rasoa (satria nihinana voankazo manta) unripe PRES.sick Rasoa because PAST.eat fruit nihinana voankazo (satria manta) because PAST.eat fruit unripe 'Rasoa is sick because she (Rasoa) ate unripe fruit.'

² Randriamasimanana 2007 gives two examples similar to (9) with the verb *milaza* 'say'. To my knowledge, this is the first indication in the literature that finite CP extraposition is not always obligatory.

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Finally, other clause-like elements that lack a clause-internal subject and do not need to extrapose are ECM/SOR complements (Paul and Rabaovololona 1998, Travis 2001) and small clause complements to perception verbs (Pearson 2001, 2017). Examples are available in the references cited.

Returning to the bigger picture, in most cases, extraposition is simply optional.³ This includes all kinds of PP complements: locatives, (11), goals, (12), recipients, (13), material themes, (14), instruments, (15), and benefactives, (16). Observe that the predicate need not be verbal; in (16), the main predicate is an adjective.

- (11)Nitoetra (tamin' ity nandritran' ny raopolo trano ity) taona PAST.live PREP during DEM house DEM DET twenty vear (tamin' ity Ratsimba trano ity) DET Ratsimba DEM house DEM PREP 'The Ratsimbas lived in this house for twenty years.'
- (12) Nanimpy ny saribakoliny (teo am-baravarankely)
 PAST.throw DET doll.3SG LOC PREP-window
 ilay zazavavy (teo am-baravarankely)
 DEM girl LOC PREP-window
 'The girl threw her doll out the window.'
- (13) Nanome vola (ho an-dRabe) aho (ho an-dRabe)
 PAST.give money PREP PREP-Rabe 1SG PREP PREP-Rabe
 'I gave money to Rabe.'
- (14)Nameno harona i Bakoly ny (tamin' ny vary) (tamin' ny vary) PAST.fill DET basket PREP DET rice Bakoly PREP DET rice 'Bakoly filled the basket with rice.'
- (15)Nandidy hena ny (tamin' ny antsy) Rasoa (tamin' ny antsy) PAST.cut DET meat PREP DET knife Rasoa PREP DET knife 'Rasoa cut the meat with a knife.
- (16)Tsy tsara an' ankizy) divay (ho ankizy) (ho ny ny an' ny NEG good children DET wine children PREP PREP DET PREP PREP DET 'Wine is not good for children.'

Optional extraposition is possible for comparative phrases (Potsdam 2011):

³ See Rajaonarimanana 1995:87, which indicates that all types of adjuncts can be placed before or after the subject ("Tous ces compléments circonstanciels n'ont pas de place fixe dans la phrase. Ils peuvent se mettre avant or après le sujet").

- (17) a. Hendry (noho nv zandriny) i Koto (noho zandriny) ny sibling.3sG Koto sibling.3sG wise than DET than DET 'Koto is wiser than his younger sibling.'
 - Hendry (hoatra ny zandriny) i Noro (hoatra ny zandriny) like DET sibling.3SG Noro like DET sibling.3sG wise 'Noro is as wise as her younger sibling.'

Extraposition is also optional with most kinds of adverbials. VP-adverbs may optionally extrapose, (18), as may S-adverbs, (19), temporal adverbials, (20), locative adverbials, (21), and reason phrases, (22).

- (18) Namono akoho (tamin-katezerana) ny mpamboly (tamin-katezerana)
 PAST.kill chicken PREP-anger
 'The farmer killed the chickens angrily.'
- (19) Tsy mandamina ny trano (matetika) Rakoto (matetika)

 NEG PRES.arrange DET house often Rakoto often

 'Rakoto generally does not put the house in order.'
- (20)Hividy fiara vaovao (amin' ny taona ambony) IRR.buy car above new PREP DET year aho (amin' ny ambony) taona PREP DET year above 'I will buy a new car next year.'
- Nanoratra taratasy (tany am-pianarana) ny zazavavy (tany am-pianarana) PAST.write letter LOC PREP-school DET girl LOC PREP-school 'The girl wrote a letter in school.'
- (22) Nandositra (noho ny tahony) izy (noho ny tahony)
 PAST.flee because DET fear.3SG 3SG because DET fear.3SG
 'He fled because of his fear.'

Kalin 2009:37 shows that multiple elements may extrapose and that they are freely ordered after the subject. (23) illustrates this freedom with two instances of non-clausal extraposition. One element may extrapose, (23b, 23c), or both elements may extrapose, in either order, (23d, 23e).

- (23) a. Nanome vola ho an-dRabe tamin' ny Talata ianao PAST.give money PREP PREP-Rabe PREP DET Tuesday 2SG 'You gave money to Rabe on Tuesday.'
 - b. Nanome vola tamin' ny Talata ianao ho an-dRabe PAST.give money PREP DET Tuesday 2SG PREP PREP-Rabe
 - c. Nanome vola ho an-dRabe ianao tamin' ny Talata PAST.give money PREP PREP-Rabe 2SG PREP DET Tuesday

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d. Nanome
              vola
                       ianao
                             ho
                                     an-dRabe tamin'
                                                              Talata
   PAST.give
                                     PREP-Rabe PREP
                                                             Tuesday
             money
                       2sg
                              PREP
                                                        DET
                                                              an-dRabe
e. Nanome
              vola
                              tamin'
                                            Talata
                       ianao
                                      ny
                                                      ho
                                      DET Tuesday
   PAST.give money
                       2sg
                              PREP
                                                      PREP
                                                              PREP-Rabe
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This freedom also obtains with one instance of non-clausal extraposition and one instance of clausal extraposition:

- (24) a. Nino tamin' ny taon-dasa Ranaivo fa hahomby
 PAST.believe PREP DET year-gone Ranaivo that FUT.succeed
 'Ranaivo believed last year that he will succeed.'
 - b. ?Nino Ranaivo fa hahomby tamin' ny taon-dasa PAST.believe Ranaivo that FUT.succeed PREP DET year-gone
 - c. Nino Ranaivo tamin' ny taon-dasa fa hahomby
 PAST.believe Ranaivo PREP DET year-gone that FUT.succeed

To summarize, extraposition is optional for a wide range of constituents with diverse grammatical functions. Objects cannot extrapose and finite clauses that have an overt subject must extrapose.

3 THE SEMANTICS OF EXTRAPOSITION

There are semantic restrictions on extraposed elements (see Paul and Rabaovololona 1998:51, Pearson 2001, Kalin 2009, and Potsdam & Edmiston 2016):

(25) Extraposed constituents are backgrounded/presupposed

Evidence for this generalization was first given in Pearson 2001:180. That work observes the contrast in (26). In the yes/no question in (26a), the locative is inside the predicate and is contained in the scope of the question. In (26b), in contrast, the locative is extraposed and is presupposed in the question.

- (26) a. Namaky boky tany antokotany ve i Tenda?

 PAST.read book LOC PREP garden Q Tenda

 'Was Tenda reading a book in the garden?'

 i.e. "Was reading a book in the garden what Tenda was doing?"
 - b. Namaky boky ve i Tenda tany an- tokotany?

 PAST.read book Q Tenda LOC PREP garden

 'Was Tenda reading a book in the garden?'

 i.e "Was reading a book what Tenda was doing in the garden?"
- (25) correctly predicts that extraposed elements are degraded if they are focused in some way, on the assumption that focus and backgrounding are mutually exclusive. The data below show that wh-phrases, (27), and answers to information questions, (28), cannot be extraposed.

- (27) a. Lasa nody (oviana) Rabe (*oviana)? go.home when Rabe when 'When did Rabe go home?'
 - Nanafina ny vola (tao anatin' ny boky inona) Rabe PAST.hide DET money LOC in book what Rabe DET anatin' ny (*tao boky inona)? DET book LOC in what 'In which book did Rabe hide the money?'
- (28) Q: Oviana no lasa nody Rabe? when FOC go.home Rabe 'When did Rabe go home?'
 - A: Lasa nody (omaly hariva) izy (??omaly hariva) go.home yesterday evening 'SG.NOM yesterday evening 'Rabe went home last night.'

One exception is that full CP answers to a question are extraposed. This is intuitively understandable given that they obligatorily appear in this position. The discourse restrictions are thus called off when extraposition is required for other reasons. Potsdam and Edmiston 2016 argues that they must extrapose for prosodic reasons.

- (29) Q: Inona no notenenan- dRabe momba ahy? what FOC PAST.say.CT Rabe about 1SG.ACC 'What did Rabe say about me?'
 - A: Miteny izy fa miasa tsara ianao PRES.say 3SG.NOM that work well 2SG.NOM 'He says thaty you work hard.'

4 CONCLUSION

To summarize, extraposition is quite free in Malagasy and generally optional. Objects cannot extrapose and full CPs with an overt subject must extrapose. Optional extraposition has the function of backgrounding the extraposed constituent.

I conclude by providing evidence against Kalin's (2009:39) claim that "there seems to be an exact correlation between those constituents that can appear post-topic [i.e. extraposed] and those that can be clefted in a non-topic [i.e. non-subject] pseudocleft". The cleft construction is a focus construction in Malagasy that fronts a constituent followed by the particle *no* (see Paul 2001 and Law 2007 for analyses). We have seen that full CPs must extrapose; however, CPs cannot be clefted (Paul 2000a), (30). Similarly, standards of comparison can extrapose but cannot cleft, (31) (see also (17)).

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- (30) a. Manantena Rabe fa hividy fiara aho
 PRES.hope Rabe that IRR.buy car 1SG.NOM
 'Rabe hopes that I will buy a car.'
 - b. *Fa hividy fiara aho no manantena/antenain-d Rabe that IRR.buy car 1SG.NOM FOC PRES.hope/PRES.hope.TT Rabe ('It's that I will buy a car that Rabe hopes.')
- (31) a. Nitomany kokoa (noho ny zazavavy) ny zazalahy (noho zazavavy) ny PAST.cry more than DET girl DET boy than DET girl 'The boys cried more than the girls.'
 - b. *Noho ny zazvavy no nitomany kokoa ny zazalahy than DET girl FOC PAST.cry more DET boy ('It's the girls that the boys cry more than.')
 - c. *Noho ny zazvavy no nitomanian' ny zazalahy kokoa than DET girl FOC PAST.cry.CT DET boy more ('It's the girls that the boys cry more than.')

Given that extraposition and clefting are associated with different syntactic and semantic restrictions, I tentatively conclude that they should not be derivationally related.

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