The Malagasy phrasal comparative

Eric Potsdam

University of Florida

Correspondence address: P.O. Box 115454, University of Florida, Gainesville, Florida, 32611

Abstract: There is no consensus in the literature on the analysis of phrasal comparatives. Both reduced clause analyses, in which the standard phrase contains elided clausal structure, and direct analyses, in which the standard of comparison is a direct complement to the standard marker, have been proposed. This paper argues for a direct analysis of the phrasal comparative in Malagasy, an Austronesian language spoken on the island of Madagascar. Evidence for the direct analysis comes from the lack of overt clausal comparatives, Binding Theory, scope, and Malagasy-specific characteristics of the standard. The conclusion contributes to the rapidly expanding picture of cross-linguistic variation in comparative syntax.

Keywords: Malagasy, comparative, Direct Analysis, Reduction Analysis

1   Introduction

The cross-linguistic picture of the syntax and semantics of comparatives has expanded rapidly in the last two decades (Beck et al. 2004, Pancheva 2006, Beck et al. 2009, Kennedy 2009, Bhatt & Takahashi 2011, Bobaljik 2012, others), revealing a complex range of variation and analytical options. In this paper, I contribute to this research with an analysis of the syntax of the comparative construction in Malagasy, a VOS Austronesian language spoken on the island of Madagascar. While the Malagasy construction in (1) looks superficially like its English counterpart, I argue that the Malagasy comparative should not have the same analysis that is typically offered for English.

1

(1) Maditra (kokoa) [noho [ilay zaza]] Rabe

stubborn more than that child Rabe

'Rabe is more stubborn than that child.'

Some terminology is useful before continuing. In the comparatives in (1, 2), *ilay zaza* 'that child' is the STANDARD OF COMPARISON and *Rabe* is the TARGET OF COMPARISON, also called the associate or the correlate. *Kokoa* 'more' is the COMPARATIVE MORPHEME, *maditra* 'stubborn' is the GRADABLE PREDICATE, and *noho* 'than' is the STANDARD MARKER. The standard marker and the standard of comparison together form the STANDARD PHRASE.

(2)

Rabe	is more	stubborn	than	that child.
TARGET OF COMPARISON	COMPARATIVE MORPHEME	GRADABLE PREDICATE	STANDARD MARKER	STANDARD OF COMPARISON

To first approximation, two types of comparatives predominate cross-linguistically. A CLAUSAL COMPARATIVE is a comparative in which the standard, italicized in (3, 4), shows clausal syntax:

(3) a. Mary is taller than *John is*.

b. Sue bought more candy than *she could eat*.

(4) Marija je viša nego *što* *je Petar*   Serbo-Croatian

Maria is taller than what is Peter

'Maria is taller than Peter is.'

(Pancheva 2006: 10, (23a))

2

A widely accepted analysis of clausal comparatives (Bresnan 1973, Heim 2000, Lechner 2004) is that the complement to the standard marker is a CP complement with a degree operator (Op) in spec,CP binding a degree variable (*d)* in the predicate. Some portion of the clause is then deleted under identity with antecedent material, as shown in (5). Deleted material is contained in angled brackets here and below.

(5) a. Mary is taller [than [$_{CP}$ Op$_i$ [John is d_i-tall]]]

b. Mary is taller [than [$_{CP}$ Op$_i$ [John is <d_i-tall>]]]

In contrast, a PHRASAL COMPARATIVE is one in which the surface standard is a phrase:

(6) a. Mary is taller than *John*.

b. Sue talked more to Bill than *to Tom*.

(7)   Anna je viša nego   *Tanja*   Serbo-Croatian

Anna is taller than   Tanja

'Anna is taller than Tanja.'

(Pancheva 2006: 10, (21a))

Unlike with clausal comparatives, there is no consensus on the analysis of phrasal comparatives (Lechner 2021, others), and it may be the case that Universal Grammar makes available more than one analysis. This paper will consider two families of analysis for phrasal comparatives: the Reduction Analysis and the Direct Analysis.

Under a REDUCTION ANALYSIS (Lees 1961, Chomsky 1965, Bresnan 1973, Hazout 1995, Lechner 2004, Pancheva 2006, Merchant 2009, others), phrasal comparatives have a covert clausal structure, much as in clausal comparatives. The clausal is greatly reduced by ellipsis, (8).

(8)   Mary is taller [than [$_{CP}$ Op$_i$ [John <is d_i-tall>]]]

Under a DIRECT ANALYSIS (Hankamer 1973, Hoeksema 1983, Brame 1983, Napoli 1983, Kennedy 1999, Bhatt & Takahashi 2011, others), the standard is a simple phrase, i.e. a DP, and no ellipsis is involved:

(9)   Mary is taller [than [$_{DP}$ John]]

Within this analytical context, this paper addresses the analysis of the Malagasy phrasal comparative. The paper is structured as follows. Section 2 presents relevant aspects of Malagasy morphosyntax and the comparative construction. Section 3 develops concrete instantiations of Direct and Reduction Analyses for Malagasy. Section 4 provides argumentation in favor of a Direct Analysis. Section 5 considers additional data that are apparently problematic for the Direct Analysis proposal and suggests that they ultimately are not. Section 6 summarizes.

2   *Malagasy morphosyntax and comparatives*

Malagasy is an Austronesian language spoken by over 18 million people on the island of Madagascar. It is most closely related to Ma'anyan spoken in Kalimantan, Indonesia. This section provides the necessary background on Malagasy morphosyntax and the Malagasy comparative construction. I discuss clause structure in section 2.1. Sections 2.2 and 2.3 present two well-known and relevant properties of Malagasy clauses: morphosyntactic requirements on the clause-final nominal and extraction restrictions. The final two subsections turn to the comparative construction. Section 2.4 describes the morphosyntax of ordinary comparatives in which the standard of comparison is an individual. Section 2.5 briefly introduces comparatives in which the standard names a degree.

2.1   Clause structure

Malagasy is traditionally described as a VOS language, as seen in (10a). More accurately, Malagasy is a predicate-initial language as non-verbal clauses also show this word order, (10b-d).[1]

(10) a. [Niantso   mpiasa]ᵥₚ   i Mery

           PAST.call   worker   Mary

           'Mary called the worker.'

      b. [Vorona   ratsy   feo]ₙₚ   ny   goaika

            bird   bad   voice   DET crow

           'The crow is a bird with an ugly voice.'

      c. [Faly   amin'   ny   zanany]ₐₚ   Rasoa

            happy PREP   DET child.3SG.GEN   Rasoa

           'Rasoa is proud of her children.'

      d. [Any   an-tsena]ₚₚ   Rakoto

            LOC   PREP-market   Rakoto

           'Rakoto is at the market.'

    The verbal picture and the use of the term "subject" are complicated by Malagasy's Philippine-style voicing system. Within a verbal predicate, the default constituent order is verb, followed by the subject, object, obliques, and adjuncts. From within this predicate, one element,

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[1] I follow Leipzig glossing abbreviations, with the following additions: AT—actor topic voice, TT—theme topic voice, CT—circumstantial topic voice. Examples come from my own field work unless otherwise indicated.

often called the TRIGGER (Schachter 1993, Pearson 2000, Law 2006), externalizes to a clause-final position. Voice morphology on the verb registers the grammatical role of the trigger, underlined in some of the examples below.

Malagasy has three voices. In the actor topic voice (AT), the trigger is the subject, (11). In the theme topics voice (TT), the trigger is the object, (12). In the circumstantial topic voice (CT) the trigger is an oblique or adjunct, (13). CT can be used to externalize a wide range of elements, including place, time, goal, cause, means, manner, instrument, price, benefactive, and locative phrases (Rajemisa-Raolison 1966, Paul 2000). In non-actor topic clauses, (12) and (13), the subject appears immediately after the verb inside the predicate. It is phonologically "bonded" to the verb, indicated in the orthography by an apostrophe or hyphen.

(11)   N-i-antso   mpiasa   i Mery

         PAST-AT-call   worker   Mary

         'Mary called the worker.'

(12)   N-antso-in'   i Mery   ny mpiasa

         PAST-call-TT   Mary   the worker

         'Mary called the worker.'

(13) a. N-i-antso-an'   i Mery   mpiasa   ny kiririoka

         PAST-CT-call-CT   Mery   worker   the whistle

         'Mary called the worker with the whistle.'

b. N-an-droso-an-   dRasoa   vary   <u>ny vahiny</u>

   PAST-CT-serve-CT   Rasoa   rice   the guests

   'Rasoa served rice to the guests.

c. I-toer-an'   ny lehilahy   <u>ity   trano   ity</u>
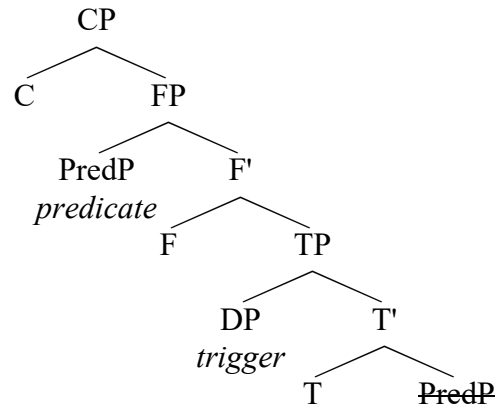
   CT-live-CT   the man   DEM   house   DEM

   'The man lives in this house.'

In the traditional view (Keenan 1976, 1995, Randriamasimanana 1986, Guilfoyle, Hung & Travis 1992, Dahl 1996, Paul 2000, others), the trigger is the subject of the clause and the non-actor topic voices are parallel to familiar passives that advance non-subjects to the canonical subject position. This yields a description of (10a) as VOS. In contrast, more recent approaches to Malagasy voice (notably Pearson 2001, 2005, 2018) take the trigger to be a topic-like element, with the post-verbal noun phrase being the true subject. Under this view, Malagasy is a VSO language, with basic word order distorted by obligatory topicalization. I will not decide between these two views but will continue to call the immediately post-verbal agent the subject and the clause-final element the trigger.

Recent analyses have argued or assumed that predicate-initial word order is derived by an operation of Predicate Fronting (Massam & Smallwood 1997, Rackowski & Travis 2000, Pearson 2001, 2005, 2018, others; see Chung 2017 for critical discussion). I follow this line of analysis and posit a clause structure as in (14). The predicate fronts to the specifier of a high functional projection, FP. The trigger occupies spec,TP below the fronted predicate. The debate about the status of the trigger as the subject or a topic largely reduces what the label of what I am calling TP is and whether its specifier is an A or A' position. The answers to these questions are not crucial

for what follows.[2] The actual immediately post-verbal subject is inside the fronted PredP constituent, a claim for which there is much empirical evidence (Keenan 1995).

(14)

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                    CP
                   /  \
                  C    FP
                      /  \
                 PredP    F'
                predicate /  \
                         F    TP
                             /  \
                            DP   T'
                          trigger /  \
                                 T   ~~PredP~~
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2.2   Trigger restrictions

The trigger is subject to certain restrictions that will be relevant in the discussion of comparatives. In particular, the trigger must be nominal, appears in the nominative case, and must occur with an overt determiner:

(15) *Trigger restrictions*

    a. must be nominal

    b. bear nominative case

    c. must have an overt determiner

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[2] Pearson 2005, 2018, for example, calls TP Top(ic)P. This requires that the fronted phrase in spec,FP be a larger constituent, TP in those works. The labeling of these projections impacts the naming of the morphological cases in Malagasy. See Pearson 2018 for further discussion. I believe that these variations are largely a matter of terminology, not impacting the analysis of comparatives.

As with English subjects, Malagasy triggers are typically nominal. Even though circumstantial topic morphology can be used to advance a wide range of elements to the trigger position, these elements must be nominal. PPs, (16a), adverb phrases, (16b), and clausal adverbials, (16c) are impossible triggers.

(16) a. *Nividiana-ko   vary   [tamin' ny   zoma]PP

        bought.CT-1SG.GEN rice   PREP   DET Friday

        ('I bought rice on Friday.')

        (Paul 2000: 92, (4d))

   b. *Itenenan'   i Bozy   [mafy]AdvP

        speak.CT   Bozy   hard

        ('Bozy speaks loudly.')

   c. *Itsanganan- dRabe   [mihinana   akoho]VP

        stand.CT   Rabe   eat.AT   chicken

        ('Rabe stands while eating chicken.')

The Malagasy pronominal system recognizes three cases: accusative, genitive, and nominative (see Keenan 1976, Zribi-Hertz & Mbolatianavalona 1999, Pearson 2018). Accusative case is used with objects. Genitive case is used for possessors and subjects. Objects of prepositions are idiosyncratically accusative or genitive (but see below). Nominative case is reserved for triggers as well as predicates, modified pronouns, and non-initial conjuncts in conjoined noun

phrases (Pearson 2001, 2018). Pearson 2005 proposes that nominative is a default case used when a noun phrase does not have a Case feature. Case is generally unmarked on non-pronominals.[3]

Finally, there is an unusual requirement that triggers have an overt pre-nominal determiner (Keenan 1976, 2008, Paul 2000, 2009, Pearson 2001, Law 2006, others). A range of elements counts as determiners. Names may have the determiner *i* or the incorporated determiner *Ra-*, as in *i Soa/Rasoa.* Pronouns count as determiners. There are also demonstrative determiners such as *ilay* 'that'. Lastly, there is the default determiner *ny*, which is often translated as 'the' but does not necessarily encode definiteness (Paul 2009). Triggers with an appropriate determiner are in (17). If such triggers are missing a determiner, the sentences are ungrammatical, (18).

(17)   Nihomehy   {Ra-soa,   izy,   ilay zaza,   ny   zanan-dRasoa}

        laughed.AT   DET-NAME   3SG.NOM   DEM child   DET   child-Rasoa

        'Rasoa/She/That child/Rasoa's child laughed.'

(18)   *Nihomehy   {zaza, zanan-dRasoa}

         laughed.AT   child   child-Rasoa

        ('A child/Rasoa's child laughed.')

Law 2006 discusses that this restriction is not clearly related to definiteness or specificity, citing examples as in (19). The underlined trigger must have a determiner but is not interpreted as definite. In object position, the italicized, semantically equivalent indefinite nominal, 'a place where children can play' can lack a determiner.

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[3] The accusative marker *an'* is used before proper nouns, certain kinship terms, and, optionally, before noun phrases beginning with a demonstrative determiner (Rajemisa-Raolison 1966: 35).

(19)   Ilainay   <u>ny   kianja filalaovana</u>,   satria   tsy   manana   *toerana   afahan'*

       need.TT.1PL.GEN   DET   playground   because   NEG   have   place   can.CT

       ny   ankizy   milalao   izahay

       DET   children   play   1PL.EXCL.NOM

       'We need a playground, because we don't have any place where children can play.'

       (Law 2006: 162, (26d))

The source of this requirement is as yet unclear (see Law 2006, Keenan 2008, and Paul 2009) and I will not attempt to characterize it further.

2.3   Extraction restrictions

Malagasy is well-known for its restriction on extraction that only triggers can undergo A' movement (Keenan 1976, MacLaughlin 1995, Paul 2000, 2001, Sabel 2002, others):

(20)   *Malagasy extraction restriction*

       Only triggers can undergo A' movement

(20) holds for all known overt A' movement constructions, including wh-questions and relative clauses.[4] The relative clause data below from Keenan 2008 illustrates the robust generalization that only triggers can relativize. From the actor topic voice clause in (21a), only the agent trigger can be relativized, (21b). To relativize the theme, the verb must be in the theme topic voice, (22). To relativize the oblique, the verb must be in the circumstantial topic voice, (23). Other verbal

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[4] Some adjuncts can be wh-questioned without first becoming triggers (Keenan 1976, Paul 2000, 2001, Pearson 2001, others). This will not be relevant for what follows.

voice forms would be ungrammatical.

(21) a. Manasa   lamba amin' io   savony io   <u>ny   tovolahy</u>

      wash.AT   clothes with DEM soap   DEM DET young.man

      'The young man is washing the clothes with that soap.'

    b. ny   tovolahy   (izay)   manasa   lamba amin' io   savony io

      DET young.man REL   wash.AT   clothes with DEM soap   DEM

      'the young man who is washing the clothes with that soap'

(22)   ny lamba   (izay)   sasan'   ny   tovolahy   amin' io   savony io

      DET clothes   REL   wash.TT DET young.man   with DEM soap   DEM

      'the clothes that are being washed by the young man with that soap'

(23)   ny savony (izay)   anasan'   ny   tovolahy   lamba

      DET clothes   REL   wash.CT DET young.man clothes

      'the soap that the young man is washing clothes with'

I will assume that this generalization also holds of novel overt A' movement operations.

2.4 *Ordinary comparatives*

The Malagasy comparative looks superficially similar to its English phrasal counterpart, modulo predicate-initial word order:[5]

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[5] Henceforth, unmarked verbs are in the actor topic voice (AT) form.

(24) a. Lava (kokoa) noho Rasoa Rabe

      tall more than Rasoa Rabe

      'Rabe is taller than Rasoa.'

    b. Sarotra (kokoa) [noho [ny teny anglisy]]PP ny teny gasy

      difficult more than DET language English DET language Malagasy

      'Malagasy is more difficult than English.'

    c. Nividy boky betsaka (kokoa) noho Rasoa Rabe

      bought book many more than Rasoa Rabe

      'Rabe bought more books than Rasoa.'

    d. Nividy laoranjy betsaka (kokoa) noho ny akondro Rabe

      bought orange many more than DET banana Rabe

      'Rabe bought more oranges than bananas.'

The comparative morpheme *kokoa* is roughly equivalent to 'more' and the standard marker is *noho* 'than'. *Kokoa* is generally optional when the standard phrase is present, though frequently preferred; otherwise, it is required. An adjective on its own cannot be interpreted as comparative:

(25) a. Lava Rabe

      tall Rabe

      'Rabe is tall.', *'Rabe is taller.'

    b. Lava kokoa Rabe

      tall more Rabe

      'Rabe is taller.'

    I will assume that *noho* is a preposition and that *noho* and the standard form a prepositional

phrase, as explicitly bracketed in (24b). The standard, when it is pronominal, must be in the nominative case, (26). This is unusual in that most prepositions in Malagasy are followed by a genitive or accusative nominal.[6] I return to this fact below.

(26)   Lava   noho   izy/*azy/*-ny   aho

        tall   than   3SG.NOM/3SG.ACC/3SG.GEN   1SG.NOM

        'I am taller than him.'

The standard phrase typically occurs in one of two positions: it appears either at the right edge of the predicate, as in the examples above, or at the end of the clause. Both options are shown in (27). I assume that the predicate-internal position is the canonical position, and that the clause-final position is derived via extraposition, which Potsdam 2021 argues is a PF operation with no syntactic consequences. I will not be concerned with the analysis of extraposition here, although a number of examples below show the standard phrase in the clause-final position.

(27)   Lava   kokoa   (noho   Rasoa)   Rabe   (noho   Rasoa)

        tall   more   than   Rasoa   Rabe   than   Rasoa

        'Rabe is taller than Rasoa.'

Given simple examples like (27) and the clause structure developed above, this predicate-final position is underdetermined and corresponds to two possible positions. The standard phrase could either be inside a degree phrase forming a constituent with the gradable predicate and the

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[6] Two other preposition-like elements take nominative complements: *afa-tsy* 'except' and *toy* 'like' (Rajemisa-Raolison 1966: 145).

comparative morpheme (if it is present), and/or it could be right adjoined to the fronted predicate, not forming a constituent with the gradable predicate. The placement of the standard phrase in ditransitives reveals that only the former option is available.

Word order in ditransitive predicates is fixed as V DP PP:

(28) a. Nanisy   sira   tao   amin'   ny   lasopy   Rasoa

       put   salt   LOC   PREP   DET   soup   Rasoa

       'Rasoa put salt in the soup.'

   b. *Nanisy   tao   amin'   ny   lasopy   (ny)   sira   Rasoa

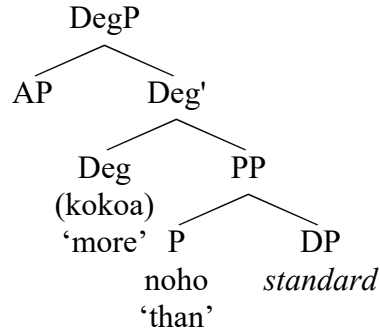   put   LOC   PREP   DET   soup   DET   salt   Rasoa

In comparatives involving ditransitives in which the direct object is the target of comparison, this basic word order must be maintained, and the standard phrase must appear adjacent to the target, (29a), where I assume that it forms a constituent with the gradable predicate inside the nominal object, as bracketed. The standard phrase cannot be separated from the gradable predicate and follow the PP, (29b), nor can the two arguments be reversed, (29c).[7]

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[7] This data has been idealized. Two speakers have infrequently and inconsistently accepted both kinds of examples in (29b, c); however, they are always degraded in comparison to examples that both maintain basic word order and have the standard phrase adjacent to the gradable predicate. A third speaker never accepts such examples. Malagasy does have a mechanism that moves predicate-internal elements rightward within the predicate (Pearson 2000), although its properties have not been investigated. It is likely that it can apply to heavy constituents and the standard phrase under some conditions.

15

(29) a. Nanisy [sira betsaka kokoa noho ny sakay]

put salt much more than DET chili.pepper

tao amin' ny lasopy Rasoa

LOC PREP DET soup Rasoa

'Rasoa put more salt than chili pepper in the soup.'

  b. *Nanisy sira betsaka kokoa tao amin' ny lasopy

put salt much more LOC PREP DET soup

noho ny sakay Rasoa

than DET chili.pepper Rasoa

  c. *Nanisy tao amin' ny lasopy

put LOC PREP DET soup

(ny) sira betsaka kokoa noho ny saka Rasoa

DET salt much more than DET chili.pepper Rasoa

The traditional assumption is that the standard phrase forms a constituent with the comparative morpheme and the gradable predicate as part of a larger phrase, typically a degree phrase, DegP, at some point in the derivation (see Bresnan 1973, Abney 1987, Kennedy 1999, Heim 2000, Bhatt & Pancheva 2004, Lechner 2021, among others). Lechner & Corver 2017 and Lechner 2021 discuss the three dominant proposals in the literature for structurally combining the comparative morpheme (Deg head), the gradable predicate, and the standard phrase. For concreteness, I assume the structure in (30) defended in Lechner's (2001, 2004, 2021) work.
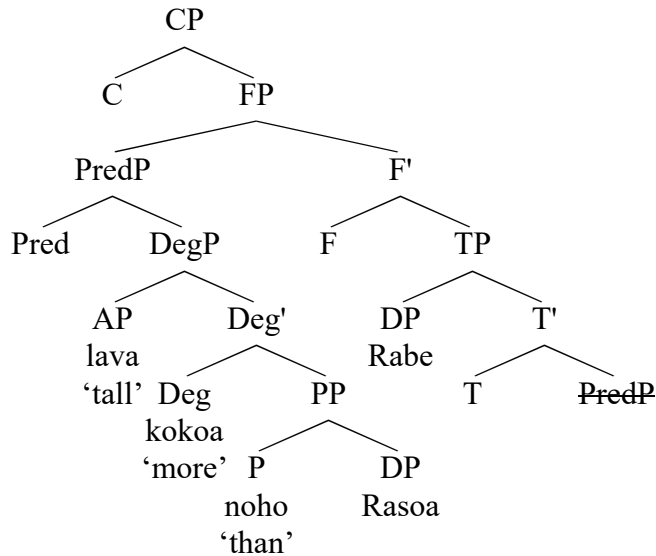
(30)
```
                    DegP
                   /    \
                 AP      Deg'
                        /    \
                      Deg     PP
                    (kokoa)   /  \
                    'more'   P    DP
                            noho  standard
                           'than'
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It straightforwardly captures the correct word order in Malagasy. For concreteness, I illustrate the structures of the predicate comparative in (31).

(31) a. Lava   kokoa   noho   Rasoa   Rabe

         tall   more   than   Rasoa   Rabe

         'Rabe is taller than Rasoa.'

    b.
```
                        CP
                       /  \
                      C    FP
                          /   \
                      PredP     F'
                     /    \    /   \
                  Pred   DegP  F    TP
                        /   \      /   \
                      AP    Deg'  DP    T'
                     lava         Rabe  /  \
                     'tall' Deg    PP  T    PredP
                           kokoa  /  \
                           'more' P   DP
                                noho  Rasoa
                               'than'
```

2.5   Degree standard comparatives

In addition to standards that denote an individual, as in the above examples, the standard of comparison may also be a measure phrase. In (32a), the measure phrase is 'one meter'; in (32b), it is 'the world record'.

(32) a. Lava   kokoa   noho   [ny   iray   metatra]   Rabe

    tall   more   than   DET   one   meter   Rabe

    'Rabe is taller than one meter.'

b. Tsy   mihazakazaka   haingana   noho   [ny   hazakazaka   tsara   indrindra

    NEG   run   quickly   than   DET   running   good   most

    eran-tany]   Rabe

    around-earth   Rabe

    'Rabe didn't run faster than the world record.'

Such cases are clear phrasal comparatives and do not have a reduced clause analysis (Pancheva 2006, Bhatt & Takahashi 2011). I assume that the standard marker *noho* 'than' combines directly with a nominal expressing a definite degree of semantic type *d*. This use of *noho* will appear in a number of places below, when an ordinary phrasal comparative is unavailable, and I will refer to it as a DEGREE STANDARD COMPARATIVE.

Further, more complex examples are given in (33), as ways to express the English clausal comparative *Rabe bought more books than Rasoa bought*. As will be demonstrated below, the standard in Malagasy cannot be a clause as it is in the English translation; however, the comparison can be expressed by making the standard a nominal degree expression. In the examples below, the bracketed standards are expressed as a headless relative clause with an amount/measure interpretation, as paraphrased in the English translations, either *the ones that Rasoa bought* or *what Rasoa bought*. Malagasy has a rich system of headless relative clauses (Ntelitheos 2006).

18

(33) a.

Betsaka	ny	boky	novidin-	dRabe	[noho	[ny	novidin-	dRasoa]]
many	DET	book	bought.TT	Rabe	than	DET	bought.TT	Rasoa

lit. "The books Rabe bought are more than the (number/amount of) books that Rasoa bought."

'Rabe bought more books than Rasoa bought.'

b.

Nividy	boky	betsaka	kokoa	Rabe	[noho	[ny	novidin-	dRasoa]]
bought	book	many	more	Rabe	than	DET	bought.TT	Rasoa

'Rabe bought more books than what Rasoa bought.'

I assume that the syntax of degree standard comparatives does not involve a reduction analysis. Because of space considerations then, I do not consider their analysis in any detail, although they will make occasional appearances in the paper as a means to express comparatives that do not have a grammatical expression with an ordinary comparative.

3   Two analyses of phrasal comparatives

This section introduces two syntactic approaches to phrasal comparatives, the reduction analysis and the direct analysis, and develops instantiations appropriate for Malagasy.

3.1   Reduction Analysis

Since the earliest syntactic treatments of comparatives, it has been recognized that some comparatives are reduced clause constructions in which the standard of comparison is introduced inside a degree clause, (34) (Lees 1961, Chomsky 1965, Hankamer 1973, Bresnan 1973, 1975, others). Such clausal comparatives may overtly show evidence of clausal syntax, such as clausal case-marking patterns, inflectional morphosyntax, and predicate-related material.
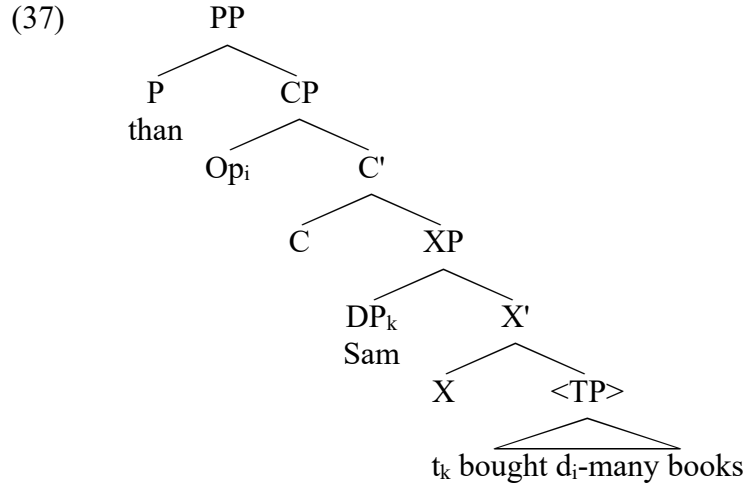
(34)   Mary is taller than [John is]$_{clause}$

As developed in Bresnan 1973, 1975, Chomsky 1977, and others (see Lechner & Corver 2017 for an overview), the standard analysis illustrated in (35) has been that there is a gap in the degree clause corresponding to a null degree operator which moves from within the gradable predicate and leaves behind a degree variable, *d*. The degree predicate itself is elided through an operation dubbed Comparative Deletion (CD) (Bresnan 1973, 1975, Lechner & Corver 2017).

(35) a.   Mary is taller [than [Op_i John is <d_i-tall>]]

   b.   Mary has more Beanie Babies [than [Op_i John has <d_i-many comic books>]]

This analysis has been extended to phrasal comparatives. Under such a REDUCTION ANALYSIS (Lees 1961, Chomsky 1965, Bresnan 1973, Lechner 1999, 2004, others), phrasal comparatives are also reduced clause constructions, which differ only in the amount of material that is elided. A Reduction Analysis of phrasal comparatives has been defended for English (Lechner 2001, 2021) and German (Lechner 2001, 2004). To illustrate, the phrasal comparative in (36) would have the derivation in (37). There is movement of the degree operator Op to spec,CP from the position of the gradable predicate, as well as movement of the standard to a clause-peripheral position, spec,XP (Merchant 2009, Bhatt & Takahashi 2011). This permits it to escape deletion. The gradable property is deleted via Comparative Deletion and any additional material is eliminated via a further process called Comparative Ellipsis (Pinkham 1985).
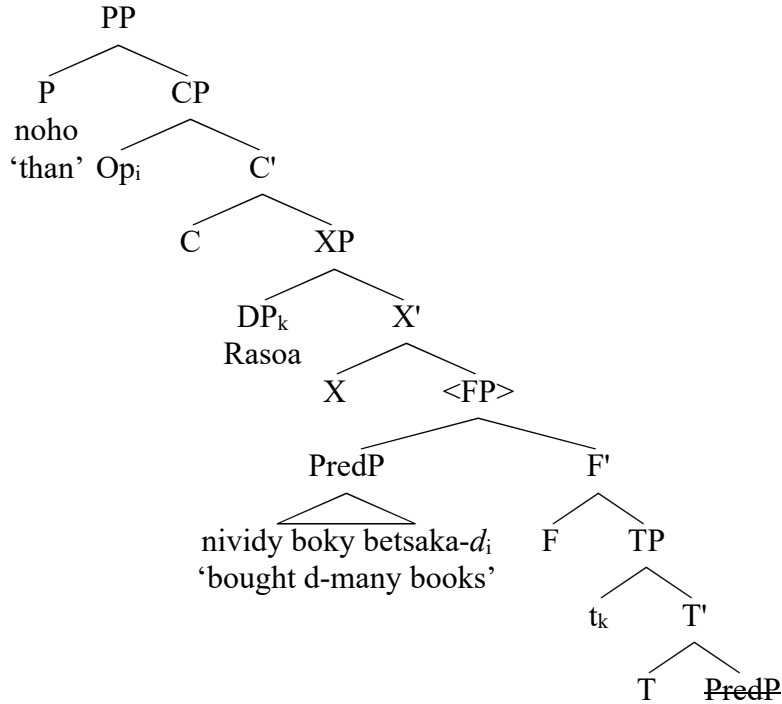
(36)   Mary bought more books than Sam.

(37)
```
                PP
              /    \
            P       CP
          than    /    \
               Opᵢ      C'
                      /    \
                     C      XP
                          /    \
                       DPₖ      X'
                       Sam    /    \
                             X     <TP>
                                  /    \
                             tₖ bought dᵢ-many books
```

A Reduction Analysis (RA)[8] can easily extend to Malagasy, with CP replaced by the Malagasy clause structure in (14), which includes Predicate Fronting. The example in (38) would receive the analysis in (39).[9]

(38)   Nividy   boky   betsaka   (kokoa)   noho   Rasoa   Rabe

       bought   book   many   more   than   Rasoa   Rabe

       'Rabe bought more books than Rasoa.'

---

[8] The Reduction and Direct Analyses developed specifically for Malagasy will be referred to as RA and DA, respectively.

[9] The null operator movement in (39) violates the Extraction restriction in (20). I ignore this complication as I will ultimately reject the Reduction Analysis.

(39)

```
                    PP
                  /    \
                 P      CP
               noho    /  \
              'than' Op_i   C'
                           /  \
                          C    XP
                              /   \
                           DP_k    X'
                           Rasoa  /  \
                                 X    <FP>
                                    /     \
                                 PredP     F'
                              /        \   /  \
                    nividy boky betsaka-d_i  F    TP
                    'bought d-many books'        /  \
                                               t_k   T'
                                                    /  \
                                                   T   PredP
```

RA receives apparent support in Malagasy from two places: i) the observation that the standard of comparison obeys the trigger restrictions and ii) non-comparative uses of *noho* where it means 'because' and can be followed by a clause. I present these considerations next, although I will ultimately argue that RA is not the correct analysis.

One of the most salient characteristics of the Malagasy comparative that would seem to argue for RA is that the standard is subject to the trigger restrictions from section 2.2. First, standards must be nominal. The examples in (40) illustrate that the standard cannot be a PP, (40a), CP, (40b), or AdvP, (40c).

(40) a. *Nandihy kokoa tamin' ny lehilahy noho [tamin' ny vehivavy]_PP Rasoa

      danced more PREP the men than PREP DET woman Rasoa

      ('Rasoa danced more with men than with women.')

b. *Mahagaga   kokoa   fa   nitety   an'   i   Frantsa   ny   mpanjaka

   surprising   more   that   visit   ACC' DET France   DET king

   noho   [fa   nitety   an'   i   Amerika   izy]_{CP}

   than   that visited   ACC' DET America   3SG.NOM

   ('That the king visited France is more surprising than that he visited America.')

c. *Niasa   kokoa   omaly   noho   [androany]_{AdvP}   ny   mpanampy

   worked   more   yesterday than   today   DET   servant

   ('The servant worked more yesterday than today.')

Second, it was previously shown that pronominal standards bear nominative case, (26). Finally, like triggers, the standard must have an overt determiner. The standards in (41) have an appropriate determiner. Those in (42), in contrast, are unacceptable because they lack an overt determiner. Even when the standard is not interpreted as definite, (42b, c), a determiner is still necessary.

(41)   Lava   noho   {Ra-soa /   izy /   ilay zaza / ny   zanan-dRasoa}   Rabe

     tall   than   DET-NAME 3SG.NOM DEM child   DET child-Rasoa   Rabe

     'Rabe is taller than Rasoa/her/that child/Rasoa's child.'

(42) a. *Lava   noho   {zaza / zanan-dRasoa}   Rabe

      tall   than   child   child-Rasoa   Rabe
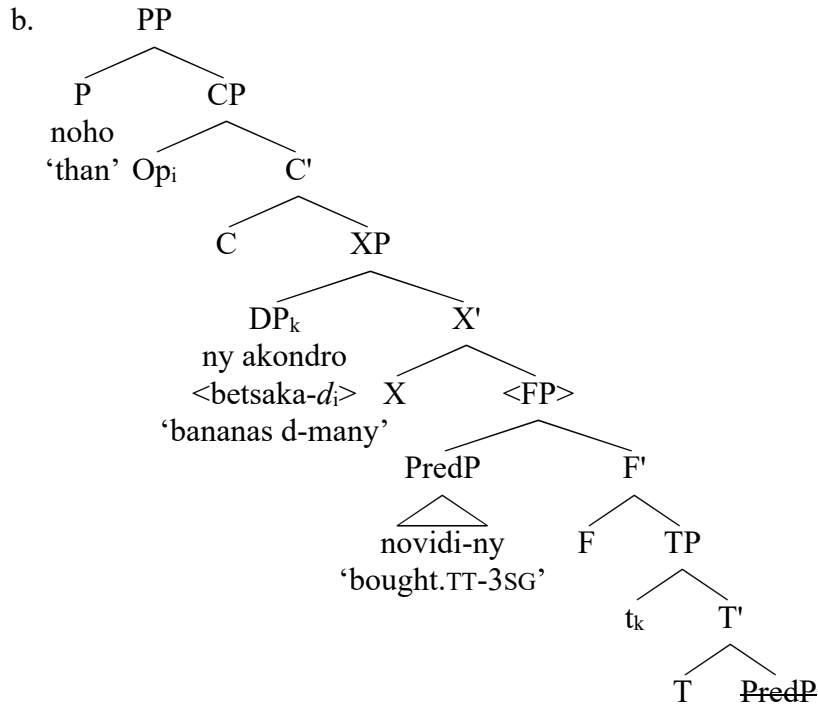
      ('Rabe is taller than a child/Rasoa's child.')

    b. Lava   noho   ny   zaza   Rabe

      tall   than   DET child   Rabe

      'Rabe is taller than a/the child.'

c. Nividy   laoranjy   betsaka   noho   *(ny)   akondro   Rasoa

    bought   orange   many   than   DET   banana   Rasoa

    'Rasoa bought more oranges than bananas.'

The morphosyntactic parallels between triggers and standards strongly suggest that the standard is itself a trigger and, if so, there must be a clause following the standard marker. This is captured in the RA derivation in (39). The standard originates in spec,TP where the trigger restrictions are enforced. Further, given the proposed derivation and the Extraction Restriction in (20), the standard must be a trigger as only a trigger could undergo A' movement to spec,XP. RA thus provides a principled explanation for why the standard obeys the trigger restrictions.

Even though the standard must be a trigger in RA, the target does not also have to be a trigger, because of the Malagasy voice system. To illustrate, in (43), the target is a direct object. The derivation of the comparative clause proceeds as shown, with the hypothesized elided material in brackets. The standard is the trigger of a theme topic voice clause. It moves to spec,XP followed by deletion. Comparative Ellipsis succeeds because Malagasy clausal ellipsis is able to ignore voice morphology mismatches (Potsdam 2007, Ranero 2021).

(43) a. Nividy   laoranjy betsaka noho   ny   akondro$_k$ <novidin-ny   t$_k$>   Rabe

        bought.AT   orange   many   than   DET   banana   bought.TT-3SG.GEN   Rabe

        'Rabe bought more oranges than bananas.'

b.

```
                    PP
               ┌────┴────┐
               P         CP
             noho    ┌───┴────┐
            'than'  Opᵢ       C'
                         ┌─────┴─────┐
                         C           XP
                               ┌─────┴─────┐
                              DPₖ          X'
                           ny akondro  ┌───┴────┐
                           <betsaka-dᵢ>  X     <FP>
                          'bananas d-many'  ┌───┴────┐
                                          PredP      F'
                                        ┌──┴──┐   ┌──┴──┐
                                       novidi-ny  F    TP
                                     'bought.TT-3SG'  ┌─┴──┐
                                                     tₖ    T'
                                                        ┌──┴───┐
                                                        T    P̶r̶e̶d̶P̶
```

A second observation that seemingly supports RA comes from a distinct use of *noho*, where it means 'because'. In this meaning, *noho* may be followed by a DP, (44), or a clause, (45). When followed by a DP, the DP obeys the trigger restrictions. It must be nominative, (44b), and requires a determiner, (44c).

(44) a. Nandositra   izy   [noho   [Rasoa]_DP]

      fled   3SG.NOM   because   Rasoa

      'He fled because of Rasoa.'

   b. Nandositra   izy   noho   ianao/*anao/*-nao

      fled   3SG.NOM   because   2SG.NOM/2SG.ACC/2SG.GEN

      'He fled because of you.'

c. Nandositra   izy   noho   *(ny)   alika/kotroka[10]

   fled   3SG.NOM   because   DET   dog/thunder

   'He fled because of dogs/thunder.'

When *noho* 'because' is followed by a clause, the embedded clause can show up with the expected trigger-final word order, (45a), or the trigger can exceptionally come before the predicate, (45b).[11]

(45) a. Nandositra   izy   [noho   [clause nanenjika   azy   Rasoa]]

      fled   3SG.NOM   because   chased   3SG.ACC   Rasoa

   b. Nandositra   izy   [noho   [clause Rasoa   nanenjika   azy]]

      fled   3SG.NOM   because   Rasoa   chased   3SG.ACC

      'He fled because Rasoa chased him.'

---

[10] *Ny* is not required with these nouns in non-trigger contexts:

(i)   Matahotra   (ny)   alika/kotroka   izy

         fear   DET   dog/thunder   3SG.NOM

         'He fears dogs/thunder.'

[11] Malagasy allows SVO in a number of contexts: adverbial clauses introduced by selected subordinators, newspaper headlines, complements to perception verbs, and clauses with contrastive subjects (Paul et al. 2016). I make no claim that all SVO clauses in these contexts have the same analysis. Nevertheless, given that SVO is possible after *noho* 'because', it is reasonable to assess whether SVO is possible after *noho* 'than'. It will be shown that it is not.

The observation that *noho* 'because' can take a clausal complement makes the RA analysis of *noho* 'than' even more plausible in the larger context. Despite the initial attractiveness of RA, however, section 4 will argue that the Direct Analysis to be introduced next is superior.

3.2   Direct Analysis

In the alternative, DIRECT ANALYSIS, phrasal comparatives are base generated as one sees them, with the standard marker directly selecting the standard. There are no movement or reduction operations inside the standard. Bhatt & Takahashi 2011 argues that Hindi and Japanese employ a Direct Analysis. That work in particular has led to the conclusion that the cross-linguistic syntax and semantics of comparatives is not monolithic and that both kinds of analyses are available, sometimes in a single language. Such a dual analysis was defended early on for English, in Hankamer 1973, McConnell-Ginet 1973, Brame 1983, Napoli 1983, and Hoeksema 1983, among others.

A Direct Analysis (DA) for Malagasy has *noho* 'than' taking a simple DP complement, with no hidden clausal structure and no deletion:

(46)   Nividy boky betsaka (kokoa)   noho Rasoa   Rabe
        bought book many   more   than Rasoa   Rabe
        'Rabe bought more books than Rasoa.'

(47)   PP
             ╱   ╲
           P   DP
         noho   Rasoa
        'than'
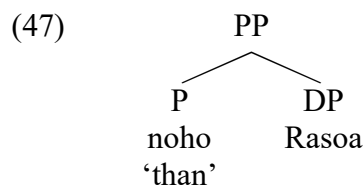
Bhatt & Takahashi 2011 develops a direct analysis for Hindi-Urdu. I apply their proposal to Malagasy, additionally importing semantic assumptions from Alrenga et al. 2012, which

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simplify the picture. In Bhatt & Takahashi's analysis, the comparative morpheme *-er/more* is a 3-place predicate which combines with two individual arguments—the standard and the target—and a predicate of individuals and degrees. Movement is required in order to create this predicate and satisfy the lexical entry of the comparative morpheme (Bhatt & Takahashi 2011; see also Reinhart 1991, Merchant 2009). In Hindi-Urdu the movements take place overtly. The movements will take place at LF in Malagasy.

I depart from Bhatt & Takahashi's analysis in following Alrenga et al. 2012, which assigns comparative semantics, not solely to the comparative morpheme, but to both the comparative morpheme and the standard marker. In traditional analyses, including Bhatt & Takahashi 2011, all of the semantics of the comparative is introduced in the comparative morpheme. The standard marker is semantically empty, serving only to flag the standard of comparison. Alrenga et al. 2012 proposes that both elements provide comparative semantics, with the following division of labor: The comparative morpheme combines with a gradable predicate to produce a corresponding comparative predicate. The standard marker introduces the comparison relation. For phrasal comparatives, the standard marker combines with the standard and the target and a predicate of individuals and degrees, as in Bhatt & Takahashi's analysis. Alrenga et al.'s (2012) semantics for phrasal 'than' is given in (48), where *sup* is the supremum function or least upper bound, which "maps (the characteristic function of) a subset D' of some set D to the minimal *d* in D that is greater than or equal to every d' in D' " (Alrenga et al. 2012: 3).[12]

---

[12] This lexical entry cannot be used for the degree standard comparatives introduced in section 2.5. A second lexical entry will be required. See Bhatt & Takahashi 2011 and Alrenga et al. 2012 for

(48)   ⟦THAN_phrasal⟧ $= \lambda s_e \lambda g_{<d,et>} \lambda x_e \, . \, sup(\lambda d.g(d)(x)) > sup(\lambda d.g(d)(s))$
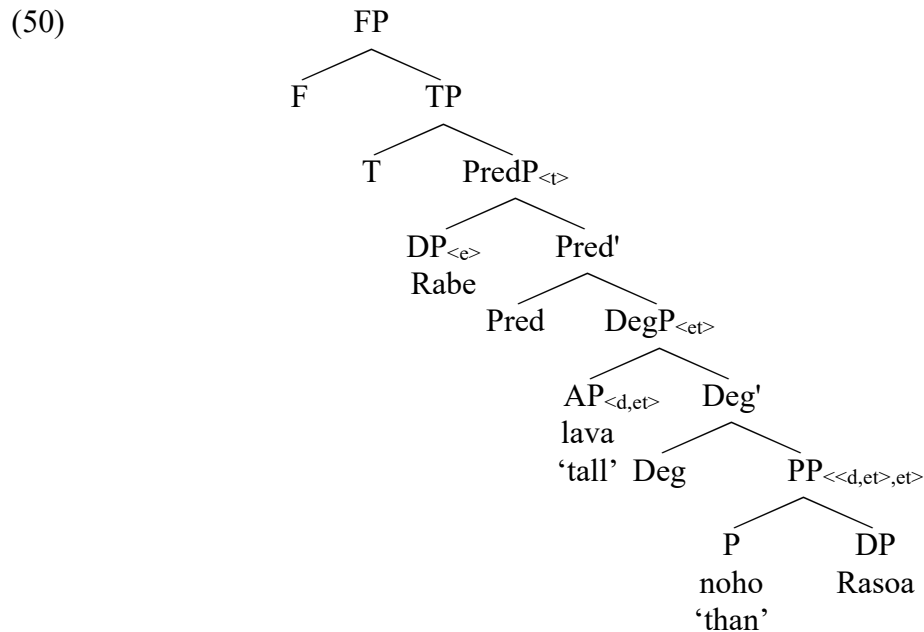
This proposal for the packaging of comparative semantics has the advantage of accounting for two cross-linguistically common morphosyntactic patterns in comparatives (Alrenga et al. 2012, Bobaljik 2012). First, it allows for languages such as Japanese which show no evidence of a comparative morpheme equivalent to *more/-er*, either overt or null. Second, it accommodates languages like Malagasy, whose comparative morpheme, *kokoa* 'more', is optional but which also shows no evidence of a null comparative morpheme when *kokoa* 'more' is absent. It was seen in (25a) that an adjectival predicate could not be interpreted comparatively if it had neither the comparative morpheme nor a standard phrase. In both types of languages, there need not be a comparative morpheme because the standard marker provides the necessary semantics.

With this lexical entry, the Malagasy clause structure from (14), and Lechner's DegP structure in (30), I proceed to show how the basic cases are analyzed under DA (see Vaikšnoraitė 2021 for similar derivations in Lithuanian). Consider first the predicate comparative in (49) repeated from (24a). The LF structure is (50). I show PredP and the trigger having reconstructed from their surface spec,FP and spec,TP positions, respectively, to their base positions, following Massam 2000, Potsdam 2007, Cole & Hermon 2008, and Pearson 2018. The trigger is PredP-internal and PredP itself is the complement of T°. The gradable predicate adjective phrase *lava*

---

proposals regarding the semantics of 'than' in degree standard comparatives. Both works agree that it is a two-place relation, not a three-place relation as in (48).

'tall' is given standard semantics as a function of individuals and degrees, $\llbracket tall \rrbracket = \lambda d \lambda x.\mathbf{tall}(x) \geq$

d and is of type $<d,<e,t>>$ (e.g. Cresswell 1976, von Stechow 1984, Heim 2000, others).[13]

(49)   Lava   (kokoa)   noho   Rasoa   Rabe

       tall   more   than   Rasoa   Rabe

       'Rabe is taller than Rasoa.'

(50)

```
                        FP
                       /  \
                      F    TP
                          /  \
                         T   PredP<t>
                            /    \
                         DP<e>    Pred'
                         Rabe    /    \
                              Pred   DegP<et>
                                    /      \
                                AP<d,et>   Deg'
                                 lava     /   \
                                'tall'  Deg   PP<<d,et>,et>
                                            /    \
                                           P      DP
                                         noho    Rasoa
                                        'than'
```

The derivation in this case converges, without the need for LF movement.

      Consider next the nominal comparative in (51), repeated from (24c). An initial attempt at

an LF is shown in (52). In this structure, however, the standard phrase cannot semantically combine

---

[13] I leave *kokoa* 'more' out of the representations. If it were present, it would combine with the

gradable predicate and create a function of the same type (Alrenga et al. 2012).

with the QP *betsaka* 'many', which is a generalized quantifier of type <d,<et,<et,t>> (Hackl 2000).
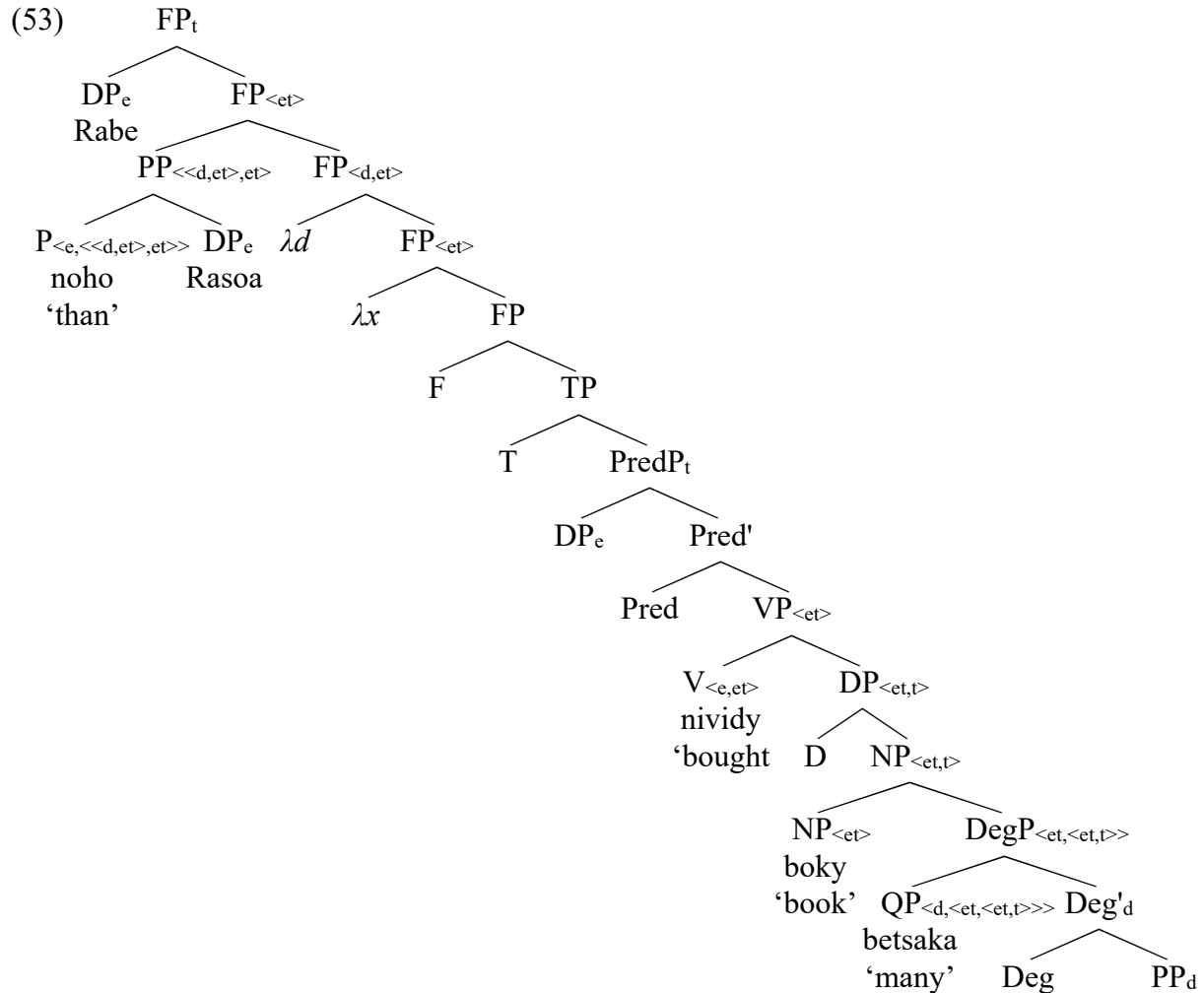
See the arrow in (52).

(51)   Nividy boky betsaka (kokoa)   noho   Rasoa   Rabe

        bought book many   more   than   Rasoa   Rabe

        'Rabe bought more books than Rasoa.'

(52)

```
                    FP
                  /    \
                 F      TP
                      /    \
                     T      PredP
                          /      \
                        DP        Pred'
                        Rabe     /    \
                               Pred    VP
                                     /    \
                                    V      DP
                                 nividy   /  \
                                'bought' D    NP
                                            /    \
                                          NP      DegP
                                         boky    /     \
                                        'book'  QP<d,<et,<et,t>>  Deg'<<d,et>,et>   ⇦
                                                betsaka          /      \
                                                'many'         Deg       PP<<d,et>,et>
                                                                        /    \
                                                                       P      DP
                                                                      noho   Rasoa
                                                                     'than'
```
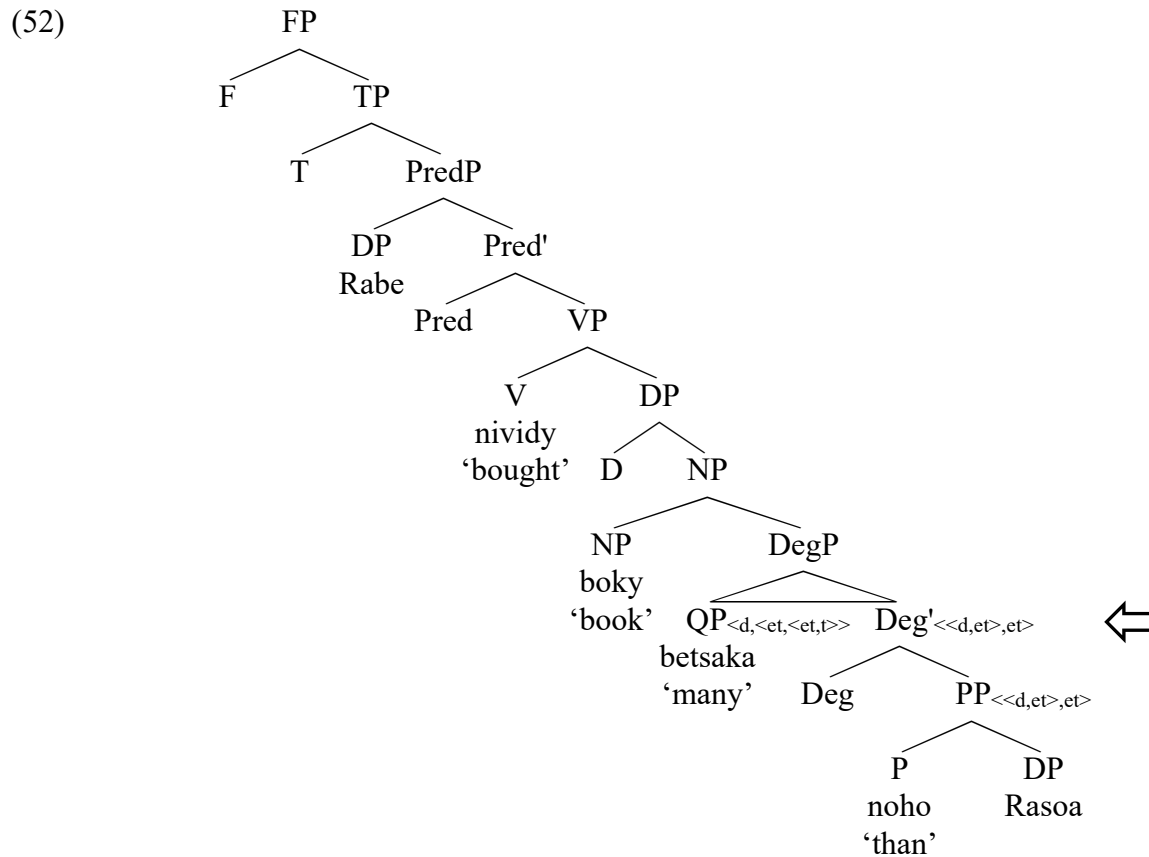
Following Bhatt & Takahashi 2011, LF movement is necessary. First, the target of comparison, *Rabe*, undergoes LF movement, creating a predicate of individuals. Then the standard phrase moves, tucking in below the target, creating a predicate of individuals and degrees. Bhatt & Takahashi 2011 notes that this is a case of parasitic scope (Sauerland 1998, Barker 2007, Lechner 2017, others) where movement of the standard phrase targets a position created by prior movement

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of a scope taking element, the target. The structure after LF movement is shown in (53).[14] The

semantic derivation now converges.

(53)

$$
\begin{array}{c}
\text{FP}_t \\
\end{array}
$$

[Tree structure:]

- FP$_t$
  - DP$_e$ Rabe
  - FP$_{<et>}$
    - PP$_{<<d,et>,et>}$
      - P$_{<e,<<d,et>,et>>}$ noho 'than'
      - DP$_e$ Rasoa
    - FP$_{<d,et>}$
      - λd
      - FP$_{<et>}$
        - λx
        - FP
          - F
          - TP
            - T
            - PredP$_t$
              - DP$_e$
              - Pred'
                - Pred
                - VP$_{<et>}$
                  - V$_{<e,et>}$ nividy 'bought'
                  - DP$_{<et,t>}$
                    - D
                    - NP$_{<et,t>}$
                      - NP$_{<et>}$ boky 'book'
                      - DegP$_{<et,<et,t>>}$
                        - QP$_{<d,<et,<et,t>>>}$ betsaka 'many'
                        - Deg'$_d$
                          - Deg
                          - PP$_d$

In the next section, I provide evidence showing that DA is superior to RA. In section 5, I

return to the trigger restrictions. DA does not automatically account for the trigger restrictions on

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[14] Bhatt & Takahashi 2011 argues that these movements are overt in Hindi-Urdu. Unlike in that

work, Late Merger of the standard is unnecessary here as the comparative semantics are encoded

in the standard marker, not the comparative morpheme.

the standard but section 5 argues that this is not a mark against it. It is independently necessary that there be a mechanism to attach these characteristics to a nominal without making it a trigger. This mechanism can thus be combined with DA without cost.

4   Evidence for a Direct Analysis

This section provides arguments in favor of DA and against RA for Malagasy. The evidence is of four kinds. First, there is indirect evidence in section 4.1 from the observation that the standard never shows overt clausal structure beyond the trigger. If RA is correct, the reduction operations will have to be maximal and obligatory. Second, section 4.2 presents locality diagnostics from Binding Principle B and scope which indicate that the standard in Malagasy is in the matrix clause and not in a separate dependent clause. Under DA, the construction is monoclausal and the standard is in the matrix clause. Under RA, in contrast, the standard is in an embedded clause and comparatives should behave as though they are biclausal, which Malagasy comparatives do not. Third, section 4.3 discusses island sensitivity of Malagasy comparatives, showing that the target cannot be located inside an island and supporting a direct analysis. Finally, section 4.4 presents evidence against the specific instantiation of RA developed above in which the standard is always a trigger. This claim turns out to be incorrect in that there are possible standards that are not possible triggers and vice versa. In total, the evidence strongly suggests that RA is not appropriate for Malagasy.

4.1   Lack of overt clausal structure

An expectation of RA is that one will see unreduced clauses in comparatives. DA, in contrast, precludes clausal comparatives because the standard is never a clause. English allows a wide range of clausal comparatives, which has been used as motivation for a reduction analysis of phrasal

comparatives because the reduction operations are optional. We will see that none of the English clausal comparatives are grammatical in Malagasy.

Not surprisingly, fully unreduced clausal comparatives are not possible. They are also ungrammatical in English, indicating that some amount of ellipsis is obligatory:

(54) a. *Lava   kokoa   [noho   lava   (kokoa)   Rasoa]   Rabe

    tall   more   than   tall   more   Rasoa   Rabe

    ('*Rabe is taller than Rasoa is tall.')

  b. *Nividy boky   betsaka [noho nividy   boky   (betsaka   kokoa)   Rasoa]   Rabe

    bought book   many   than   bought book   many   more   Rasoa   Rabe

    ('*Rabe bought more books than Rasoa bought books.')

Applying Comparative Deletion to the nominal containing the gradable element still results in ungrammaticality in Malagasy, although not in English, as seen in the examples below. The material targeted by Comparative Deletion is shown in angled brackets. The presence of a verb indicates clausal structure, but the result is ungrammatical, regardless of the order of the subject and predicate inside the standard phrase or the voice of the verb.

(55) a. *Nividy   boky   betsaka   [noho   [nividy   \<boky   betsaka\>   Rasoa]   Rabe

    bought   book   many   than   bought   book   many   Rasoa   Rabe

    ('Rabe bought more books than Rasoa bought.')

  b. *Nividy   boky   betsaka   [noho   [Rasoa   nividy   \<boky   betsaka\>]]   Rabe

    bought   book   many   than   Rasoa   bought   book   many   Rabe

    ('Rabe bought more books than Rasoa bought.')

c. *Nividy boky betsaka [noho [novidin- dRasoa <ny boky betsaka>]] Rabe

   bought book many than bought.TT Rasoa DET book many Rabe

   ('Rabe bought more books than were bought by Rasoa.')

It is not the case that such comparatives cannot be expressed; rather, they are formulated as degree standard comparatives introduced in section 2.5. The clausal comparative attempted in (55) can be expressed as in (56).

(56) a. Betsaka ny boky novidin- dRabe [noho [ny novidin- dRasoa]]

   many DET book bought.TT Rabe than DET bought.TT Rasoa

   lit. "The books Rabe bought are more than the ones that Rasoa bought."

   'Rabe bought more books than Rasoa bought.'

   b. Nividy boky betsaka kokoa Rabe [noho [ny novidin- dRasoa]]

   bought book many more Rabe than DET bought.TT Rasoa

   'Rabe bought more books than what Rasoa bought.'

Subcomparatives, in which only the degree variable is unpronounced, are also impossible:

(57) a. *Lava kokoa ny latabatra [noho [lehibe <betsaka> ny varavarana]]

   long more DET table than big much the door

   b. *Lava kokoa ny latabatra [noho [ny varavarana lehibe <betsaka>]]

   long more DET table than the door big much

   ('The table is longer than the door is wide.')

As above, such subcomparatives can be expressed using a degree standard comparative:

(58) Be kokoa ny halavan' ny latabatra noho ny sakan' ny varavarana

big more DET length DET table than DET width DET door

lit. "The table's length is bigger than the door's width."

'The table is longer than the door is wide.'

The absence of clausal comparatives does not conclusively show that phrasal comparatives are not derived by RA. Rather, they indicate that, if the source is clausal, Comparative Ellipsis is maximal in obligatorily deleting everything but the trigger. This is an unusual state of affairs as ellipsis operations are typically optional. DA, on the other hand, would straightforwardly not allow any of the ungrammatical examples on the assumption that the standard must be a nominal.

4.2 Locality diagnostics

A structural difference between RA and DA is the number of clauses in a comparative. Under RA, the construction is biclausal; the standard is the trigger of an embedded clause. In DA, the construction is monoclausal; the standard is in a PP that is part of the matrix clause. Coreference options with respect to Binding Principle B in sections 4.2.1 and scope ambiguities in section 4.2.2 support the monoclausal picture. Both Principle B and scope ambiguities suggest that the standard is in the same clause as the target in Malagasy. In section 4.2.3 I address a potential counterargument to these considerations given that the English and Malagasy facts are identical but English is argued to use a Reduction Analysis (Lechner 2004).

4.2.1 Principle B

Principle B of the Binding Theory in (59) requires that a pronoun be free in its minimal clause and imposes a clausemate anti-locality requirement on bound pronouns.

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(59) *Binding Principles* (Chomsky 1981)

    A. An anaphor must be bound in its binding domain

    B. A pronoun must be free in its binding domain

    C. An R-expression must be free

I assume that the Binding Principles apply at LF (Chomsky 1995, Hornstein, Nunes & Grohmann 2005, others) after PredP reconstruction (see references above) and that Malagasy obeys Principle B (Paul & Rabaovololona 1998, Pearson 2018). In the examples in (60), the pronouns must be free from the coindexed trigger at LF because of Principle B.

(60) a. Nahita $azy_{k,*R}$ $Rakoto_R$

          PAST.see   3.ACC   Rakoto

          '$Rakoto_R$ saw $him_{k,*R}$.'

  b. Faly $ami\text{-}ny_{k,*R}$ $Rabe_R$

          happy PREP-3SG.GEN Rabe

          '$Rabe_R$ is proud of $him_{k,*R}$.'

    If DA is correct, a pronominal standard should require disjoint reference with a matrix argument such as the trigger, as the standard and trigger are in the same clause and coreference would violate Principle B, just as in (60). Indeed, speakers reject coreference, (61). Instead, the complex reflexive *ny tenany* 'DET self.3SG.GEN' must be used.

(61)   Tsapan- dRabe$_R$ fa

feel.TT   Rabe   that

matanjaka   noho   *izy$_R$/ny   tena-ny$_R$ izy$_R$

be.strong   than   3SG.NOM/DET self-3SG.GEN 3SG.NOM

'Rabe$_R$ felt that he$_R$ was stronger than *him$_R$/himself$_R$.'

Under RA, the standard *izy* '3SG.NOM' in (61) would be in a separate clause and would not be excluded by Principle B, as shown in the RA representation in (62). Principle B thus suggests that the standard is in the matrix clause, as in DA.[15]

(62)   Tsapan- dRabe$_R$ fa

feel.TT   Rabe   that

matanjaka   [noho [$_{CP}$ [$_{XP}$ izy$_R$ [$_{FP}$ <matanjaka-*d* >   izy]]]]   izy$_R$

be.strong   than   3SG.NOM   be.strong   3SG.NOM

'Rabe$_R$ felt that he$_R$ was stronger than *him$_R$/himself$_R$.'

4.2.2   Scope

It is widely recognized that the scope of many quantifiers, particularly the universal quantifier *every*, is clausebound (Chomsky 1977, May 1977, Hornstein 1995, others). I illustrate this observation for English and Malagasy. In (63a), the universal quantifier in trigger position takes

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[15] While the reflexive might be taken to further support DA, the Malagasy reflexive *ny tenany* 'himself' is not a strict Principle A reflexive because *ny tenany* can find an antecedent across a clause boundary (Paul 2004). Consequently, its grammaticality does not argue against a biclausal analysis.

wide scope over the indefinite object. In (63b), the universal quantifier in object position takes inverse scope over the indefinite in trigger position. In both cases, the wide scope interpretation of the universal is facilitated by the distributive marker *samihafa* 'different' on the indefinite.

(63) a. Nihira   ny   hira   samihafa   ny   mpianatra   rehetra

        sang   DET song   different   DET   student   all

        'Every student sang a different song.'   EVERY > A (SURFACE SCOPE)

    b. Namotsotra   ny   mpifatotra   rehetra   ny   mpiambina samihafa

        freed   DET prisoner   all   DET   guard   different

        'A different guard freed every prisoner.'   EVERY > A (INVERSE SCOPE)

Hantrimalala & Paul 2012 notes that scope ambiguities are difficult to investigate in Malagasy; speakers tend to find examples unambiguous. For that reason, I have given two unambiguous examples above, which nevertheless show the availability of surface and inverse scope readings in the monoclausal case.

    The situation is different when the universal quantifier is in an embedded clause. In this case, it cannot take scope out of the embedded clause over an indefinite in the matrix clause, (64), even when the inverse reading is facilitated by *samihafa* 'different' and would yield a more pragmatically reasonable meaning than the surface scope.

(64)   Lazaiko   ny   olona   (#samihafa)

tell.TT.1SG   DET   person   different

[CP fa   manambady   ny   lehilahy   rehetra   Rasoa]

that   be.married   DET   man   all   Rasoa

'I told someone that Rasoa is married to every man.'

a. *Every man is such that I told a different person that Rasoa is married to him.

*EVERY > A (INVERSE, NON-CLAUSEBOUND SCOPE OF *EVERY*)

b. I told someone that Rasoa is married to every man.

A > EVERY (SURFACE SCOPE)

This observation can be used to determine whether the comparative construction is monoclausal or biclausal. If a quantificational standard can scopally interact with matrix material, then they are in the same clause, the construction is monoclausal, and a Direct Analysis is supported. Conversely, if they do not scopally interact, one explanation is that they are in separate clauses, as in RA, and the clauseboundedness of QR prevents the interaction. A Reduction Analysis is thus supported.

The Malagasy data in (65) conform to the DA prediction. The universally-quantified standard *ny rehetra* 'everyone' interacts with matrix negation to yield a scope ambiguity. In particular, the standard can scope over negation, the reading in (65b). The fact that it can do so indicates that the standard is not inside a finite clause and can be taken as evidence in favor of the monoclausal DA analysis.

40

(65)   Tsy   matanjaka   noho   [ny   rehetra]   Rabe

        NEG   be.strong   than   DET   all   Rabe

        'Rabe isn't stronger than everyone.'

    a. 'Rabe is stronger than not everyone.'   NEG > ALL

    b. 'Rabe isn't stronger than anyone.'   ALL > NEG

Under RA, the example would have the structure in (66), in which the universal quantifier *ny rehetra* 'DET all' is the trigger in the clausal standard. It should not be able to scope out of the embedded clause, over negation in the main clause, contrary to fact.

(66)   Tsy matanjaka [noho [$_{CP}$ [$_{XP}$ ny   rehetra [$_{FP}$ <matanjaka-*d* > ~~ny rehetra~~]]]] Rabe

        NEG be.strong than   DET all   be.strong   Rabe

        'Rabe isn't stronger than everyone.'

Summarizing, scope and Principle B suggest that the standard of comparison is in the same clause as matrix material, a conclusion that is straightforwardly compatible with DA.

4.2.3   An alternative

The reader will have noticed that the English facts regarding Principle B and scope are the same as in Malagasy. Nevertheless, some researchers have resisted concluding that a Direct Analysis is needed for English (Lechner 2004, Pancheva 2006). Instead, they argue for an alternative instantiation of the Reduction Analysis in which the missing clause is not a full finite clause but, rather, a small clause lacking a CP layer and finiteness. This section develops such an analysis for Malagasy, using the small clause complement to Malagasy perception verbs (Pearson 2018) as a guide to the expected syntactic behavior of Malagasy small clauses. I show that comparative

standards behave differently from the triggers of such small clauses and conclude that a small clause approach to the Malagasy comparative data is not appropriate.

The only well-documented case of small clauses in Malagasy is the complement to perception verbs (Pearson 2018), as in (67).

(67)   Nahita   [ilay   vehivavy   niditra   tao   an-trano]   aho

        saw   DEM   woman   enter   LOC   PREP-house   1SG.NOM

        'I saw the woman enter the house.'

A salient characteristic of these small clauses is that they show trigger-predicate order.[16] Pearson 2018 therefore concludes that they lack Predicate Fronting. In the clause structure adopted here, (14), that means that FP, the position for the fronted predicate, is missing. Nevertheless, Pearson 2018 also shows that the initial noun phrase in the small clause is still a trigger. This requires that Malagasy small clauses be as large as TP. In the extension of the small clause analysis to Malagasy comparatives, this is desirable in order to continue to capture the trigger characteristics of the standard.

A Small Clause Analysis for Malagasy comparatives would resemble RA developed above: the standard is a small clause trigger that composes directly with a (non-)verbal predicate. I instantiate a Small Clause Analysis for Malagasy as in (68b) for the scope example repeated in (68a). The clausal complement of the standard marker is TP, as opposed to CP. It is large enough

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[16] The embedded verb is also marked for tense, as Malagasy has no non-finite verb forms. Nonetheless, the tense is not interpretable but must match the tense of the perception verb (Pearson 2018: 795-796). I conclude that these are not syntactically finite clauses.

to contain spec,TP, the position for the trigger, but not large enough to allow predicate fronting or other markers of finiteness.

(68) a. Tsy   lava   noho   [ny   rehetra   <lava-*d*>]   Rabe

       NEG   tall   than   DET   all   tall   Rabe

       'Rabe isn't taller than everyone.'

b.

```
            PP
          /    \
        P        TP
       noho     /   \
     'than'  DP_k      T'
          ny rehetra  /   \
          'DET all'  T     PredP
                            /\
                          lava-d
                          'd-tall'
```
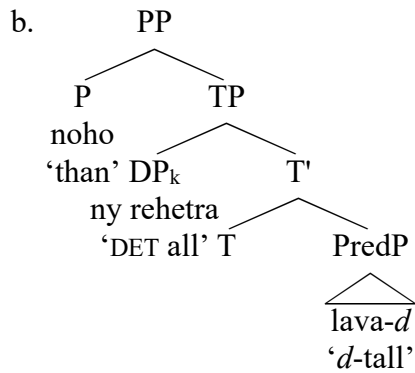
Unfortunately, this variant of the Reduction Analysis does not work for the Malagasy Principle B and scope data. I demonstrate this below while also explaining how the Small Clause Analysis succeeds in English.[17]

Looking first at the Principle B data, a pronominal standard requires disjoint reference with respect to the subject, (69). A local reflexive is used to indicate coreference.

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[17] A reviewer expresses concern that small clause complements to perception verbs in Malagasy behave differently from similar small clause complements in English. Malagasy seems to not have small clauses that parallel the English class, making perception verb complements the most suitable and, currently, only indicator of expected behavior.

(69)   John can't be better than *him/himself.

This is accounted for by a Small Clause Analysis because the subjects of small clauses show the same behavior, (70). They are necessarily disjoint in reference from the matrix subject and coreference requires a reflexive. The subject of a small clause acts as though it is in the matrix clause for purposes of Principle B.

(70)   Looking in the mirror, John saw [*him/himself trembling].

Pearson 2018: 821 documents that Malagasy small clause complements to perception verbs behave differently. The equivalent of (70) allows coreference between the matrix subject and the small clause trigger, (71); the small clause constitutes a separate binding domain for the pronoun.

(71)   Nahita   [azy$_i$ nangovitra]   Rakoto$_i$

         saw   3SG.ACC   tremble   Rakoto

         'Rakoto saw himself trembling.'

         (Pearson 2018: 821, (86b))

Given the differing behavior of English and Malagasy small clauses, the comparatives should also behave differently under a Small Clause Analysis; however, they do not, (61).

The same challenge arises with the scope data. Larson 1988 observed that phrasal comparatives in English in which the standard of comparison is a universal quantifier are ambiguous, (72), unlike in the clausal comparative, (73).

(72)   Someone is smarter than everyone.

         (Larson 1988: 4, (12a))

    a. There is someone who is smarter than everyone.   SOME > EVERY

    b. Somebody or other is smarter than everyone.   EVERY > SOME

(73)   Someone is smarter than everyone is.

         (Larson 1988: 4, (12b))

    a. There is someone who is smarter than everyone.   SOME > EVERY

    b. *Somebody or other is smarter than everyone.   *EVERY > SOME

The Small Clause Analysis again achieves the right result here because English small clause subjects can take scope out of the small clause, as shown by the ambiguity of (74).

(74)   Someone saw [every student cheat].

    a. There is someone who saw every student cheat.   SOME > EVERY

    b. Every student was seen cheating by somebody or other.   EVERY > SOME

Malagasy small clauses again behave differently. The trigger of a small clause cannot take scope over matrix elements. In (75), the small clause trigger cannot scope over matrix negation. The ambiguity of the comparative in (65) is thus unexpected if a Small Clause Analysis were correct for Malagasy comparatives.

(75)   Tsy nahita   [ny olona rehetra niditra   tao   an-trano]   aho

        NEG saw   DET person all   enter   LOC PREP-house 1SG.NOM

        'I didn't see everyone enter the house.'

a. I saw not all (but some) people enter the house.   NEG > EVERY

b. *I didn't see anyone enter the house.   *EVERY > NEG

In summary, Malagasy small clauses are not as small as English small clauses and behave differently with respect to locality diagnostics. Malagasy small clauses constitute a separate clausal domain for scope and binding. Thus, even positing a small clause standard in comparatives will not explain the Malagasy facts in sections 4.2.1 and 4.2.2. I conclude that a Small Clause Analysis for Malagasy comparatives is not adequate, despite being able to handle English facts that are potentially problematic for a full Reduction Analysis.

4.3 Island sensitivity

A third argument in favor of DA and against RA comes from islands. A well-known diagnostic for hidden clausal structure is the possibility of interpreting unelided material inside a syntactic island. Ross 1969, and later Merchant 2001, show that Sluicing, or TP ellipsis, ameliorates islands. A wh-phrase extracted from an island is grammatical just in case the island is deleted. This phenomenon has been dubbed ISLAND REPAIR BY ELLIPSIS (Ross 1969, Chomsky 1972, Lasnik 2001, Merchant 2001, 2004, 2008, others). Island sensitivity can thus be used a diagnostic for hidden clausal structure.

In the domain of comparatives, Merchant 2009 shows that reduced clausal comparatives introduced by the standard marker *ap'oti* 'than.CLAUSAL' in Greek do not show island effects, (76a), an instance of repair by ellipsis. Phrasal comparatives introduced by *apo* 'than.PHRASAL', in contrast, are island sensitive, (76b). (76) illustrates a standard corresponding to the bold-faced target inside the bracketed relative clause island.

(76)   Perisoteri anθropi menun   sto   kratos [pu kivernai   **o Putin**] …

         more   people live   in.the state that governs   the Putin

   a. ap'oti   o   Bush

       than.CLAUSAL   the Bush.NOM

   b. *apo   ton Bush

        than.PHRASAL   the Bush.ACC

       'More people live in the country that Putin governs than (live in the country that) Bush

       (governs).'

       (Merchant 2009: 142, (31))

Malagasy comparatives show island sensitivity.[18] The target cannot be inside a clausal adjunct, (77), or a relative clause, (78).

(77)   *clausal adjunct island*

         *Miara-miasa   tsara kokoa (noho   Rabe)   izahay

          be.together-work   well more   than   Rabe   1EXCL.NOM

         [rehefa   mihira   **Rasoa**] (noho   Rabe)

         when   sing   Rasoa   than   Rabe

         ('We work together better when Rasoa sings than (we work together when) Rabe

         (sings).')

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[18] For island insensitivity of reduced clausal comparatives and island sensitivity of phrasal comparatives in other languages, see Merchant 2009 (Greek), Lindenbergh 2016 (Dutch), An 2020 (Korean), and Vaikšnoraitė 2021 (Lithuanian).

(78)   *complex noun phrase (relative clause) island*

       *Namaky boky betsaka (noho   i Tolstoy)   [nosoratan' **i Balzac**] aho

        read   book more   than   Tolstoy   wrote.TT' Balzac   1SG.NOM

       (noho   i Tolstoy)

       than   Tolstoy

       ('I read more books that Balzac wrote than (I read books that) Tolstoy (wrote).')

Island sensitivity is expected given DA from section 3.2. Because the target undergoes movement at LF, it cannot be located inside an island. For example, the LF for the example in (78) requires that the bold-faced target *i Balzac* move from inside the relative clause to the position where it takes scope, as in the derivation in (53). This violates the Complex NP Constraint (Ross 1967).

In contrast, RA leads to the incorrect expectation that comparatives will be island insensitive, with the explanation falling under the umbrella of Island Repair by Ellipsis. For concreteness, we can follow Merchant's (2004, 2009) account of this phenomenon, which is that intermediate traces of an element once it has moved out of an island are marked as illicit at PF. Ellipsis eliminates these traces. If ellipsis does not take place, or the elided constituent is too small, illicit traces remain and the derivation crashes at PF.

Under RA, the derivation of the CNPC island example in (78) proceeds as in (79). Within the standard phrase on the second line, the standard *i Tolstoy* moves from within the bold-faced relative clause to the edge of the clausal standard, stopping at the edges of the DP and PredP phases. In doing so, it crosses an island and intermediate traces are marked illicit, indicated by a *. Ellipsis applies at PF, however, deleting the material inside angled brackets, which includes the offending traces. The derivation should thus converge as an instance of Island Repair by Ellipsis.

(79)   Namaky boky betsaka [nosoratan' i Balzac] aho

read   book   many   wrote.TT   Balzac   1SG.NOM

noho [i Tolstoy$_i$ <[$_{PredP}$ *t$_i$ namaky [$_{DP}$ *t$_i$ boky   betsaka-*d* **[nosoratan' t$_i$]**]] aho>]

than Tolstoy   read   book   many   wrote.TT   1SG

Malagasy does allow Island Repair by Ellipsis, as shown by the example in (80), in which Sluicing appears to repair islands.

(80) a. *clausal adjunct island*

Malahelo Rabe satria   lasa nody ny   zanany   lahy

sad   Rabe because left   DET   child-3SG male

fa   tsy   fantatr-o   hoe   iza

but NEG   know.TT-1SG COMP who

'Rabe is sad because his son left but I don't know which (son) (*Rabe is sad [because __ left]).'

b. *complex noun phrase (relative clause) island*

Mitady   olona   miteny fiteny   afrikanina ilay   komity

look.for person   speak   language African   DEM   committee

fa   tsy   fantatro   hoe   teny   inona

but NEG   know.1SG COMP language what

(*no mitady   [olona [miteny __]] ilay komity)

  FOC look.for   person   speak   DEM committee

'The committee is looking for someone who speaks an African language but I don't know which language (*it is looking for [someone [who speaks __]]).'

RA thus incorrectly predicts (79) to be grammatical. Under the Direct Analysis, there is no ellipsis to repair an island violation. The island sensitivity of Malagasy comparatives consequently supports DA.[19] [20]

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[19] Apparent island-violating comparatives are occasionally and inconsistently accepted by speakers. A representative example is in (i).

(i)   Betsaka kokoa [ny olona [miteny **teny anglisy**]] *noho ny teny gasy*

          many   more   DET person speaks English   than   Malagasy

          lit. 'The people who speak English are more than Malagasy'

          'More people speak English than Malagasy.'

Such exceptions uniformly have the following form: The island involved is a relative clause which is attached to the clause-final trigger. The target of comparison, bold-faced, is clause-final inside the relative clause. The italicized standard immediately follows the relative clause and is right-adjacent to the target. If any of these conditions are not met, the example becomes ungrammatical. For example, displacing the relative clause away from the standard phrase results in consistent ungrammaticality, (iia), as does placing the standard before the relative clause, (iib). I do not have an explanation and further investigation is required.

4.4 Non-trigger behavior of standards

The final piece of evidence for DA comes from under- and over-generation by RA. In RA, the standard moves from the trigger position and non-trigger material is deleted. It thus correlates standards and triggers, accounting for the trigger restrictions, but also predicting that a phrase can be a standard if and only if it can be a trigger. DA does not correlate standards and triggers. In this context, I discuss wh-phrases and targets inside prepositional phrases which argue in favor of DA. Wh-phrases can be standards but not triggers; Objects of prepositional phrases can become triggers but they cannot be standards.

(ii) a. *[Ny olona [miteny **teny anglisy**]] dia betsaka kokoa *noho ny teny gasy*

         DET person speaks English   TOPIC many   more   than   Malagasy

     b. *Betsaka kokoa *noho ny teny gasy* [ny olona [miteny **teny anglisy**]]

         many   more   than   Malagasy   DET person speaks   English

     ('More people speak English than Malagasy.')

[20] A reviewer suggests that island sensitivity could be accounted for under RA if it too assumed some island-violating LF movement. Two points argue against this: First, reduced clausal comparatives in other languages are island insensitive (see Merchant 2009 on Greek, Lindenbergh 2016 on Dutch, and An 2020 on Korean), suggesting that we do not want a reduction analysis to predict island sensitivity—this would have to be a Malagasy-specific fix. Second, there is no motivation for LF movement of the target or the standard in a reduction analysis, the structure is interpretable without it.

4.4.1 Wh-phrases

Malagasy is a wh-in-situ language (Paul & Potsdam 2012); however, there is a restriction on where in-situ phrases can appear. Specifically, wh-triggers cannot appear in-situ (Sabel 2002, 2003, but see Law 2006 for refinements): the ungrammatical (81a), versus (81b) and (81c).

(81) a. *Nividy   ny   vary   **iza**?

      bought   DET   rice   who

      ('Who bought the rice?')

      (Sabel 2003: 234, (12a))

   b. Nividy   **inona**   Rabe?

      bought   what   Rabe

      'What did Rabe buy?'

      (Sabel 2003: 234, (11c))

   c. Nividy   ny   vary   **taiza**   Rabe?

      bought   DET   rice   where   Rabe

      'Where did Rabe buy the rice?'

      (Sabel 2003: 234, (13a))

Instead, triggers must be questioned using an alternative, cleft strategy in which the wh-phrase is the clause-initial predicate (Dahl 1986, Paul 2001, Potsdam 2006, Law 2007):

(82) a. Iza   no   nividy   ny   vary?

      who   FOC   bought   DET   rice

      'Who bought rice?'

   b. [iza]~predicate~   [no   nividy   ny   vary]

Given that *iza* 'who' cannot be a trigger, RA predicts that it also cannot be the standard of comparison, since standards are simply triggers in a clause that has been reduced by ellipsis. This prediction is incorrect. A standard may be an in-situ wh-phrase, (83).[21]

(83)   Lava   kokoa   noho   **iza**   Rabe?

       tall   more   than   who   Rabe

       'Who is Rabe taller than?'

Under DA, the grammaticality of this example is expected and is on a par with wh-in-situ with prepositional objects:

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[21] The standard under RA is not actually in spec,TP after ellipsis. It is in the specifier of a projection, XP, above TP, having moved there from spec,TP. See the structure in (39). If the restriction on wh-in-situ holds only of wh-phrases in spec,TP at Spell Out, the argument would not go through. It only succeeds on the assumption that wh-in-situ is ruled out because the wh-phrase was in spec,TP at some point in the derivation. I do not know of an appropriate construction that would allow me to determine the precise formulation of the wh-in-situ restriction.

(84) a. Mandihy   miaraka   amin'   **iza**   ianao?

   dance   together   PREP   who 2SG

   'Who do you dance with?'

   (Law 2006: 179, (72c))

   b. Nijaly   noho   **iza**   i Paoly?

   suffered   because who   Paul

   'Who did Paul suffer because of?

4.4.2   Targets inside PPs

A second case of standard-trigger mismatch comes from targets which are the object of a preposition. Such examples are ungrammatical if the standard corresponds to the prepositional object:

(85) a. *Nividy   voninkazo   betsaka   kokoa   ho   an'   i Mery   *noho   i Noro*   Rabe

   bought   flowers   many   more   for   ACC Mary   than   Noro   Rabe

   ('Rabe bought more flowers for Mary than Noro.')

   b. *Nandihy   kokoa   tamin'   ny   lehilahy   *noho   ny   vehivavy*   Rasoa

   danced   more   PREP   DET men   than   DET women   Rasoa

   ('Rasoa danced more with men than women.')

RA overgenerates in predicting that such examples should be grammatical. The circumstantial topic voice can be used to make these prepositional objects into triggers, (86).

(86) a. Nividianan- dRabe   voninkazo   <u>i Noro</u>

        bought.CT   Rabe   flowers   Noro

        'Noro was bought flowers by Rabe.'

    b. Nandihizan- dRasoa   <u>ny   vehivavy</u>

        danced.CT   Rasoa   DET women

        'Rasoa danced with the women.'

If such nominals can be triggers, these clauses should be able to serve as the clausal standards for the comparatives in (85), prior to reduction. For example, (85a) should permit the pre-ellipsis structure in (87) which includes the well-formed clause in (86a) as the clausal standard. Nevertheless, after comparative deletion of the bracketed material, the ungrammatical (85a) results.[22] [23]

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[22] The voice mismatch between the matrix clause and the standard clause is not the cause of the ungrammaticality, as voice mismatches under clausal ellipsis are allowed in Malagasy (Potsdam 2007, Ranero 2021).

[23] In order to express such standards, a degree standard comparative is used. The licit version of (85a) is in (i).

(87)   *Nividy   voninkazo   betsaka   kokoa   ho   an'   i Mery

      bought.AT   flowers   many   more   for   ACC   Mary

noho   [i Noro   <nividianan-   dRabe   voninkazo   betsaka-*d*   ~~i Noro~~>]   Rabe

than   Noro   bought.CT   Rabe   flowers   many   Rabe

DA, in contrast, can account for these data. Malagasy does not allow P-stranding (Potsdam 2003) and I assume that this ban on P-stranding also holds of LF movement. If the object of a preposition is to take scope, the whole PP moves at LF (see Bayer 1996, von Stechow 2002, Bayer & Bader 2007 for QR of PP). In the comparative case at hand, the target must move at LF. The DP object of *noho* 'than' cannot move because that would result in P-stranding. The whole PP can move, but then there would then be mismatch between the target, a PP, and the standard, a DP. A PP target will not successfully semantically combine in its adjoined position (see (53)).

4.5   Intermediate conclusion

I take the above evidence to show that phrasal comparatives in Malagasy are best analyzed with a

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(i)   Nividy   voninkazo   betsaka   kokoa   ho   an'   i Mery

bought   flowers   many   more   for   ACC   Mary

noho   ny   ho   an'   i Noro   Rabe

than   DET   for   ACC   Noro   Rabe

lit. "Rabe bought more flowers for Mary than what (he bought) for Noro"

'Rabe bought more flowers for Mary than for Noro.'

As discussed in section 2.5, I take the standard in such examples to be a headless amount relative, roughly corresponding to "what (Rabe bought) for Noro" or "what was for Noro".

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Direct Analysis. Although independently motivated by being able to account for the trigger restrictions, the Reduction Analysis makes incorrect predictions elsewhere and I conclude it is not correct for Malagasy.

5   *Trigger restrictions under DA*

The observation from section 2.2 that comparative standards obey the trigger restrictions, (15), has no automatic explanation under DA as the standard is not a trigger. This section demonstrates that the trigger restrictions cannot be solely tied to the trigger position and the grammar must independently provide a way to place these restrictions on non-triggers. Given that such a mechanism must be available, it can be incorporated into DA with no penalty. I develop such an analysis here, proposing that the trigger restrictions can follow from complement selection.

Two pieces of evidence support the claim that there must be a way to enforce the trigger restrictions on a nominal without making it a trigger in a Reduction Analysis. The first is the use of *noho* where it means 'because', introduced in section 3.1. (44b, c) showed that, when followed by a DP, the DP obeys the trigger restrictions. A reduction analysis strikes me as unlikely here as there is no obvious antecedent for a missing clause. For example, (44a), repeated as (88), does not mean "He fled because Rasoa fled".

(88)   Nandositra   izy   noho   Rasoa

         fled   3SG.NOM   because   Rasoa

         'He fled because of Rasoa.'

The second comes from nominal objects following the preposition *toy* 'like', which also obey the trigger restrictions (Rajemisa-Raolison 1966: 45, 145). They are in the nominative case, (89a), and must be overtly marked with a determiner, (89b).

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(89) a. Kinga   saina toy ianao/*anao/*-nao   aho

        skilled mind   like 2SG.NOM/2SG.ACC/2SG.GEN   1SG.NOM

        'I am smart like you.'

    b. Mena   toy *(ny)   vainafo ny   takolany

        red   like DET   coals   DET cheek.3SG.GEN

        'His cheeks are red like coals.'

Toy 'like' has a variety of uses; however, as with *noho* 'because', an ellipsis analysis is not always appropriate. While (89b) has a plausible elliptical analysis as 'His cheeks are red like coals (are red)', the examples in (90) do not have elliptical interpretations. For example, (90a) does not mean 'We talk like that talks too'. Thus, we must be able to directly attach the trigger restrictions to a nominal without making it a trigger.[24]

(90) a. Afaka   miteny toy izany koa isika

        can   talk   like DEM   also 1PL.INCL.NOM

        'We can talk like that too.'

    b. Toy   ny   aloka   tsy miala ami-nao   ny   eritreritrao

        like   DET shadow NEG leave PREP-2SG.GEN   DET thought.2SG.GEN

        'Your thoughts are like shadows that never leave you.'

---

[24] DPs following *afa-tsy* 'except' must also be nominative, but the trigger restrictions are not otherwise respected. The complement of *afa-tsy* need not be a DP and DPs do not require a determiner (Potsdam 2018). Potsdam 2018 argues for an ellipsis analysis akin to RA for *afa-tsy* 'except'.

c. Misy zavatra maromaro, toy ny fary sy ny akondro,

exist thing several like DET sugar.cane and DET banana

mampiseho ny fanambinana

show DET prosperity

'There are several things, like sugar cane and bananas, that show prosperity.'

I propose that the trigger restrictions can be imposed on an element via complement selection. In comparatives, *noho* 'than' is a preposition that selects a DP complement against which it checks nominative Case, (91a). The DP category of the complement will ensure that there is an overt D˚, provided that we do not allow null determiners in Malagasy, (91b).[25] The Direct Analysis can thus account for the trigger restrictions, but they are not a result of the standard of comparison being a trigger.

(91) a. *noho*, P˚[Case: NOM], 'than', [__ DP]

b. no null determiners in Malagasy

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[25] Paul 2009 proposes that Malagasy has a null determiner with a restricted distribution, being allowed in DPs that are direct objects, accusative objects of prepositions, or predicates, but not DPs in other positions, such as trigger position. One could adopt Paul's proposal if there were a principled way to rule out the null D˚ in positions where it does not appear. For example, suppose that Pearson 2005 is correct that nominative case is a default used when no Case is checked. An obligatorily overt determiner could be taken as an alternative licensing mechanism when Case is not available. I leave the analysis of the overt determiner restriction for future work.

I conclude that the trigger restrictions are not strictly tied to a particular syntactic position and the grammar must provide a way to place these requirements on non-triggers. While selection may not be the most explanatory way to achieve this, some mechanism must be available. Ultimately, the trigger restrictions fail to support RA and are equally compatible with DA.

6   Conclusion

This paper has argued for a Direct Analysis of Malagasy phrasal comparatives. DA is more successful that RA in accounting for the phenomena in (92).

(92)

		RA	DA
a.	lack of clausal comparatives	✗	✓
b.	Principle B effects with respect to the standard	✗	✓
c.	scope interactions between the standard and matrix clause	✗	✓
d.	island sensitivity of the standard	✗	✓
e.	wh-phrase standards	✗	✓
f.	targets that are the object of a preposition	✗	✓

The superficial reasons to suspect a Reduction Analysis of Malagasy comparatives introduced in section 3.1—the trigger restrictions on the standard and uses of *noho* with the meaning 'because'—turn out to be unsupportive upon further investigation. Regarding the trigger restrictions, DA is at least as successful as RA in explaining them. Comparatives give insight into the proper analysis of these restrictions and suggest that they are not actually exclusively properties of triggers. I have proposed how they can be directly encoded in the Malagasy grammar without reference to trigger-hood.

Regarding *noho*, there are simply two homophonous lexical items. *Noho* 'because' selects either a DP or a clause. The standard marker *noho* 'than' selects only a DP. This nominal maybe an ordinary nominal typically of type *e*, (93a), or a nominal of type *d*, (93b). The latter yields what I have called a degree standard comparative, the precise analysis of which remains to be explored.

(93) a. Lava   kokoa   noho   [Rasoa]   Rabe

      tall   more   than   Rasoa   Rabe

      'Rabe is taller than Rasoa.'

   b. Lava   kokoa   noho   [ny   iray   metatra]   Rabe

      tall   more   than   DET   one   meter   Rabe

      'Rabe is taller than one meter.'

Malagasy is not the only language for which a Direct Analysis has been argued to be superior. Other languages include Mandarin Chinese (Xiang 2005, Lin 2009), Korean (Kim & Sells 2010), Japanese and Hindi-Urdu (Bhatt & Takahashi 2011), Greek (Merchant 2012), Russian (Philippova 2018), and Lithuanian (Vaikšnoraitė 2021). Languages with phrasal comparatives where a Reduction Analysis has been argued to be superior include Slavic (Pancheva 2006), Greek (Merchant 2009), Dari and Tajik (O'Connor 2013), Dutch (Lindenbergh 2016), and Russian (Philippova 2018). It is thus apparent that different languages employ different syntactic mechanisms to arrive at superficially similar forms. The phrasal comparative is not a unified syntactic phenomenon. At minimum, the cross-linguistic picture necessitates that the standard marker can syntactically select for a clause or a nominal, or both.

The larger question that the Malagasy picture raises is whether, given a language with a phrasal comparative, it is possible to predict whether it will employ a reduction analysis and/or a direct analysis from other aspects of the grammar. An anonymous reviewer suggests that, in light

of Lechner's (2001, 2004, 2017, 2021) work on the fine details of the reduction analysis in English, it could be informative to look at a language's small clause inventory. For Malagasy, the lack of English-like small clauses might explain why the language cannot have reduced phrasal comparatives. Perhaps languages without English-like small clauses cannot avail themselves of a reduction analysis and will necessarily use a direct analysis. This does not make the choice entirely predictable but other grammatical factors may be relevant to further restrict the analysis workspace, or there may in fact be analytical freedom in some languages.

Data-availability statement: All original data generated by this study are given explicitly in the text.

References

Abney, Steven. 1987. *The English noun phrase in its sentential aspect.* Doctoral thesis. Cambridge, MA: Massachusetts Institute of Technology.

Alrenga, Peter, Christopher Kennedy, and Jason Merchant. 2012. A new standard of comparison. In: Nathan Arnett and Ryan Bennett, editors. *Proceedings of 30th West Coast Conference on Formal Linguistics*. Somerville, MA: Cascadilla Press. 32-42.

An, Duk-Ho. 2020. Reduced NP comparatives in Korean and their implications. *Journal of East Asian Linguistics* 29.337-364.

Barker, Chris. 2007. Parasitic scope. *Linguistics & Philosophy* 30.407-444.

Bayer, Josef. 1996. *Directionality and Logical Form: On the scope of focus particles and wh-in-situ.* Dordrecht: Kluwer.

Bayer, Josef, and Markus Bader. 2007. On the syntax of prepositional phrases. In: Andreas Späth, editor. *Interface and interface conditions*. Berlin: de Gruyter. 157-180.

Beck, Sigrid, Toshiko Oda, and Koji Sugisaki. 2004. Parametric variation in the semantics of comparison: Japanese vs. English. *Journal of East Asian Linguistics* 13.289-344.

Beck, Sigrid, Sveta Krasikova, Daniel Fleischer, Remus Gergel, Stefan Hofstetter, Christiane Savelsberg, John Vanderelst, and Elisabeth Villalta. 2009. Crosslinguistic variation in comparison constructions. *Linguistic Variation Yearbook* 9.1-66.

Bhatt, Rajesh, and Roumyana Pancheva. 2004. Late merger of degree clauses. *Linguistic Inquiry* 35.1-45.

Bhatt, Rajesh, and Shoichi Takahashi. 2011. Reduced and unreduced phrasal comparatives. *Natural Language and Linguistic Theory* 29.581-620.

Bobaljik, Jonathan. 2012. *Universals in comparative morphology*. Cambridge, MA: MIT Press.

Brame, Michael. 1983. Ungrammatical notes 4: *Smarter than me*. *Linguistic Analysis* 12.323-338.

Bresnan, Joan. 1973. Syntax of the comparative clause construction in English. *Linguistic Inquiry* 4.275-343.

Bresnan, Joan. 1975. 1975. Comparative deletion and constraints on transformations. *Linguistic Analysis* 1.25-74.

Chomsky, Noam. 1965. *Aspects of the theory of syntax*. Cambridge, MA: MIT Press.

Chomsky, Noam. 1972. Some empirical issues in the theory of transformational grammar. In: Stanley Peters, editor. *The goals of linguistic theory.* Englewood Cliffs, NJ: Prentice-Hall. 63-130.

Chomsky, Noam. 1977. *Essays on form and interpretation*. New York, NY: North-Holland.

Chomsky, Noam. 1981. *Lectures on Government and Binding*. Berlin: Mouton de Gruyter.

Chomsky, Noam. 1995. *The Minimalist Program*. Cambridge, MA: MIT Press.

Chung, Sandra. 2017. VOS languages: Some of their properties. In Martin Everaert and Henk van Riemsdijk, editors. *The Wiley Blackwell companion to syntax,* 2nd edition. New York: John Wiley & Sons, Inc. 685-720.

Cole, Peter, and Gabriella Hermon. 2008. VP raising in a VOS language. *Syntax* 11.144-197.

Cresswell, Max. 1977. The semantics of degree. In: Barbara Partee, editor. *Montague Grammar.* New York, NY: Academic Press. 261-292.

Dahl, Otto Chr. 1986. Focus in Malagasy and Proto-Austronesian. In: Paul Geraghty, Lois Carrington, and S.A. Wurm, editors. *FOCAL I: Papers from the Fourth International Conference on Austronesian Linguistics*. The Australian National University: Pacific Linguistics. 21-45.

Dahl, Otto Chr. 1996. Predicate, subject, and topic in Malagasy. *Oceanic Linguistics* 35.167-179.

Gawron, Jean-Marc. 1995. Comparatives, superlatives, and resolution. *Linguistics & Philosophy* 18.333-380.

Guilfoyle, Eithne, Henrietta Hung, and Lisa Travis. 1992. Spec of IP and spec of VP: Two subjects in Austronesian languages. *Natural Language and Linguistic Theory* 10.375-414.

Hackl, Martin. 2000. *Comparative quantifiers.* Doctoral thesis. Cambridge, MA: Massachusetts Institute of Technology.

Hankamer, Jorge. 1973. Why there are two *than*'s in English. In: Claudia Corum, T. Cedric Smith-Stark, and Ann Weiser, editors. *Papers from the 9th Regional Meeting of the Chicago Linguistic Society*. Chicago, IL: Chicago Linguistic Society. 179-191.

Hazout, Ilan. 1995. Comparative ellipsis and Logical Form. *Natural Language and Linguistic Theory* 13.1-37.

Heim, Irene. 2000. Degree operators and scope. In: Brendan Jackson and Tanya Matthews, editors. *The Proceedings of SALT X*. Ithaca, NY: Cornell Linguistics Club. 40-64.

Hoeksema, Jack. 1983. Negative polarity and the comparative. *Natural Language and Linguistic Theory* 1.403-434.

Hornstein, Norbert, Jairo Nunes, and Kleanthes Grohmann. 2005. *Understanding Minimalism: An introduction to Minimalist syntax*. Cambridge: Cambridge University Press.

Keenan, Edward L. 1976. Remarkable subjects in Malagasy. In: Charles Li, editor. *Subject and topic*. New York, NY: Academic Press. 247-301.

Keenan, Edward L. 1995. Predicate-argument structure in Malagasy. In: Clifford S. Burgess, Katarzyna Dziwirek, and Donna Gerdts, editors. *Grammatical relations: Theoretical approaches to empirical questions*. Stanford, CA: CSLI. 171-216.

Keenan, Edward L. 2008. The definiteness of subjects and objects in Malagasy. In: Greville Corbett and Michael Noonan, editors. *Case and grammatical relations.* Amsterdam: John Benjamins. 241-261.

Kennedy, Christopher. 1999. *Projecting the adjective.* New York: Garland Publishing Co.

Kennedy, Christopher. 2009. Modes of comparison. In: Malcolm Elliott, editor. *Proceedings from the 43rd Annual Meeting of the Chicago Linguistic Society.* Chicago, IL: Chicago Linguistics Society. 141-165.

Kim, Jong-Bok, and Peter Sells. 2010. A phrasal analysis of Korean comparatives. *Studies in Generative Grammar* 20.179-205.

Larson, Richard. 1988. Scope and comparatives. *Linguistics & Philosophy* 11.1-26.

Lasnik, Howard. 2001. When can you save a structure by destroying it? In: Minjoo Kim and Uri Strauss, editors. *The Proceedings of the 31st Meeting of the North East Linguistic Society.* Amherst, MA: GLSA, University of Massachusetts at Amherst. 301-320.

Law, Paul. 2006. Argument marking and the distribution of wh-phrases in Malagasy, Tagalog, and Tsou. *Oceanic Linguistics* 45.153-190.

Law, Paul. 2007. The syntactic structure of the cleft construction in Malagasy. *Natural Language and Linguistic Theory* 25.765-823.

Lechner, Winifred. 2001. Reduced and phrasal comparatives. *Natural Language and Linguistic Theory* 19.683-735.

Lechner, Winfried. 2004. *Ellipsis in comparatives.* Berlin: Mouton de Gruyter.

Lechner, Winfried. 2017. Phrasal comparatives and parasitic scope. *Wiener Linguistische Gazette* 82.181-191.

Lechner, Winfried. 2021. Clausal vs. phrasal comparatives. In: Daniel Gutzmann, Lisa Matthewson, Cécile Meier, Hotze Rullmann, Thomas Ede Zimmermann, and Dina Voloshina. editors. *The Wiley Blackwell companion to semantics*. New York, NY: John Wiley & Sons, Inc.

Lechner, Winfried, and Norbert Corver. 2017. Comparative deletion and comparative subdeletion. In: Martin Everaert and Henk van Riemsdijk, editors. *The Wiley Blackwell companion to syntax*, 2nd edition. Malden: Blackwell.

Lees, Robert B. 1961. The English comparative construction. *Word* 17.171-185.

Lin, Jo-Wang. 2009. Chinese comparatives and their implicational parameters. *Natural Language Semantics* 17.1-27.

Lindenbergh, Charlotte G. 2016. Phrasal and clausal comparatives in Dutch. In: Jenny Audring and Sander Lestrade, editors. *Linguistics in the Netherlands 2016*. Amsterdam: John Benjamins. 70-88.

MacLaughlin, Dawn. 1995. Wh-movement in Malagasy: An extraction asymmetry. In: Akinbiyi Akinlabi, editor. *Theoretical approaches to African linguistics*. Trenton, NJ: Africa World Press. 117-128.

Massam, Diane 2000. VSO And VOS: Aspects of Niuean word order. In: Andrew Carnie and Eithne Guilfoyle, editors. *The syntax of verb initial languages*. Oxford: Oxford University Press. 97-116.

Massam, Diane, and Carolyn Smallwood. 1997. Essential features of predication in English and Niuean. In: Kiyomi Kusumoto, editor. *The Proceedings of the 27th Meeting of the North East Linguistic Society*. Amherst, MA: GLSA, University of Massachusetts at Amherst. 263-272.

May, Robert. 1977. *The grammar of quantification.* Doctoral thesis. Cambridge, MA: Massachusetts Institute of Technology.

McConnell-Ginet, Sally. 1973. *Comparative constructions in English: A syntactic and semantic analysis*. Doctoral thesis. Rochester, NY: University of Rochester.

Merchant, Jason. 2001. *The syntax of silence: Sluicing, islands, and the theory of ellipsis.* Oxford: Oxford University Press.

Merchant, Jason. 2004. Fragments and ellipsis. *Linguistics & Philosophy* 27.661-738.

Merchant, Jason. 2008. Variable island repair under ellipsis. In: Kyle Johnson, editor. *Topics in ellipsis.* Cambridge: Cambridge University Press. 132-153.

Merchant, Jason. 2009. Phrasal and clausal comparatives in Greek and the abstractness of syntax. *Journal of Greek Linguistics* 9.134-164.

Merchant, Jason. 2012. The two phrasal comparatives of Greek. Unpublished paper. Work conducted at: University of Chicago.

Merchant, Jason. 2013. Voice and ellipsis. *Linguistic Inquiry* 44.78-108.

Napoli, Donna Jo. 1983. Comparative ellipsis: A phrase structure analysis. *Linguistic Inquiry* 14.675-694.

Ntelitheos, Dimitrios. 2006. *The morphosyntax of nominalizations: A case study.* Doctoral thesis. Los Angeles, CA: UCLA.

O'Connor, Ellen. 2013. A clausal analysis of Dari and Tajik phrasal comparatives. In: Yelena Fainleib, Nicholas LaCara, and Yangsook Park, editors. *The Proceedings of the 41st Meeting of the North East Linguistic Society.* Amherst, MA: GLSA, University of Massachusetts at Amherst. 83-94.

Pancheva, Roumyana. 2006. Phrasal and clausal comparatives in Slavic. In: James Lavine, Steven Franks, Mila Tasseva-Kurktchieva, and Hana Filip, editors. *Formal Approaches to Slavic Linguistics 14: The Princeton Meeting.* Ann Arbor: Michigan Slavic Publications. 236-257.

Paul, Ileana. 2000. *Malagasy clause structure.* Doctoral thesis. Montreal, Canada: McGill University.

Paul, Ileana. 2001. Concealed pseudoclefts. *Lingua* 111.707-727.

Paul, Ileana. 2004. NP versus DP reflexives: Evidence from Malagasy. *Oceanic Linguistics* 43.32-48.

Paul, Ileana. 2009. The presence versus absence of determiners in Malagasy. In: Jila Ghomeshi, Ileana Paul, and Martina Wiltschko, editors. *Determiners: Universals and variation.* Amsterdam: John Benjamins. 215-242.

Paul, Ileana, Matthew Pearson, and Eric Potsdam. 2016. An argument for predicate fronting in Malagasy from SVO contexts. Handout, *42nd Meeting of the Berkeley Linguistic Society*, Berkeley, CA.

Paul, Ileana & Eric Potsdam. 2012. Sluicing without wh-movement in Malagasy. In: Jason Merchant and Andrew Simpson, editors. *Sluicing: Cross-linguistic perspectives*. Oxford: Oxford University Press. 164-182.

Paul, Ileana, and Lucie Rabaovololona. 1998. Raising to object in Malagasy. In: Ileana Paul, editor. *UCLA Occasional Papers in Linguistics 20: The Structure of Malagasy II*, Los Angeles, CA: UCLA Linguistics Department. 50-64.

Pearson, Matthew. 2000. Two types of VO languages. In: Peter Svenonius, editor. *The derivation of VO and OV*. Amsterdam: John Benjamins. 327-363.

Pearson, Matthew. 2001. *The clause structure of Malagasy: A minimalist approach.* Doctoral thesis. Los Angeles, CA: UCLA.

Pearson, Matthew. 2005. The Malagasy subject/topic as an A'-element. *Natural Language and Linguistic Theory* 23.381-457.

Pearson, Matthew. 2018. Predicate raising and perception verb complements in Malagasy. *Natural Language and Linguistic Theory* 36.1-69.

Philippova, Tatiana. 2018. *Prepositional repercussions in Russian: Pronouns, comparatives and ellipsis.* Doctoral thesis. Beersheba, Israel: Ben-Gurion University of the Negev.

Pinkham, Jessie. 1985. *The formation of comparative clauses in French and English*. New York: Garland Publishing Co.

Polinsky, Maria. 2008. Existential constructions in Malagasy. In: Yuri Lander, editor. *Language and text in the Austronesian world. Studies in honor of Ülo Sirk.* Berlin: LINCOM Europa. 222-257.

Potsdam, Eric. 1997. English verbal morphology and VP ellipsis. In: Kiyomi Kusumoto, editor. *The Proceedings of the 27th Meeting of the North East Linguistic Society.* Amherst, MA: GLSA, University of Massachusetts at Amherst. 353-368.

Potsdam, Eric. 2003. Evidence for semantic identity under ellipsis from Malagasy sluicing. In: Makoto Kadowaki and Shigeto Kawahara, editors. *The Proceedings of the 33rd Meeting of the North East Linguistic Society*. Amherst, MA.: GLSA, University of Massachusetts at Amherst. 285-302.

Potsdam, Eric. 2006. More concealed pseudoclefts in Malagasy and the Clausal Typing Hypothesis. *Lingua* 116.2154-2182.

Potsdam, Eric. 2007. Malagasy Sluicing and its consequences for the identity requirement on ellipsis. *Natural Language and Linguistic Theory* 25.577-613.

Potsdam, Eric. 2011. A direct analysis of Malagasy comparatives. *Tampa Papers in Linguistics* 2.1-24.

Potsdam, Eric. 2021. Malagasy extraposition: Evidence for PF movement. *Natural Language and Linguistic Theory* 40.195-237.

Rackowski, Andrea, and Lisa Travis. 2000. V-initial languages: X or XP movement and adverbial placement. In: Andrew Carnie and Eithne Guilfoyle, editors. *The syntax of verb initial languages*. Oxford: Oxford University Press. 117-141.

Rajemisa-Raolison, Régis 1969. *Grammaire malgache*. Fianarantsoa: Centre de Formation Pédagogique.

Randriamasimanana, Charles. 1986. *The causatives of Malagasy*. Honolulu: University of Hawaii Press.

Ranero, Rodrigo. 2021. *Identity conditions on ellipsis.* Doctoral thesis. College Park, MD: University of Maryland, College Park.

Reinhart, Tanya. 1991. Elliptic conjunctions – non-quantificational LF. In: Asa Kasher, editor. *The Chomskyan turn.* Cambridge, MA: Basil Blackwell. 360-384.

Ross, John Robert. 1967. *Constraints on variables in syntax*. Doctoral thesis. Cambridge, MA: Massachusetts Institute of Technology.

Ross, John Robert. 1969. Guess who? In: Robert Binnik, Alice Davison, and Georgia Green, editors. *Proceedings from the 5th Annual Meeting of the Chicago Linguistic Society.* Chicago, IL: Chicago Linguistic Society. 252-286.

Sabel, Joachim. 2002. *Wh*-questions and extraction asymmetries in Malagasy. *MIT Working Papers in Linguistics* 44.309-323.

Sabel, Joachim. 2003. Malagasy as an optional multiple wh-fronting language. In: Cedric Boeckx and Kleanthes Grohmann, editors. *Multiple wh-fronting*. Amsterdam: John Benjamins. 229-254.

Sauerland, Uli. *The meaning of chains*. Doctoral thesis. Cambridge, MA: Massachusetts Institute of Technology.

Schachter, Paul. 1993. Tagalog. In: Joachim Jacobs, Arnim von Stechow, Wolfgang Sternefeld, and Theo Venneman, editors. *Syntax: An international handbook of contemporary research*. Berlin: de Gruyter. 1418-1430.

von Stechow, Arnim. 1984. Comparing semantic theories of comparison. *Journal of Semantics* 3.1-77.

von Stechow, Arnim. 2002. Temporal prepositional phrases with quantifiers: Some additions to Pratt and Francez (2001). *Linguistics & Philosophy* 25.755-800.

Vaikšnoraitė, Elena. 2021. A direct analysis of Lithuanian phrasal comparatives. *Glossa* 6.1-18.

Xiang, Ming. 2003. A phrasal analysis of Chinese comparatives. In: Jonathon Cihlar, Amy Franklin, David Kaiser, and Irene Kimbara, editors. *Proceedings from the 39th Annual Meeting of the Chicago Linguistic Society*. Chicago, IL: Chicago Linguistic Society. 739-754.

Zribi-Hertz, Anne, and Liliane Mbolatianavalona. 1999. Towards a modular theory of linguistic deficiency: Evidence from Malagasy pronouns. *Natural Language and Linguistic Theory* 17.161-218.