

*Proceedings of the Eighteenth Meeting of the
Austronesian Formal Linguistics Association (AFLA)*

**Lauren Eby Clemens
Gregory Scontras
Maria Polinsky
(dir.)**

**AFLA XVIII
The Eighteenth Meeting of the Austronesian Formal Linguistics Association**

Harvard University
March 4-6, 2011

**A DIRECT ANALYSIS OF MALAGASY PHRASAL
COMPARATIVES**

Eric Potsdam
University of Florida

Table of Contents

| | | |
|---|--|---------|
| | Preface | i |
| Byron Ahn | <i>Tongan Relative Clauses at the Syntax-Prosody Interface</i> | 1-15 |
| Edith Aldridge | <i>Event Existentials in Tagalog</i> | 16-30 |
| Laura Kalin and Edward Keenan | <i>TP Serialization in Malagasy</i> | 31-45 |
| Manfred Krifka | <i>Notes on Daakie (Port Vato): Sounds and Modality</i> | 46-65 |
| Eri Kurniawan | <i>Does Sundanese have Prolepsis and/or Raising to Object Constructions?</i> | 66-79 |
| Bradley Larson | <i>A, B, C, or None of the Above: A C-Command Puzzle in Tagalog</i> | 80-93 |
| Anja Latrouite | <i>Differential Object Marking in Tagalog</i> | 94-109 |
| Dong-yi Lin | <i>Interrogative Verb Sequencing Constructions in Amis</i> | 110-124 |
| Andreea Nicolae and Gregory Scontras | <i>How Does who Compose?</i> | 125-139 |
| Eric Potsdam | <i>A Direct Analysis of Malagasy Phrasal Comparatives</i> | 140-155 |
| Chaokai Shi and T.-H. Jonah Linl | <i>A Probe-based Account of Voice Agreement in Formosan Languages</i> | 156-167 |
| Doris Ching-jung Yen and Loren Billings | <i>Sequences of Pronominal Clitics in Mantauran Rukai: V-Deletion and Suppletion</i> | 168-182 |

The Proceedings of AFLA 18

PREFACE

The 18th annual meeting of the Austronesian Formal Linguistics Association (AFLA 18) was held March 4-6, 2011, at Harvard University. A total of 30 presentations representing the work of 43 researchers were given, including three plenary talks by Robert Blust, Marc Brunelle, and Manfred Krifka. In addition to work on the syntax of Austronesian languages, the original focus of AFLA, researchers presented analyses of phenomena from a variety of core linguistics subfields including phonetics, phonology, and semantics, as well as their interfaces. In order to personalize the meeting and highlight the strong historical component of Harvard's Department of Linguistics, we also encouraged the presentation of work dealing with diachronic analyses of language phenomena. The culmination of these efforts appears here in these Conference Proceedings, which include twelve papers presented during the conference.

Throughout this process we have received generous support from a variety of sources within the Harvard Community. Financial support came from the Office of the Dean of the Faculty of Arts and Sciences, the Office of the Provost, Linguistics Circle: A Workshop of Linguistic Interfaces, the GSAS Research Workshop in Indo-European and Historical Linguistics, the GSAS Research Workshop in Language Universals and Linguistic Fieldwork, and the Harvard GSAS Graduate Student Council. Student participants in the volunteer effort include Michael Erlewine, Ruthe Foushee, Laura Grestenberger, Christopher Hopper, Julie Li Jiang, Caitlin Keenan, Louis Liu, Andreea Nicolae, Hazel Pearson, and Cheng-Yu Edwin Tsai. We also gratefully acknowledge the encouragement, endorsement, and assistance of the Harvard Department of Linguistics.

Finally, we would like to thank our reviewers for providing thoughtful commentary on abstracts submitted to the conference: Edith Aldridge, Michael Becker, Loren A. Billings, Marc Brunelle, Sandra Chung, Abby Cohn, Peter Cole, Jessica Coon, Amy Rose Deal, Marcel den Dikken, Mark Donohue, Dan Finer, Edward Flemming, Catherine Fortin, Randall Hendrick, Gabriella Hermon, Arthur Holmer, Hui-chuan Huang, Jay Jasanoff, Peter Jenks, Edward Keenan, Hilda Koopman, Paul Law, Jonathan MacDonald, Diane Massam, Ileana Paul, Hazel Pearson, Matt Pearson, Maria Polinsky, Eric Potsdam, Omer Preminger, Nina Radkevich, Norvin Richards, Joseph Sabbagh, Peter Sells, Lisa Travis, Wei-Tien Dylan Tsai and Elizabeth Zeitoun. Thank you also to the University of Western Ontario for hosting the website where AFLA proceedings are published.

To the groups and individuals who made this conference possible, and to the many researchers who made the event as enriching and stimulating as it was, we offer our sincerest thanks.

Lauren Eby Clemens, Gregory Scontras and Maria Polinsky, Harvard University

A DIRECT ANALYSIS OF MALAGASY PHRASAL COMPARATIVES*

Eric Potsdam
University of Florida
potsdam@ufl.edu

This paper investigates the syntax of Malagasy phrasal comparatives—comparatives in which the standard of comparison is a phrase. It argues for a direct analysis in which the standard is a simple noun phrase at all levels of representation. Evidence is offered against a reduced clause analysis in which the standard is the remnant of a partially elided clause.

1. Introduction

The cross-linguistic picture of the syntax and semantics of comparatives has expanded rapidly in the last two decades. In this paper, I contribute to this body of work by investigating the syntax of the comparative construction in Malagasy, an Austronesian language spoken by as many as seventeen million people on the island of Madagascar. Malagasy is typologically quite distinct from English, although the comparative construction looks superficially very English-like, as in (1).

- (1) lava (koko) [noho [ilay zaza]] Rabe
long more than that child Rabe
'Rabe is taller than that child.'

I begin with some terminology. In the English comparative in (2), *Sandy* is the TARGET OF COMPARISON and *Kim* is the STANDARD OF COMPARISON. *More* is the COMPARATIVE MORPHEME, *stubborn* is the GRADABLE PREDICATE, and *than* is the STANDARD MARKER. The standard marker plus the standard of comparison constitute the STANDARD PHRASE, bracketed in (2).

- (2) Sandy is more stubborn [than Kim].
target of *comparative* *gradable* *standard* *standard of*
comparison *morpheme* *predicate* *marker* *comparison*

Two types of comparatives predominate cross-linguistically. A CLAUSAL COMPARATIVE is a comparative in which the object of the standard marker shows clausal syntax:

* I thank my Malagasy consultants Bodo and Voara Randrianasolo as well as audiences at the University of Chicago, the 2nd Annual Tampa Workshop on Syntax, Semantics, and Phonology (University of South Florida), and the 18th meeting of the Austronesian Formal Linguistics Association (Harvard University).

The following non-Leipzig abbreviations are used in glossing: AT-actor topic voice, CT-circumstantial topic voice, DEIC-deictic, DIR-directional, PREP-preposition, T/A-tense/aspect, TT-theme topic voice. Examples come from my own notes unless otherwise indicated.

- (3) a. Mary is taller than *John is*.
b. Sue bought more books than *she read*.

A widely accepted analysis of clausal comparatives is Comparative Deletion. The complement to the standard marker is a clausal CP complement with a degree operator (Op) in spec,CP binding a degree variable (*d*) in the gradable predicate. Some portion of the clause is then deleted under identity with antecedent material (Bresnan 1973, Heim 2000), as in (4). Deleted material is contained in angled brackets.

- (4) Mary is taller [than [_{CP} Op_i [John is <*d_i*-tall>]]]

A PHRASAL COMPARATIVE is one in which the object of the standard marker is a phrase:

- (5) a. Mary is taller than *John*.
b. Sue talked more to Bill than *to Tom*.

Unlike with clausal comparatives, there is no consensus on the analysis of phrasal comparatives. There are three broad approaches. Under a REDUCED CLAUSE ANALYSIS (Bresnan 1973, Heim 1985, Hazout 1995, Hackl 2000, Lechner 2001, 2004, Pancheva 2006, to appear, Merchant 2009, and others), phrasal comparatives have covert clausal structure, much as in clausal comparatives. The clausal structure is greatly reduced by ellipsis:

- (6) Mary is taller [than [_{CP} Op_i [John <is *d_i*-tall>]]]

Under a DIRECT ANALYSIS, the object of the standard marker is a simple phrase, e.g. a DP, and no ellipsis is involved (Hankamer 1973, Hoeksema 1983, Brame 1983, Napoli 1983, Bhatt and Takahashi 2011, and others):

- (7) Mary is taller [than [_{DP} John]]

Finally, there is the so-called IMPLICIT COMPARISON ANALYSIS. Following Kennedy 2009, explicit comparison involves specialized comparative morphosyntax that expresses a comparative ordering relation. Implicit comparison, in contrast, expresses comparison only indirectly, by specifying the context in which an inherently context-sensitive gradable predicate is evaluated. English comparatives as in (8a) clearly represent explicit comparison. Implicit comparison is represented by (8b).

- (8) a. Mary is taller than John.
b. Mary is tall, compared to John.

Within this analytical context, this paper explores the syntactic analysis of Malagasy examples such as (1). Section 2 lays out relevant aspects of Malagasy morphosyntax and the comparative construction. Section 3 considers the opposition between a reduced clause analysis and a direct analysis. I offer evidence in favor of a direct analysis in section 4. Section 5 concludes.

2. Malagasy Morphosyntax and Comparatives

Malagasy is traditionally described as a VOS language. In fact, this view is somewhat controversial because it depends upon the analysis of Malagasy's Philippine-style voicing system illustrated in (9) through (11) below. I will remain neutral about the exact analysis and will base the rest of the paper on the following conception of Malagasy clauses: I take the core of a clause to be a predicate, in a non-technical sense. Within a verbal predicate, the constituent order is verb, followed by the subject, object, obliques, and adjuncts. From within this predicate, one element, the TRIGGER, externalizes to a clause-final position. Voice morphology on the verb then registers the grammatical role of this externalized trigger.

Malagasy has three voices. In the actor topic voice (AT), the trigger is the subject, (9). When the object is the trigger, the verb shows theme topic (TT) morphology, (10). Finally, when the trigger is an oblique or adjunct, the verb is in the circumstantial topic (CT) form, (11). 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 1969).

- | | | | | |
|--------|--|------------------------|-------------------------|-----------------------------|
| (9) | n-i-antso past-AT-call 'Mary called the worker.' | mpiasa worker | i Mery Mary | |
| (10) | n-antso-in' past-call-TT 'Mary called the worker.' | i Mery Mary | ny mpiasa the worker | |
| (11)a. | n-i-antso-an' PAST-CT-call-CT 'Mary called the worker with the whistle.' | i Mery Mary | mpiasa worker | ny kiririoka the whistle |
| b. | i-toer-an' CT-live-CT 'The man lives in this house.' | ny lehilahy the man | ity trano this house | ity this |

Paul 2000:91

In the non-actor topic clauses, (10) and (11), the subject appears immediately after the verb. It is phonologically "bonded" to the verb, indicated in the orthography by an apostrophe or hyphen.

2.1 Trigger Restrictions

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

(12) *Trigger restrictions*

- a. nominal
- b. nominative case
- c. overt determiner

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 (13a), adverbs (13b), and clausal adverbials (13c) are impossible triggers.

- (13)a. *nividiana-ko vary [PP tamin' ny zoma]
 buy.CT-1SG rice PREP the Friday
 ('I bought rice on Friday.')

Paul 2000:92

- b. *itenenan' i Bozy [AP mafy]
 speak.CT Bozy hard
 ('Bozy speaks loudly.')

after Paul 2000:94

- c. *itsanganan- dRabe [VP mihinana akoho]
 stand.CT- Rabe eat.AT chicken
 ('Rabe stands while eating chicken.')

after Paul 2000:94

The Malagasy pronominal system recognizes three cases: accusative, genitive, and nominative. A partial paradigm for singular pronouns is given in (14). Nominative case is used for triggers, (15).

(14) *Malagasy singular pronouns*

| | ACCUSATIVE | GENITIVE | NOMINATIVE |
|-----|-------------|-------------|----------------|
| 1SG | <i>ahy</i> | <i>-ko</i> | <i>(iz)aho</i> |
| 2SG | <i>anao</i> | <i>-nao</i> | <i>ianao</i> |
| 3SG | <i>azy</i> | <i>-ny</i> | <i>izy</i> |

- (15) nihomehy izy/*azy/*-ny
 laugh.AT 3SG.NOM/3SG.ACC/3SG.GEN
 'S/he laughed.'

Finally, there is an unusual, robust requirement that triggers have an overt pre-nominal determiner (Keenan 1976, 2008, M. Pearson 2001, Paul 2000, 2009, Law 2006, and others). A range of elements counts as determiners. This includes the determiners *i* and *Ra-* used with names, pronouns, demonstratives such as *ilay* ('that') or *ireo* ('those'), and the default determiner *ny*, which roughly translates as ('the') but does not always indicate definiteness. Grammatical triggers with an appropriate determiner are shown in (16). If the triggers in the above examples are missing a determiner, the result is ungrammatical, as in (17).

- (16) nihomehy **i** Soa/**izy/ny** zaza/**ilay** vehivavy
 laugh.AT **DET** NAME/**3SG/DET** child/**that** woman
 ‘Soa/She/The child/That woman laughed.’
- (17) *nihomehy zaza/vehivavy
 laugh.AT child/woman
 ‘A child/woman laughed.’

The source of this restriction is still unclear (see Law 2006, Keenan 2008, and Paul 2009). I assume that it is a purely syntactic requirement that D° be phonologically filled. I return to these restrictions after introducing the comparative construction in Malagasy.

2.2 Comparatives

The Malagasy comparative looks superficially similar to its English phrasal counterpart:¹

- (18)a. lava (koko) noho Raso Rabe
 long more than Raso Rabe
 ‘Rabe is taller than Raso.’
- b. nividy boky betsaka (koko) [_{pp} noho [Raso]] Rabe
 buy book many more than Raso Rabe
 ‘Rabe bought more books than Raso.’
- c. nividy laoranjy betsaka (koko) noho ny akondro Rabe
 buy orange many more than the banana Rabe
 ‘Rabe bought more oranges than bananas.’

There is an optional morpheme *koko* which I tentatively equate with ‘more’ and the standard marker is *noho* (‘than’). I will assume that *noho* is a preposition and that the standard phrase is a PP, as explicitly bracketed in (18b).

The connection to the trigger restrictions in section 2.1 is that the standard of comparison is subject to these restrictions. First, the standard of comparison must be nominal. Note the ungrammaticality of the following Malagasy examples in contrast to their English translations. The standard may be neither a PP, as in (19a), nor a CP, as in (19b), nor other kinds of non-nominals (not shown).

- (19)a. *nandihy koko tamin’ ny lehilahy noho [_{pp} tamin’ ny vehivavy] Raso
 dance more PREP the men than PREP the woman Raso
 ‘Raso danced more with men than with women.’

¹ Verbs below are in the AT form unless otherwise indicated.

- b. *mahagaga kokoa fa nitety an i Frantsa ny mpanjaka
 surprising more that visit ACC France the king
 noho [CP fa nitety an' i Amerika izy]
 than that visit ACC America 3SG.NOM
 'That the king visited France is more surprising than that he visited America.'

Second, the standard must be in the nominative case:

- (20) lava noho izy/*azy/*-ny aho
 long than 3NOM/3ACC/3GEN 1SG.NOM
 'I am taller than him.'

Third, the standard must have an overt determiner, like triggers. The examples in (21) have an appropriate determiner and are grammatical. Those in (22), in contrast, are ungrammatical because the standard lacks an overt determiner. Even when the standard is not interpreted as definite, as in (22b), a determiner is still necessary, reinforcing the formal nature of this restriction.

- (21) lava noho **i Soa/izy/ny zaza/ilay** vehivavy Rabe
 long than **DET NAME/3SG/DET child/that** woman Rabe
 'Rabe is taller than Soa/her/the child/that woman.'

- (22)a. *lava noho zaza Rabe
 long than child Rabe
 'Rabe is taller than a child/Rasoa's child.'
- b. nivity laoranjy betsaka noho *(ny) akondro Rasoa
 buy orange many than the banana Rasoa
 'Rasoa bought more oranges than bananas.'

The parallel between triggers in clauses and the standard of comparison in the comparative construction suggests a clausal source for comparatives. I pursue this in the next section.

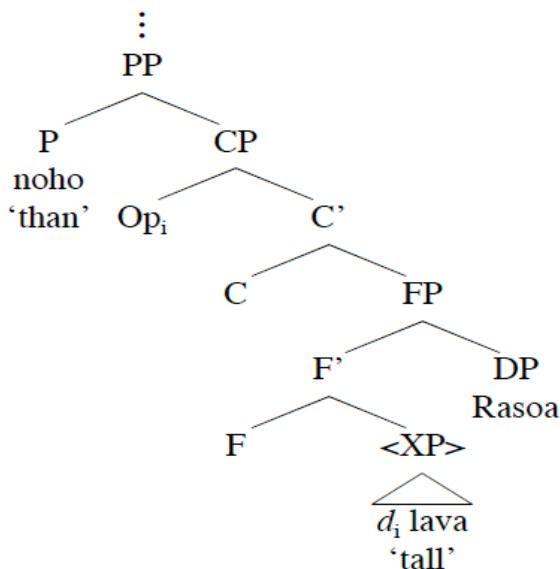
3. Two Syntactic Analyses of Phrasal Comparatives

In this section I develop reduced clause and direct analyses of the Malagasy comparative. Despite the attractiveness of a clausal analysis, I argue that it is not correct and the direct analysis is preferable.

A reduced clause analysis for the Malagasy comparative is motivated by the observation that the standard obeys the trigger restrictions. The standard is the trigger of a clausal complement to *noho* ('than') in which non-trigger material has been elided. I schematize this process in (23) and illustrate it structurally in (24).

- (23) lava [noho [_{CP} <lava> Rasoa]] Rabe
 long than long Rasoa Rabe
 ‘Rabe is taller than Rasoa.’

(24)

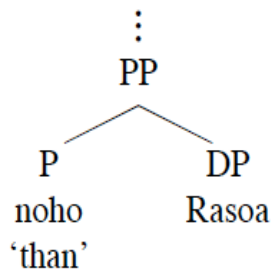


The analysis shown assumes that the complement of *noho* ('than') is a CP. A degree operator in spec,CP binds a degree variable inside the gradable predicate. The trigger is external to this predicate and I locate it in the rightward specifier of a high projection that I simply label FP. The surface form is achieved by deleting the non-trigger material, the complement of F°.

The direct analysis, in contrast, takes the complement of *noho* to be a simple phrase, with no hidden clausal structure and no deletion:

- (25) lava [noho [_{DP} Rasoa]] Rabe
 long than Rasoa Rabe
 ‘Rabe is taller than Rasoa.’

(26)



4. Evidence for the Direct Analysis

In this section I provide three types of evidence in favor of the direct analysis. First, there is indirect evidence from the empirical observation that the standard never shows overt clausal structure. Second, locality diagnostics indicate the standard is in the matrix clause, as expected under the direct analysis but not under the bi-clausal, reduced clause analysis. Finally, there is a mismatch between possible standards and possible triggers. The reduced clause analysis makes the incorrect prediction that standards are also clausal triggers, while the direct analysis does not make this claim.

4.1 Non-Clausal Characteristics of the Standard

An expectation from the reduced clause analysis is that one might see unreduced clauses in comparatives. The direct analysis, in contrast, precludes clausal comparatives because the standard is never a clause. English allows a wide range of clausal comparatives and it will be seen that none has a direct grammatical Malagasy counterpart.

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

- (27)a. *lava kokoa [noho lava Rasoa] Rabe
 long more than long Rasoa Rabe
 (*Rabe is taller than Rasoa is tall.)
- b. *nividy boky betsaka [noho nividy boky Rasoa] Rabe
 buy book many than buy.AT book Rasoa Rabe
 (*Rabe bought more books than Rasoa bought books.)

Examples in English that do have some amount of ellipsis are still ungrammatical in Malagasy. The presence of a verb indicates that we still have a clause. For completeness, I give examples with both AT and TT verbs.

- (28)a. *nividy boky betsaka [noho nividy Rasoa] Rabe
 buy book many than buy.AT Rasoa Rabe
 ('Rabe bought more books than Rasoa bought.')
 b. *nividy boky betsaka [noho novidin- dRasoa] Rabe
 buy book many than buy.TT Rasoa Rabe
 ('Rabe bought more books than were bought by Rasoa.')
- (29)a. *nividy boky betsaka [noho namaky izy ireo] ny mpianatra
 buy book many than read 3PL.NOM the student
 ('The students bought more books than they read.')
 b. *nividy boky betsaka [noho vakiany] ny mpianatra
 buy book many than read.TT.3 the student
 ('The students bought more books than were read by them.')

- (30)a. *nividy laoranjy betsaka [noho nividy akondro izy] Rabe
 buy orange many than buy banana 3SG.NOM Rabe
 ('Rabe bought more oranges than he bought bananas.')
- b. *nividy laoranjy betsaka [noho novidiny ny akondro] Rabe
 buy orange many than buy.TT.3 the banana Rabe
 (*Rabe bought more oranges than bananas were bought by him.')

So-called subcomparatives, which also show clausal structure, are also impossible in Malagasy:

- (31) *lava kokoa ny latabatra [noho [lehibe ny varavarana]]
 long more the table than big the door
 ('The table is longer than the door is wide.')

The absence of these clausal comparatives does not conclusively show that phrasal comparatives do not come from a clausal source. Rather, they indicate that, if the source is clausal, the comparative deletion process is maximal in deleting everything but the trigger and it is obligatory.

Such comparatives can be expressed without clausal structure. In each case, the object of *noho* ('than') is a clear noun phrase. For example, subcomparatives are formulated as in (32). "The table is longer than the door is wide" is expressed as "The table's length is bigger than the door's width".

- (32) be kokoa ny halavan' ny latabatra noho ny sakan' ny varavarana
 big more the length the table than the width the door
 lit. "Bigger [the table's length] [than [the door's width]]"
 "The table's length is bigger than the door's width."
 'The table is longer than the door is wide.'

Similarly, "The students bought more books than they read" can be expressed as "The books the students bought are more than the ones they read":

- (33) betsaka ny boky novidin' ny mpianatra [noho [ny vakiany]]
 many the book buy.TT the student than the read.TT.3
 lit. "More [the books the students bought] [than [the ones they read]]"
 "The books the students bought are more than the ones they read."
 'The students bought more books than they read.'

Finally, Merchant 2009:138 indicates that examples with multiple standards, as in the English translation of (34), are evidence for a reduced clause analysis. They presumably require a clausal source that contains both of the standards. A direct analysis precludes such examples on the reasonable assumption that prepositions allow only one object.

- (34) *nividy boky betsaka Rabe noho ny gazety Raso
 read book more Rabe than the newspaper Raso
 ('Rabe read more books than Raso newspapers.')

4.2 Locality Arguments

A structural difference between the reduced clause analysis and the direct analysis is the number of clauses and the position of the standard with respect to the matrix clause. In the reduced clause analysis, as in (24), the standard is the trigger of an embedded clause. In the direct analysis, as in (26), the construction is mono-clausal and the standard is in the matrix clause; it is the object of a preposition. A number of phenomena sensitive to clause boundaries and locality can be used to distinguish these two proposals: scope, negative polarity item (NPI) licensing, and Binding Theory.

It is widely recognized that the scope of many quantifiers, particularly the universal quantifier *every*, is clause-bound (May 197, Fodor and Sag 1982, Hornstein 1995, and many others). This is seen by the contrast between (35) and (36). *Every play* can take wide or narrow scope with respect to the indefinite *a reviewer* in (35) because they are in the same clause. In particular, the reviewers can vary with the plays showing that *every play* can take wide scope with respect *a reviewer*. This is not possible in (36). The notation $X > Y$ indicates that X takes scope over Y .

- (35) *A reviewer* attended *every play* this season.
 a. There is a reviewer who attended every play. $A > \text{EVERY}$
 b. Every play was attended by some reviewer or other. $\text{EVERY} > A$
- (36) *A reviewer* thinks [_{CP} that *every play* will fail this season]
 a. There is a reviewer who thinks that every play will fail. $A > \text{EVERY}$
 b. *Every play is such that some reviewer or other thinks that it will fail. $*\text{EVERY} > A$

Larson 1988 observed that phrasal comparatives in English in which the standard of comparison is a universal quantifier are ambiguous. In (37) the universal can take wide or narrow scope over clausemate negation. This is expected because it is mono-clausal. The clausal comparative in (38), in contrast, is unambiguous. The universal quantifier cannot scope out of the standard clause because its scope is clause-bound.

- (37) Joe didn't score more than [_{DP} everyone]
 a. Joe scored more than not everyone. $\text{NEG} > \text{EVERY}$
 b. Joe didn't score more than anyone. $\text{EVERY} > \text{NEG}$
- (38) Joe didn't score more than [_{CP} everyone did]
 a. Joe scored more than not everyone. $\text{NEG} > \text{EVERY}$
 b. *Joe didn't score more than anyone. $*\text{EVERY} > \text{NEG}$

Returning to Malagasy, we see that the corresponding comparative is ambiguous like the mono-clausal phrasal comparative above, providing support for the direct analysis.

- (39) tsy lava noho [ny rehetra] Rabe
 NEG tall than the all Rabe
 ‘Rabe isn’t taller than everyone.’
 a. ‘Rabe is taller than not everyone.’ NEG > ALL
 b. ‘Rabe isn’t taller than anyone.’ ALL > NEG

Turning to NPIs, Hoeksema 1983 argues that they provide a diagnostic for phrasal versus clausal comparatives. Using the Dutch NPI *ook maar*, he proposes that phrasal comparatives are not an NPI licensing environment but that clausal comparatives are:

- (40)a. *Wim is gevaarlijker dan [_{DP} ook maar iemand] PHRASAL COMPARATIVE
 Wim is more.dangerous than whosoever anyone
 (‘Wim is more dangerous than anybody whosoever.’) Hoeksema 1983:407
 b. Wim was minder vervelend, dan [_{CP} ook maar CLAUSEL COMPARATIVE
 Wim was less obnoxious than at-all
 iemand voor hem was geweest]
 anyone before him (had) been
 Hoeksema 1983:407
 ‘Wim was less obnoxious than anyone at all before him had been.’

The expression *na dia iray aza* is a Malagasy NPI equivalent to English ‘even one’:

- (41)a. *nahomby na dia iray aza b. tsy nahomby na dia iray aza
 succeed even_one NEG succeed even_one
 (‘*Even one succeeded.’) (‘Not even one succeeded.’)

As expected under the direct analysis and Hoeksema’s generalization, the NPI is not licensed in comparatives, as in (42). If the comparative were a reduced clause, Hoeksema’s data lead us to expect that (42) would be grammatical.

- (42) *lava kokoa noho na dia iray aza Rabe
 long more than even_one Rabe
 (‘*Rabe is taller than even one (girl).’)

Finally, Binding Theory can be used to reach the same conclusion. Malagasy does not have a strict clause-bound reflexive (Paul 2004), so Principle A is not helpful. One can however use Principle B, which, to first approximation, requires that pronouns be free in their minimal clause. We can see its application in the English examples below. In the phrasal comparative (43a), a pronominal standard cannot be coreferential with the matrix subject because they are in the same clause. This is possible in the clausal comparative (43b) because of the clause boundary.

- (43)a. Matt_m can’t be taller than [_{DP} him_{k,*m}] PHRASAL COMPARATIVE
 b. Matt_m can’t be taller than [_{CP} he_{k,m} is] CLAUSEL COMPARATIVE

As above, Malagasy behaves like the phrasal comparative case:

- (44) tsy ambony noho izy_{k,*R} Rabe_R
 NEG above than 3SG.NOM Rabe
 ‘Rabe isn’t better than him(*self).’

In summary, scope, binding, and NPI licensing facts support a direct analysis of the Malagasy standard.

4.3 Trigger–Standard Mismatches

The final set of arguments against the reduced clause analysis comes from cases in which there is a mismatch between possible standards in comparatives and possible triggers in canonical clauses. The reduced clause analysis derives the standard phrase from a full clause by advancing the standard to trigger position and deleting non-trigger material. It thus correlates standards and triggers and leads to the expectation that a phrase that is a possible standard in a comparative should be a possible trigger in a non-comparative. The direct analysis does not correlate standards and triggers. As evidence against the clausal analysis, there are a number of cases in which a possible standard does not correspond to a well-formed trigger.

One such case comes from nominalized standards. As seen above, standards require an overt determiner. This restriction extends to cases where the standards are not DPs. The examples in (45) are ungrammatical because the standards are not DPs; they are a PP and an AdvP, respectively.

- (45)a. *nandihy kokoa tamin’ ny lehilahy noho [**tamin’ ny vehivavy**] Raso
 dance more PREP the man than PREP the woman Raso
 ‘Raso danced more with men than with women.’
 b. *nijinja vary betsaka omaly noho [**androany**] ny mpiasa
 harvest rice much yesterday than today the worker
 ‘The worker harvested more rice yesterday than today.’

These examples can be made grammatical by including the default determiner *ny* in the standard:

- (46)a. nandihy kokoa tamin’ ny lehilahy noho [**ny tamin’ ny vehivavy**] Raso
 dance more PREP the man than the PREP the woman Raso
 ‘Raso danced more with men than with women.’
 b. nijinja vary betsaka omaly noho [**ny androany**] ny mpiasa
 harvest rice much yesterday than the today the worker
 ‘The worker harvested more rice yesterday than today.’

The challenge that these examples pose for the reduced clause analysis is that such nominalized phrases are not possible triggers, as in (47). Although the circumstantial voice (CT) used in these examples can externalize a wide range of elements, it cannot create the needed triggers here.

- (47)a. *nandihizan- dRasoa [ny tamin' ny lehilahy]
 dance.CT Rasoa the PREP the man
 'Rasoa danced with the man.'
- b. *nijinjan' ny mpiasa vary [ny androany]
 harvest.CT the worker rice the today
 'The worker harvested rice today.'

The full structure for (46b), for example, would need to be (48), but (47b) shows this embedded clause to be ill-formed, independent of the comparative syntax/semantics.

- (48) nijinja vary betsaka omaly
 harvest rice much yesterday
 noho [Op_i <nijinjan' ny mpiasa d_i-much vary> ny androany]
 than harvest.CT the worker rice the today
 'The worker harvested more rice yesterday than today.'

A similar case exists with standards that seem to originate in islands. They are possible; however, they cannot become triggers from these positions. (49a) illustrates a case in which the standard corresponds to the subject of a relative clause, as seen in the unreduced English translation in (49b).

- (49)a. nivity boky betsaka nosoratan' i Balzac noho i Tolstoy aho
 buy book many write.TT Balzac than Tolstoy 1SG.NOM
 'I bought more books that Balzac wrote than Tolstoy wrote.'
- b. I bought more books that Balzac wrote than [I bought books [that **Tolstoy** wrote]]

In order for *i Tolstoy* to be the standard in the reduced clause analysis of (49a), it would have to externalize from inside the relative clause in (50a). (50b) shows that this is not possible (Keenan and Ralalaherivony 2000).

- (50)a. nivity [boky [nosoratan' i Tolstoy]] aho
 buy book write.TT Tolstoy 1SG.NOM
 'I bought books that Tolstoy wrote.'
- b. *[novidi-ko/nividiana-ko [boky [nosoratana ___]]] i Tolstoy
 buy.TT/buy.CT-1SG book write.TT Tolstoy

5. Conclusion

I take the above evidence to show that phrasal comparatives in Malagasy are best analyzed with a direct analysis.² Although independently motivated by being able to account for the trigger restrictions, the reduced clause analysis makes incorrect predictions elsewhere. I conclude this section by showing how the direct analysis can nonetheless account for the trigger restrictions.

² There are other versions of the reduced clause analysis (e.g. Merchant 2009, Pancheva 2006, to appear, Lechner 2001, 2004), and it may be that one of these can overcome the arguments from section 4.

The fact that comparative standards obey the trigger restrictions, as in (12), has no automatic explanation in direct analysis. I propose that all three follow from strict subcategorization. *Noho* ('than') is a preposition that selects a DP complement against which it checks nominative Case. The DP category of the complement will ensure that there is an overt D° , provided that we do not allow null determiners in Malagasy.³

Although a reduced clause analysis is eliminated by the above data, an alternative to the direct analysis is the implicit comparison analysis from section 1. Space precludes a discussion of this alternative, but Potsdam 2011 tentatively argues that it is also inappropriate for Malagasy, despite the fact that it has been proposed for other Austronesian languages, namely Samoan (Hohaus 2010) and Fijian (H. Pearson 2010). Malagasy thus joins the small but growing list of languages that seem to have only a direct phrasal comparative: Mandarin Chinese (Xiang 2003, Lin 2009, but see Erlewine 2007), Hindi (Bhatt and Takahashi 2011), Japanese (Beck et al. 2004, Kennedy 2009) Turkish, Mooré, and Yorùbá (Beck et al. to appear).

References

- 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. to appear. Crosslinguistic variation in comparison constructions. *Linguistic Variation Yearbook*.
- Bhatt, Rajesh, and Shoichi Takahashi. 2011. Reduced and unreduced phrasal comparatives. *Natural Language and Linguistic Theory*.
- 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.
- Erlewine, Michael. 2007. A new syntax-semantics for the Mandarin *bi* comparative. MA thesis, University of Chicago.
- Fodor, Janet Dean, and Ivan Sag. 1982. Referential and quantificational indefinites. *Linguistics and Philosophy* 5:355-398.
- Hackl, Martin. 2000. Comparative quantifiers. Doctoral dissertation, MIT.
- Hankamer, Jorge. 1973. Why there are two *than*'s in English. *Papers from the 9th Regional Meeting of the Chicago Linguistic Society*, 179-191. Chicago Linguistic Society, Chicago, Illinois.
- Hazout, Ilan. 1995. Comparative ellipsis and logical form. *Natural Language and Linguistic Theory* 13:1-37.
- Heim, Irene. 1985. Notes on comparatives and related matters. Ms., University of Texas, Austin.

³ 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 elsewhere. 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, there would need to be a mechanism to license it in the object of a preposition that checks accusative Case but not one that checks nominative Case. I leave this choice for future work.

- Heim, Irene. 2000. Degree operators and scope. *The Proceedings of SALT X*, 40-64. Cornell Linguistics Club, Ithaca, NY.
- Hoeksema, Jack. 1983. Negative polarity and the comparative. *Natural Language and Linguistic Theory* 1:403-434.
- Hohaus, Vera. 2010. The semantics of motion verbs and comparison in Samoan. MA thesis, University of Tübingen.
- Hornstein, Norbert. 1995. *Logical Form: From GB to Minimalism*. Oxford: Blackwell.
- Keenan, Edward. 1976. Remarkable subjects in Malagasy. *Subject and Topic*, ed. Charles Li, 247-301. New York: Academic Press.
- Keenan, Edward. 2008. The definiteness of subjects and objects in Malagasy. *Case and Grammatical Relations*, eds. Greville Corbett and Michael Noonan, 241-261. Amsterdam: John Benjamins.
- Keenan, Edward, and Baholisoa Ralalaherivony. 2000. Raising from NP in Malagasy. *Linguisticae Investigationes* 23:1-44.
- Kennedy, Christopher. 1999. *Projecting the Adjective*. New York: Garland Publishing Co.
- Kennedy, Christopher. 2009. Modes of comparison. *The Proceedings of CLS 43*. Chicago Linguistic Society, Chicago, Illinois.
- Larson, Richard. 1988. Scope and comparatives. *Linguistics and Philosophy* 11:1-26.
- Law, Paul. 2006. Argument marking and the distribution of wh-phrases in Malagasy, Tagalog, and Tsou. *Oceanic Linguistics* 45:153-190.
- Lechner, Winfried. 2001. Reduced and phrasal comparatives. *Natural Language and Linguistic Theory* 19:683-735.
- Lechner, Winfried. 2004. *Ellipsis in Comparatives*. Berlin: Mouton de Gruyter.
- Lin, Jo-wang. 2009. Chinese comparatives and their implicational parameters. *Natural Language Semantics* 17:1-27.
- May, Robert. 1977. The grammar of quantification. Doctoral dissertation, MIT.
- Merchant, Jason. 2009. Phrasal and clausal comparatives in Greek and the abstractness of syntax. *Journal of Greek Linguistics* 9:134-164.
- Napoli, Donna Jo. 1983. Comparative ellipsis: A phrase structure account. *Linguistic Inquiry* 14:675-694.
- Pancheva, Roumyana. 2006. Phrasal and clausal comparatives in Slavic. *Formal Approaches to Slavic Linguistics 14*, 236-257. Michigan Slavic Publications, Ann Arbor, Michigan.
- Pancheva, Roumyana. to appear. More students attended FASL than CONSOLE. *Proceedings of FASL 18: The Cornell Meeting*. Cornell Linguistics Club, Ithaca, NY.
- Paul, Ileana. 2000. Malagasy clause structure. Doctoral dissertation, McGill University.
- 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. *Determiners: Universals and Variation*, eds. Jila Ghomeshi, Ileana Paul, and Martina Wiltschko, 215-242. Amsterdam: John Benjamins.
- Pearson, Hazel. 2010. How to do comparison in a language without degrees: A semantics for the comparative in Fijian. *Proceedings of Sinn und Bedeutung 14*, 356-372. Vienna. <http://www.univie.ac.at/sub14/proc/pearson.pdf> accessed September 8, 2011.

- Pearson, Matthew. 2001. The clause structure of Malagasy: A minimalist approach. Doctoral dissertation, UCLA.
- Potsdam, Eric. 2011. A direct analysis of Malagasy comparatives. *Tampa Papers in Linguistics* 2:1-24.
<http://www.tampalinguistics.org//TPL/Vol.%202%20%28Fall%202011%29/Volume%202%20Fall%202011.pdf> accessed September 9, 2011.
- Rajemisa-Raolison, Régis. 1969. *Grammaire Malgache*. Fianarantsoa.
- Xiang, Ming. 2003. A phrasal analysis of Chinese comparatives. *The Proceedings of CLS 39*. Chicago Linguistic Society, Chicago, Illinois.