

COMPARISON AND THE EXPRESSION OF DEGREE IN MBYÁ GUARANÍ

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ABSTRACT

This paper describes comparative constructions and related constructions in Mbyá, paying attention both to their morphosyntactic properties and to their interpretation. Although there is a rich tradition of studies of comparative constructions in formal syntax and semantics and in typology, these constructions have not been studied in details in Guaraní languages. This paper begins to fill this gap, focusing on aspects of comparative constructions that are relevant to current theoretical debates on comparison.

1 INTRODUCTION

Mbyá is a Guaraní language of the Tupí-Guaraní family (Rodrigues 1984). The Tupí-Guaraní family includes more than 50 languages and is one of the largest linguistic families in South America, according to Rodrigues (1984). Rodrigues divided the Tupí-Guaraní family in 8 sub-groups. According to this classification, Mbyá belongs to the sub-group of Guaranian languages, along with Paraguayan Guaraní, Aché, Ava, Eastern Bolivian Guaraní, Western Bolivian Guaraní, Kaiwá and Xetá. Mbyá is spoken by 14,000 to 15,000 speakers in Argentina, Brazil and Paraguay (Ladeira 2003).

The data discussed in this chapter were collected during several field trips in the community Kuña Piru in Misiones, Argentina between 2007 and 2011. These data were obtained using direct elicitation with a small number of native speaker consultants. Four kinds of data were elicited: translations of full sentences or discourse from Spanish to Mbyá, translations of full sentences or discourse from Mbyá to Spanish, judgments on the acceptability of full sentences, and judgments on the truth value of full sentences. It must be emphasized that claims about the meanings of words or sentences of Mbyá are not based on translations but on judgments of truth-value provided by native speakers. Translations were used, along with texts written in Mbyá by native speakers, to provide paradigms of Mbyá sentences that were then the object of elicitation of judgments of acceptability and of truth-value. For a full presentation and defense of the methodology that was adopted in this paper, the reader is referred to Matthewson (2004).

Elicitation sessions were conducted with three native speakers of Mbyá from Kuña Piru, Misiones: Aureliano Duarte, Cirilo Duarte and Germino Duarte. All three consultants are adult males whose first language is Mbyá. During these sessions, Spanish was used as an inter-lingua. All three consultants were schooled in Spanish and have used this language in their professional life. The elicitation sessions were realized with the informed consent of the consultants. Before each elicitation session, the consultants read and were read a consent form written in Spanish, and gave their consent for the elicitation session to be recorded and/or transcribed, as well as for the resulting data to be used in scientific conferences and publications. I adopted the Mbyá orthography in use in schools in Misiones, as illustrated for instance by Duarte (2009).

Along with elicited data, I also used illustrative sentences from texts written in Mbyá in Argentina and in Brazil, in which case the reference

is indicated after the translation. For these examples, I kept the original orthography and I indicated the Spanish or Portuguese translation when available. The morphological segmentation and glosses are mine, as well as the English translations.

The following glosses will be used in this chapter: A1SG (agreement marker, 1st person, class A, singular), ADV (adverb), B1SG (agreement marker, 1st person, class B, singular), DES (desiderative aspect), DIM (diminutive particle), DOM (differential object marking), EQU (equative particle), EXCL (exclusive), INT (intensifier), IMP (imperative marker), LOC (locative), MIR (mirative), NEG (negation), NMLZ (nominalization), PERF (perfect aspect), PAST (past), PL (plural), PROSP (prospective aspect), Q (question marker), RECP (reciprocal voice), REFL (reflexive voice), REL (relativization), SS (switch reference: same subject), TOP (topicalization).

2 BACKGROUND ON THE GRAMMAR OF MBYÁ

Before describing comparative constructions, I would like to discuss two aspects of the grammar of Mbyá whose knowledge is essential to a proper discussion of comparative constructions.

2.1 AGREEMENT AND THE MORPHOLOGY OF PREDICATES

The morphology of predicates in Mbyá is based on a rich system of affixes and particles, which includes not only inflexional and derivational affixes but also a number of adverbs and modal or aspectual suffixes. It obeys the following template (see also Dooley 2006, chapter 12 of the introduction):

- (1) Mood inflexion - Agreement inflexion - Valency derivation - Root - Modal suffixes/Aspect suffixes/Adverbs

To illustrate, consider the following constructed (and highly artificial) example:

- (2) *Nd-a-je-exa-porã-pota-xe-i*
 NEG-A1SG-REFL-see-well-try.hard-want-NEG
 ‘I don’t want to try hard to see myself well.’

The first part of the negative circumfix *nd-i* is followed by an agreement prefix and a valence changing derivational prefix (the reflexive *je-*). The

root is then followed by a post-positional adverb *porã* ('well'), two modal suffixes *-pota* ('try hard') and *-xe* ('want') and finally by the second part of the negative circumfix. The inclusion of all the prefixes and suffixes/enclitic inside the boundaries set up by the circumfixal negation indicates that the whole string of morphemes forms a single morphological domain.

Predicates are inflected for person and number. Agreement markers are prefixed to the predicate. There are two paradigms of agreement markers, which I will call A and B. Some of them have allomorphs whose selection depends on the nasality of the root. For instance, the oral 2nd person singular B prefix is *nde-*, and its nasal allomorph is *ne-*. This alternation is indicated by the symbol \sim in (3). In addition, the B paradigm is broken in two subparadigms whose differences are the presence or absence of a thematic /r/ phoneme between the agreement prefix and the root, and the form of the third person agreement marker. Following Dooley (2006), I call these subparadigms \emptyset and -r. The 3rd person suffixes of the two B sub-paradigms have different allomorphs, whose selection is independent of nasality. This alternation is indicated by the symbol / in the table. Both paradigms make a distinction between inclusive (*incl.*) and exclusive (*excl.*) first person plural.

(3) Paradigms of agreement prefixes:

	Class A	Class B, \emptyset	Class B, -r
1st sing.	<i>a-</i>	<i>che-</i>	<i>che-r-</i>
2nd sing.	<i>(e)re-</i>	<i>nde- ~ ne-</i>	<i>nde-r- ~ ne-r-</i>
1st pl. incl.	<i>ja- ~ ña-</i>	<i>ñande- ~ ñane-</i>	<i>ñande-r- ~ ñane-r-</i>
1st pl. excl.	<i>(o)ro-</i>	<i>ore-</i>	<i>ore-r-</i>
2nd. pl.	<i>pe-</i>	<i>pende- ~ pene-</i>	<i>pende-r- ~ pene-r-</i>
3rd sing. or pl.	<i>o-</i>	<i>i- / ij- ~ iñ-</i>	\emptyset / <i>h-</i>

Agreement itself follows an active/inactive pattern. Intransitive verbs are lexically specified as A or B: A verbs are active while B verbs are inactive. Transitive verbs alternate between A or B marking according to a person hierarchy: the A paradigm is used to mark agreement with subjects, while the B paradigm is used to mark agreement with objects, and the verb agrees with the highest argument on a hierarchy of person: 1st person > 2nd person > 3rd person. For instance, a transitive verb with a 2nd person subject and a 1st person object agrees with its object, while a transitive verb with a 2nd person subject and a 3rd person object agrees with its subject. The

portmanteaux prefix *ro-* is used for transitive verbs with a 1st person subject and a 2nd person object.

Note that there is no inflection for tense or viewpoint aspect on verbs. Bare verbs may be used to describe past or present eventualities, with a perfective or imperfective viewpoint. To avoid cluttering the glosses and translation of examples, all verb forms were translated as past perfectives, unless the context in which an example was elicited dictated otherwise. For examples extracted from texts, the tense/aspect combination of the original translation was preserved.

2.2 -A NOMINALIZATIONS

Nominalization with the suffix *-a* occupies an essential position in the morphosyntactic structure of comparative constructions. This subsection establishes three facts about this suffix. First, *-a* suffixation on verbs is a form of nominalization, i.e. it turns a non-nominal constituent into a nominal one. Second, different instances of *-a* nominalizations have different semantic effects. Finally, at least some instances of *-a* nominalizations have the full fletched functional structure of clauses.

Let us first give an overview of the different uses of *-a* nominalization (see also Dooley 2006). In examples (4) to (9), *-a* is suffixed to a verb which heads a nominal constituent, as shown by its distribution. In (4) to (7), this constituent is a possessive noun phrase in an argument position (subject or object). In (8), it is a (semantically definite) subject noun phrase, and in (9), it is a clausal complement.

- (4) *Mamo pa che-mbo'e-a?*
 where Q B1SG-teach-NMLZ
 ‘Where is my teacher?’
- (5) *E-ru che guapy-a*
 IMP-bring my sit-NMLZ
 ‘Bring me my chair.’
- (6) *Ñane-ñe-mbo'e-a i-tuicha vaipa.*
 our-REFL-teach-NMLZ B3-big INT
 ‘Our school is very big’
- (7) *Chee vy'a-a i-tuicha.*
 my happy-NMLZ B3-big

‘My happiness is great.’

- (8) *Mba'e i-piru-a o-acha-ve mokoĩ jachy gui.*
thing B3-dry-NMLZ A3-last-more two moon from
‘The drought lasted more than two months.’
- (9) *A-ikuaa oo pyau re-jogua-a-gue.*
A1SG-know house new A2SG-buy-NMLZ-PAST
‘I know that you bought a new house.’

These examples illustrate the variety of interpretations of *-a* nominalization. In (4) to (6), the derived nominal constituent denotes an entity that is somehow related to the type of eventuality that is described by the predicate to which *-a* is suffixed. In (4), it denotes an agent of teaching events, in (5), it denotes an instrument of sitting events, in (6) it denotes a location of teaching events. In (7), the subject denotes a degree of happiness. In (8), it denotes an event. Finally, (9) differs from all these examples insofar as the nominalized constituent does not denote an entity but a proposition.

Finally, there is evidence that at least some instances of *-a* nominalizations have the internal structure of a clause:

- (10) *Cirilo he'i Juan Aureliano pe o-ikychĩ-a.*
Cirilo B3.say Juan Aureliano DOM A3-cut-NMLZ
‘Cirilo said that Juan cut Aureliano.’
- (11) *Cirilo he'i Juan o-ñe-kychĩ-a.*
Cirilo B3.say Juan A3-REFL-cut-NMLZ
‘Cirilo said that Juan cut himself.’
- (12) *Cirilo he'i Juan Aureliano pe n-o-ikychĩ-i-a.*
Cirilo B3.say Juan Aureliano DOM NEG-A3-cut-NEG-NMLZ
‘Cirilo said that Juan didn't cut Aureliano.’
- (13) *Cirilo he'i Juan Aureliano pe o-ikychĩ-che-a.*
Cirilo B3.say Juan Aureliano DOM A3-cut-DES-NMLZ
‘Cirilo said that Juan wants to cut Aureliano.’
- (14) *Cirilo he'i Juan Aureliano pe o-ikychĩ-ta-a.*
Cirilo B3.say Juan Aureliano DOM A3-cut-PROSP-NMLZ
‘Cirilo said that Juan was going to cut Aureliano.’
- (15) *Cirilo he'i Juan Aureliano pe o-ikychĩ-a jevy.*
Cirilo B3.say Juan Aureliano DOM A3-cut-NMLZ again

‘Cirilo said that Juan cut Aureliano again.’

In these examples, the nominalized constituent is the propositional complement of a verb. Sentences (10) to (15) show that a wide range of functional material can occur on the nominalized verb in the complement clause: reflexive markers (11), predicative negation¹ (12), desiderative aspect (13), prospective aspect (14) and adverbs of frequency (15). All of these pieces of morphology belong to the functional structure of the clausal spine, and are unattested on (underived) non-phrases.

2.3 RELATIVIZATION

As in Paraguayan Guaraní, the particle *va'e* is used to introduce a clause that modifies a noun, i.e. a relative clause:

- (16) *A-echa ava i-puku va'e.*
A1SG-see man B3-tall REL
‘I saw the tall man.’

Relative clauses in Mbyá may have external nominal heads. Evidence for external heads comes from different object marking. In (17), the noun phrase *peteĩ jurua*² is optionally followed by the particle *pe*, which marks human objects as opposed to animals and inanimate objects. Since different object marking can only be controlled by the matrix verb in this example, *peteĩ jurua* ought to be its complement and therefore an external head:

- (17) *A-ikuaa peteĩ jurua (pe) i-puku va'e.*
A1SG-know one jurua DOM B3-tall REL
‘I know one jurua who is tall.’

Va'e may also be used to form headless relative clauses, as illustrated in 18:

- (18) *O-vaẽ rã guaimi-'i va'e o-o ma ra'e.*
A3-arrive DS old-DIM REL A3-go already MIR.
‘When they arrived, the old one had already left.’
Retrieved from Grupioni (2007)

For a more detailed presentation of the uses of *va'e*, the reader is referred to the grammatical introduction to Dooley’s (2006) dictionary.

¹The negative circumfix *n-∅-i* is only attested on predicates; negation on arguments or modifiers of predicates is realized as a suffix *e'y*, see Dooley (2006).

²A *jurua* is a non indigenous person.

3 COMPARISON OF SUPERIORITY

3.1 PREDICATIVE COMPARISON

Comparison in Mbyá is expressed by attaching the accented suffix *-ve* to a gradable predicate, as illustrated in (19).

- (19) *Uru gui voi xo'o porã-ve.*
Chicken from even meat good-VE
'A carne é mais gostosa do que a carne de frango.'
'[Duck] meat is tastier than even chicken meat.'
Retrieved from Veríssimo (2002)

That such constructions are indeed interpreted as comparisons is best established by eliciting their truth-conditions. Consider for instance the constructed example (20). Native speakers judge that this sentence is true in scenario (20a) but false in scenarios (20b) and (20c). In other words, native speakers judge that (20) is true if and only if Juan's height is greater than Pedro's height.

- (20) *Juan Pedro gui yvate-ve.*
Juan Pedro from tall-VE
'Juan is taller than Pedro.'
- a. **true:** Juan's height is 1m75, Pedro's height is 1m70.
 - b. **false:** Juan's height is 1m70, Pedro's height is 1m75.
 - c. **false:** Juan's height is 1m75, Pedro's height is 1m75.

(21) is the negation of (20). Judgments of truth-value about (21) confirm that (20) is interpreted as a comparison of heights: (21) is judged to be false if and only if Juan's height is either equal to Pedro's height or less than Pedro's height, i.e. (21) is true if and only if it is not the case that Juan's height is greater than Pedro's height.

- (21) *Juan Pedro gui nda-i-jyvate-ve-i.*
Juan Pedro from NEG-B3-tall-VE-NEG
'Juan is not taller than Pedro.'
- a. **false:** Juan's height is 1m75, Pedro's height is 1m70.
 - b. **true:** Juan's height is 1m70, Pedro's height is 1m75.

c. **true**: Juan’s height is 1m75, Pedro’s height is 1m75.

In (20) and (21), the noun *Pedro* forms a constituent with the ablative post-position *gui*. This post-position is used in non-comparative constructions to indicate a spatial source, as illustrated in the following examples from Dooley (2006), as well as a temporal source, material composition and psychological cause (see Dooley 2006).³

- (22) *Tetã gui aju.*
city from A1SG-come
‘Vim da cidade.’
‘I came from the city.’
Retrieved from Dooley (2006)

Note that comparison can be expressed without the post-positional *gui* phrase, as illustrated in (23). On the other hand, the use of the post-positional phrase with the predicate *yvate* is ungrammatical without the suffix *-ve*, as shown in (24).⁴

- (23) *Pedro yvate, va’eri Juan yvate-ve.*
Pedro tall, but Juan tall-VE
‘Pedro is tall, but Juan is taller.’
- (24) * *Juan Pedro gui yvate.*
Juan Pedro from tall
(Intended) ‘Juan is taller than Pedro.’

Let us close this section with a terminological note. I will call *Juan* in (20) the *target of comparison*, while the phrase *Pedro gui* is the standard of comparison, following (Schwarszchild 2013). I call the suffix *-ve* a *comparative marker* and the post-position *-gui* a *standard marker*. The gradable predicate expresses the dimension along which the target and the standard are compared, e.g. the dimension of height in example (24).

³In this and the following examples from Dooley (2006), the Mbyá translations to Portuguese were provided by Dooley (2006). The morphological segmentation and the glosses are mine, as well as the English translation. The original orthography has been kept. It differs from the orthography adopted in Misiones inasmuch as it is influenced by the orthography of Brazilian Portuguese rather than by the orthography of Spanish.

⁴Ungrammaticality is indicated by prefixing a sentence with an asterisk.

3.2 ATTRIBUTIVE AND ADVERBIAL COMPARISON

In the previous subsection I discussed sentences in which the dimension of comparison is expressed by the main predicate of the matrix sentence, but it may also be expressed by a modifier. In adverbial comparison, as illustrated in (25) and (26), the dimension of comparison is expressed by an adverb. In attributive comparison, which is illustrated in (27) and (28), the dimension of comparison is provided by a predicate that modifies a noun (i.e. an adjective, if one believes that this category exists in Mbyá):

- (25) *Juan o-ña akuã-ve Pedro gui.*
 Juan A3-run fast-VE Pedro from
 ‘Juan runs faster than Pedro.’
- (26) *Nde-tui porã-ve ke xe-ramõi.*
 A2SG-lie.down good-VE IMP B1SG-grandfather
 ‘Lie down better, grandfather.’
Retrieved from Grupioni (2007)
- (27) *Pedro o-japo ta’anga porã-ve ta’anga Juan o-japo*
 Pedro A3-make sculpture beautiful-VE sculpture Juan A3-make
va’e gui.
 REL from
 ‘Pedro makes more beautiful sculptures than the ones that Juan makes.’
- (28) *Ro-o ñavõ ore kokue py, ro-gueraa mitã*
 A2PL.EXCL-go each.time our plot to A2PL.EXCL-bring child
i-mboriau ve-’i pe ro-me’ẽ aguã chanjau.
 B3-poor VE-DIM DOM A2PL.EXCL-give PURP watermelon
 ‘Each time we go to our plot, we bring along poorer children [than us]⁵, to give them watermelon.’
Retrieved from Duarte (2009)

Comparative predicates in attributive comparison may also be relativized, as illustrated in the following example:

⁵The text from which the sentence was extracted was written by schoolchildren who narrate how they grow fruits and vegetables with their father. One understands from the context that the standard of comparison is the group of narrators of the story.

- (29) *Peteĩ karumbe tuja-ve va'e o-jojai rei*
 one tortoise old-VE REL A3-laugh INT
 'A tortoise who was older [than the others]⁶ burst out laughing.'
Retrieved from Grupioni (2007)

3.3 CLAUSAL AND PHRASAL COMPARATIVES

The comparative constructions that were discussed in the previous subsections are all examples of phrasal comparatives: the complement of the standard marker is a noun phrase, rather than a clause. Phrasal comparatives in Mbyá can be built with different kinds of noun phrases, as illustrated in the following examples. In (30), the standard phrase is determined by the demonstrative *kova'e*, in (31) it is universally quantified, and in (32) it is a disjunction of proper names.

- (30) *Juan kova'e kuña gui yvate-ve.*
 Juan this woman from tall-VE
 'Juan is taller than this woman.'
- (31) *Juan kuña-gue pavẽ gui yvate-ve.*
 Juan woman-PL all from tall-VE
 'Juan is taller than all women.'
- (32) *Maria Juan terã Pedro gui yvate-ve.*
 Maria Juan or Pedro from tall-VE
 'Maria is taller than Juan or Pedro.'⁷

The standard of comparison may also be clausal, as illustrated in (33). (33) is true if and only if the height of the tree is greater than the length of the house, as shown in the elicited judgments of truth-value in (33a) to (33c).

- (33) *Yvyra oo i-puku-a gui yvate-ve.*
 tree house B3-long-NMLZ from tall-VE

⁶The narrative from which the sentence was extracted tells the story of a young tortoise and a tapir wandering into the woods and meeting a group of tortoises. One understands from the context that *peteĩ karumbe tuja-ve va'e* refers to the oldest tortoise, i.e. that the standard of comparison consists of the other tortoises in the group.

⁷Note: according to my consultants, this sentence is true only if Maria is taller than both Juan and Pedro. See Beck (2010) for an analysis of this interpretation of disjunctions in standards of comparison in English.

‘The tree is taller than the house is long.’

- a. **true:** The height of the tree is 20m, the length of the house is 15m.
- b. **false:** The height of the tree is 15m, the length of the house is 20m.
- c. **false:** The height of the tree is 20m, the length of the house is 20m.

Note that clausal standards, whose predicate is inflected for person and number agreement, must be nominalized by the suffix *-a*, as shown by the ungrammaticality of sentence (34):

- (34) * *Yvyra oo i-puku gui yvate-ve.*
tree house B3-long from tall-VE

This constraint is not particular to comparative constructions: clausal complements of post-positions must always be nominalized with *-a*. The following examples from Dooley (2006) illustrate this point with the post-positions *peve* (‘until’, here in its spacial meaning) and *ja* (‘while’)⁸:

- (35) *Xee a-ĩ-a peve xivi o-vaẽ.*
I A1SG-be-NMLZ until puma A3-arrive
‘A onça chegou até onde eu estava.’
‘The puma came as far as where I was staying’
Retrieved from Dooley (2006)

- (36) *Ndee re-ke-a ja a-mba’epo*
You A2SG-sleep-NMLZ while A1SG-work
‘Enquanto você estava dormindo, (eu) trabalhei’
‘While you were sleeping, I was working’
Retrieved from Dooley (2006)

Clausal standards may be more complex than simple intransitive predications. In (37), the standard of comparison is a nominalized transitive clause. In (38), the nominalized clause is an intransitive predication modified by the adverb *riæ*. Lastly, in (39), it is an intransitive predication modified by the modal particle *ra’ãgue*, which appear to also play the role of a nominalizer.

⁸Again, the glosses and translation to English are mine, while the Portuguese translation is due to Dooley. The original orthography has been kept.

- (37) *Juan Maria o-ayvu-ve Pedro Ana o-ayvu-a gui.*
 Juan Maria A3-love-VE Pedro Ana A3-love-NMLZ from
 ‘Juan loves Maria more than Pedro loves Ana.’
- (38) *Juan o-puka riae-ve Maria o-jae’o riae-a gui.*
 Juan A3-laugh frequent-VE Maria A3-cry frequently-NMLZ from
 Juan laughs more frequently than Maria cries.
- (39) *Juan o-mba’epo-ve o-mba’epo ra’ã-gue gui*
 Juan A3-work-VE A3-work have.to-PAST from
 ‘Juan worked more than he had to.’

3.4 AMOUNT COMPARATIVES AND COMPARATIVE QUANTIFIERS

In amount comparatives, what is compared is the quantity of two groups of entities, as in (40) or the measurement of two portions of stuff, as in (41).

- (40) *Juan Pedro gui o-jogua-ve ajaka.*
 Juan Pedro from A3-buy-VE basket
 ‘Juan bought more baskets than Pedro.’
- (41) *Juan Pedro gui o-’u-ve guapytã aroka.*
 Juan Pedro from A3-ingest-VE guapytã juice
 ‘Juan drank more guapyta juice than Pedro.’

There are two ways to form amount comparatives in Mbyá, as show in sentences (42) and (43). One is to suffix the comparative marker *-ve* to the verb of the main clause, as in the preceding examples. Alternatively, *-ve* may be suffixed to the nominal modifier *heta*.

- (42) *Pedro o-juka-ve mboi Aureliano gui.*
 Pedro 3-kill-VE snake Aureliano from
 ‘Pedro killed more snakes than Aureliano.’
- (43) *Pedro o-juka heta-ve mboi Aureliano gui.*
 Pedro 3-kill many-VE snake Aureliano from
 ‘Pedro killed more snakes than Aureliano.’

(42) and (43) have the same truth-conditions: both are true if and only if the number of snakes that Pedro killed is greater than the number of

snakes that Aureliano killed. Note that although *heta* is glossed as ‘many,’ it is not interpreted as a differential expression in these sentences, i.e. the truth-conditions of (42) and (43) are different from the truth-conditions of the English sentence (44). In (44), *many* is a differential expression, and the sentence is true if and only if the number of snakes killed by Pedro is significantly greater than the number of snakes killed by Aureliano. What number counts as significant varies across contexts, but a native speaker of English would certainly not accept this sentence as true if Pedro had killed exactly one more snake than Aureliano. On the contrary (43) is true even if Pedro killed exactly one more snake than Aureliano.

(44) Pedro killed many more snakes than Aureliano.

(43) does not entail either that Pedro killed many snakes. For instance, the sentence is true if he killed two snakes and Aureliano only killed one. The reason why *heta* is glossed as ‘many’ is that it does receive an evaluative interpretation in other environments. The non-comparative sentence (45) for instance entails that Pedro killed a great number of snakes. Native speakers judge that the sentence is false if Pedro killed only two snakes:

(45) *Pedro o-juka heta mboi*
 Pedro A3-kill many snake
 ‘Pedro killed many snakes.’

The different interpretations of *heta* in these two environments is also reflected in the different acceptability of the following discourses. While native speakers judge that (46) is well formed, they reject (47) as nonsense. This is expected if *heta* is evaluative in (47) but not in (46), since in that case (47) but not (46) is contradictory.

(46) *Pedro o-juka mbovy’i mboi, va’eri o-juka heta-ve mboi Aureliano*
 Pedro 3-kill few-VE snake but A3-kill many-VE snake Aureliano
gui.
 from
 ‘Pedro killed few snakes, but he killed more snakes than Aureliano.’

(47) # *Pedro o-juka mbovy’i mboi, va’eri o-juka heta mboi.*
 Pedro A3-kill few-VE snake but A3-kill many snake
 ‘Pedro killed few snakes, # but he killed many snakes.’

Because amount comparatives can be formed by suffixing *-ve* to the main verb of a clause, ambiguities may arise when this verb denotes a gradable property. For instance, (48) can be used to convey either that (i) the number of villagers that Hugo likes is greater than the number of villagers that Henrique likes or that (ii) the extent of Hugo’s sympathy for the villagers is greater than the extent of Henrique’s sympathy for them. The ambiguity is confirmed by the fact that the sentence is judged to be true both in scenario (48a) and in (48b).

- (48) *Hugo o-ipota-ve tekoapygua Henrique gui.*
 Hugo A3-like-VE villagers Henrique from
 ‘Hugo likes more villagers than Henrique does’ OR ‘Hugo likes the villagers more than Henrique does.’
- a. **true:** There are 20 villagers. Hugo only likes 15 villagers, while Henrique only likes 5 villagers. Hugo likes the 15 villagers who are his friends just as much as Henrique likes the 5 villagers who are his friends.
- b. **true:** There are 20 villagers. Hugo and Henrique both like all the villagers, but Hugo likes them very much, while Henrique likes them a little bit.

Finally, the standard phrase of amount comparatives may be a number word or a quantifier phrase. Following Hackl (2001), I call such constructions comparative quantifiers. Sentences (49) and (50) illustrate:

- (49) *Juan o-jogua mboapy gui heta-ve ajaka.*
 Juan A3-buy three from many-VE basket
 ‘Juan bought more than three baskets.’
- (50) *Juan o-jogua mbyte gui heta-ve ajaka.*
 Juan A3-buy half from many-VE basket
 ‘Juan bought more than half of the baskets.’

3.5 PHRASAL COMPARATIVES AND ELLIPSIS

A debated topic in the cross-linguistic analysis of comparatives is the status of standard of comparisons in phrasal comparatives. Some scholars have proposed that phrasal standards of comparison are obtained by from clausal standards ellipsis or some other form of reduction. Such an analysis has been

proposed in English and German (Lechner 2001, 2004), in Greek (Merchant 2009) and in Slavic languages (Pancheva 2006). It has the advantage of supporting a uniform semantic analysis of comparative markers in their phrasal and clausal uses. Others such as Bhatt & Takahashi (2007) have advocated a direct analysis of phrasal comparatives in selected languages, which does not rely on deletion operations. Heim (1985) discusses semantic aspects of the reduced and direct analyses of comparatives. In this subsection, I argue in favor of a direct analysis of phrasal comparatives in Mbyá.⁹ The argument is based on an analysis of the distribution of negative words (N-words).

N-words in Mbyá are formed by adding a negative suffix *-ve* to a root that is also used in the formation of question words and existential free choice items (FCIs), as illustrated in (51). Contrarily to the comparative suffix, the negative suffix *-ve* does not attract stress.

	Root	N-word	Existential FCIs	Question word
(51)	mava'e (person)	mava'eve	mava'erã	mava pa
	mba'e (thing)	mba'eve	mba'erã	mba'e pa
	mamo (place)	mamove	mamorã	mamo pa

N-words are licensed by a negation in their local clause, as shown by the contrast between (52) vs. (53). A local negation licenses N-words in object as well as in subject position, see (54). However, a negation cannot license N-words in a different clause, even if the negation commands the N-word, as illustrated in (56). Note that the intended interpretation of (53) and (56) can be expressed as (52) and (55) respectively.

(52) *Nd-a-echa-i mava'e-ve.*
 NEG-A1SG-see-NEG person-NEG
 'I didn't see anyone.'

(53) **A-echa mava'e-ve.*
 A1SG-see person-NEG
 (Intended) 'I saw no one.'

(54) *Mava'e-ve nda-che-r-echa-i.*
 person-NEG NEG-B1SG-R-see-NEG

⁹Although see example (77).

‘No one saw me.’

- (55) *N-a-icha’ã-i nda-che-r-echa-i mava’e-ve.*
NEG-A1SG-think-NEG NEG-B1SG-R-see-NEG person-NEG
‘I don’t think that nobody saw you.’

- (56) **N-a-icha’ã-i er-echa mava’e-ve.*
NEG-A1SG-think-NEG B2SG-see person-NEG
(Intended) ‘I don’t think that nobody saw you.’

In the absence of a local negation, N-words are not licensed in contexts that license negative polarity items cross-linguistically, such as questions and antecedents of conditionals:

- (57) **Maria o-echa vy mava’e-ve pe, o-mombeu Juan pe.*
Maria A3-see SS person-NEG DOM A3-tell Juan DOM
(Intended) ‘If Maria sees anyone, she will tell Juan.’

- (58) **O-echa ndau’ ra’e Maria mava’e-ve pe?*
A3-see Q MIR Maria person-NEG DOM
(Intended) ‘Did Maria see anyone?’

Coming back to comparative constructions, we observe that a negation in the matrix clause of a comparative licenses N-words inside phrasal standards of comparison, but not inside clausal standards:

- (59) *Juan mava’e-ve gui nda-i-jyvate-ve-i.*
Juan person-NEG from NEG-B3-tall-VE-NEG
‘Juan is not taller than anyone.’
- (60) **Juan mava’e-ve (i-j)yvate-a gui nda-i-jyvate-ve-i.*
Juan person-NEG (B3)-tall-NMLZ from NEG-B3-tall-VE-NEG
(Intended) ‘Juan is not taller than anyone is.’

I conclude that phrasal comparatives are not reduced clauses. Otherwise, the use of an N-word in the supposedly elided clausal standard should be blocked due to the absence of a local negation.

3.6 FACTORIAL AND DIFFERENTIAL COMPARISON

Differentials express the difference between the measurements of the target and the standard of comparison. To illustrate, sentence (61) of English entails that the difference between John’s height and Bill’s height is one inch:

(61) John is 1 inch taller than Bill.

There are two ways to form differential comparison in Mbyá. One is to introduce a differential expression with the post-position *py*. This is a productive strategy that allows the creation of differentials with a great variety of noun phrases. A narrower range of differential expressions may also be used as adverbial modifiers without a post-position, as illustrated in (63):

(62) *Juan yvate-ve Pedro gui peteĩ kuã py.*
Juan tall-VE Pedro from one finger in
'Juan is taller than Pedro by one finger.'

(63) *Kue-'i rai rai gui ma, h-aku ve ma 0.7 graus*
PAST-DIM almost almost from TOP, B3-hot VE PERF 0.7 degree
nhande Yvy rupa.
our earth over
'Nas ultimas decadas a temperatura da terra aumentou 0.7 graus.'
'Our earth is 0.7 degree warmer than it was in the recent past.'
Retrieved from Poty et al. (2011)

Intensifying and diminutive adverbs are commonly used as differentials, as illustrated in the following examples:

(64) *Juan i-tuja-ve ete Pedro gui.*
Juan B3-old-VE INT Pedro from
'Juan is a lot older than Pedro'

(65) *Juan i-tuja-ve-'i Pedro gui.*
Juan B3-old-VE-DIM Pedro from
'Juan is slightly older than Pedro'

Factorial modifiers express the ratio of the target to the standard of comparison. Factorial terms like *mokoĩgue* ('two times') are formed by suffixation of the adverbializing particle *-gue* to a number word. In factorial comparison, the comparative marker is suffixed to the factorial term, as illustrated in (66).

(66) *Yakã h-ugua mokoĩ-gue-ve yvype gui.*
river B3-deep two-ADV-VE lake from
'The river is twice as deep as the lake.'

- a. **true**: the river is 25m deep, the lake is 10 meter deep.
- b. **true**: the river is 20m deep, the lake is 10 meter deep.
- c. **false**: the river is 10m deep, the lake is 10 meter deep.
- d. **false**: the river is 5m deep, the lake is 10 meter deep.

(66) is true if and only if the depth of the river is at least as great as two times the depth of the lake, as shown by the truth-value judgments in (66a) to (66d).

Note that while factorial comparison is expressed with the comparative operator *-ve* in Mbyá, it is expressed with the equative constructions in English, as illustrated by the translation of example (66). Mbyá differs from English in this respect. For a discussion of cross-linguistic variation in the expression of factorial comparison, see Gobeski (2009). For a discussion of equatives in Mbyá, see section 5.2 of the present paper.

4 COMPARISON OF INFERIORITY

4.1 COMPARISON AND NEGATION

When asked to translate a comparative sentence such as *Pedro is less tall than Juan*, speakers will use antonyms as in (67), or else they use a combination of negation with the comparative operator *-ve*, as in (68):

- (67) *Pedro Juan gui i-karape'i-ve.*
Pedro Juan from B3-short-VE
'Pedro is shorter than Juan.'
- (68) *Pedro Juan gui nda-i-jyvate-i-ve.*
Pedro Juan from NEG-B3-tall-NEG-VE
'Pedro is less tall than Juan.'

The truth conditions of (67) and (68) are identical: both are true if and only if the height of Pedro is less than the height of Juan. In other words, the comparative of inferiority in (68) is equivalent to the comparative of superiority in (69):

- (69) *Juan Pedro gui yvate-ve.*
Juan Pedro from tall-VE
'Juan is taller than Pedro.'

Note that in example (68), the negative suffix *-i* precedes the comparative operator. Semantically, the negation is interpreted in the scope of the comparative operator, so that sentence (68) is not the negation of (67). A comparative sentence can be negated by having the comparative operator precede the negative suffix, as illustrated in (70). The scope of negation is discussed more carefully in section 4.2 of this paper.

- (70) *Pedro Juan gui nda-i-jyvate-ve-i.*
 Pedro Juan from NEG-B3-tall-VE-NEG
 ‘Pedro is less tall than Juan.’

This use of negation to express comparison of inferiority is not restricted to predicative comparison. The following examples show that it is attested with adverbial and amount comparatives:

- (71) *Juan Pedro gui n-o-ña akuã-i-ve.*
 Juan Pedro from NEG-A3-run fast-NEG-VE
 ‘Juan runs less fast than Pedro.’
- (72) *Juan Pedro gui nd-o-jogua-i-ve ajaka.*
 Juan Pedro from NEG-A3-buy-NEG-VE basket
 ‘Juan bought fewer baskets than Pedro.’
- (73) *Nda-eta-i-ve jurua o-jogua va’e ajaka ka’ygua gui.*
 NEG-many-NEG-VE jurua A3-buy REL baskets gourd from
 ‘The juruas¹⁰ who bought baskets were fewer than the Jurua who bought gourds.’

With attributive comparison, comparison of inferiority cannot be expressed with circumfixal negation, as illustrated by the ungrammaticality of the following example:

- (74) * *Juan o-jogua ajaka na-i-porã-i-ve Pedro o-jogua*
 Juan A3-buy basket NEG-B3-beautiful-NEG-VE Pedro A3-buy
va’e gui.
 REL from
 ‘Juan bought baskets that are less beautiful than the ones that Pedro bought.’

¹⁰A jurua (literally, ‘hairy mouth’) is a non-indigenous person.

Attributive comparison of inferiority can be expressed by using a relative clause as a modifier, in which case its main predicate can be negated with the circumfixal negation, as in example (75):

- (75) *Juan o-jogua ajaka na-i-porã-i-ve va'e Pedro o-jogua*
 Juan A3-buy basket NEG-B3-beautiful-NEG-VE REL Pedro A3-buy
va'e gui.
 REL from
 'Juan bought baskets that are less beautiful than the ones that Pedro bought.'

The ungrammaticality of (74) is presumably due to the fact that circumfixal negation *n...-i* is not attested on attributive modifiers, which must be negated with the suffixal negation *(e)'ỹ*, as discussed by Dooley (2006), section 16, and illustrated in (77):

- (76) *Juan o-jogua ajaka i-porã va'e-'ỹ.*
 Juan A3-buy basket B3-beautiful REL-NEG
 'Juan bought ugly baskets.'

The same is true of amount comparison with *heta*. In (77), *ndaetaive* is the main predicate of the clause. The verb *ojogua* ('buy') is embedded in a relative clause. (78) shows that it is not possible to negate *heta* in attributive position, although the corresponding sentence without negation (79) is grammatical:¹¹

- (77) *Nda-eta-i-ve jurua o-jogua va'e ajaka ka'ygua gui*
 NEG-many-NEG-VE jurua A3-buy REL baskets gourd from
 'The juruas who bought baskets were fewer than the Jurua who bought gourds.'
- (78) **Nda-eta-i-ve jurua o-jogua ajaka ka'ygua gui*
 NEG-many-NEG-VE jurua A3-buy baskets gourd from
 (Intended) 'Fewer jurua bought baskets than gourds.'

¹¹An anonymous reviewer points that that it is implausible to analyze the standard of comparison in (77) without resorting to ellipsis. I agree with this observation. This suggests that along with truly phrasal comparatives, as discussed in section 3.5, some standard of comparisons in Mbyá are reduced clauses.

- (79) *Heta-ve jurua o-jogua ajaka ka'ygua gui*
 many-VE jurua A3-buy baskets gourd from
 ‘More Jurua bought baskets than gourds.’

An alternative and maybe more common way to express comparison of inferiority in amount comparatives is to suffix the comparative marker *-ve* to the nominal modifier *mbovy'i* (‘few’), as the following example illustrates:

- (80) *Juan Pedro gui o-jogua mbovy'i-ve ajaka.*
 Juan Pedro from A3-buy few-VE ajaka
 ‘Juan bought fewer baskets than Pedro.’

4.2 ON THE SCOPE OF NEGATION

When expressing comparison of inferiority, the second part of the negative circumfix occurs before the comparative marker *-ve* in the string of suffixes of the gradable predicate. The reverse ordering of suffixes is also attested, in which case the sentence is interpreted as a negated comparison of superiority. Compare for instance the comparison of inferiority in (81) with the negated comparison of superiority in (82). While the latter is true if and only if Pedro’s height is greater than Juan’s height, the former is true if and only if Juan’s height is not greater than Pedro’s height.

- (81) *Juan Pedro gui nda-i-jyvate-i-ve.*
 Juan Pedro from NEG-B3-tall-NEG-VE
 ‘Juan is less tall than Pedro.’
- false:** Juan’s height is 1m75, Pedro’s height is 1m70.
 - true:** Juan’s height is 1m70, Pedro’s height is 1m75.
 - false:** Juan’s height is 1m75, Pedro’s height is 1m75.
- (82) *Juan Pedro gui nda-i-jyvate-ve-i.*
 Juan Pedro from NEG-B3-tall-VE-NEG
 ‘Juan is not taller than Pedro.’
- false:** Juan’s height is 1m75, Pedro’s height is 1m70.
 - true:** Juan’s height is 1m70, Pedro’s height is 1m75.
 - true:** Juan’s height is 1m75, Pedro’s height is 1m75.

This suggests that comparison of inferiority is obtained quite literally by interpreting the negation in the semantic scope of the comparative marker, a position that has been advocated in formal analyses of comparison of inferiority (see Büring 2007a,b; Heim 2006, 2007).

It is a general fact of Mbyá morphology that the order of suffixes on a predicate determines the respective semantic scope of the operators that they denote. The following sentences from Dooley (2006) illustrate this phenomenon.

- (83) *Nd-a'eve-i ranhe*
 NEG-possible-NEG still
 'It is/was still impossible.'
Retrieved from Dooley (2006)
- (84) *Nd-a'eve ranhe-i*
 NEG-possible still-NEG
 'It is/was not possible anymore.'
Retrieved from Dooley (2006)
- (85) *Ava n-o-mba'e-apo-i ete*
 man NEG-A2-thing-do-NEG really
 'The man is truly not working.'
Retrieved from Dooley (2006)
- (86) *Ava n-o-mba'e-apo ete-i*
 man NEG-A2-thing-do really-NEG
 'The man is not truly working.'
Retrieved from Dooley (2006)

5 OTHER GRADABLE CONSTRUCTIONS

5.1 NON-COMPARATIVE USES OF -VE

The suffix *-ve* is attested in additive constructions, whose truth-conditions are distinct from those of comparatives. Sentence (87) for instance is true even if it rained less on the day of utterance than on the previous day, provided it rained at all. (88) and (89) have similar truth-conditions. Additive constructions like these have been studied in Mbyá by Thomas (2009) and in English and modern Hebrew by Greenberg (2009a,b, 2010b,a) and Thomas (2010, 2011).

- (87) *Kuee, o-ky. Ange, oky-ve.*
 yesterday A3-rain today A3-rain-VE
 ‘Yesterday, it rained, and today it rained (some) more.’
- true:** It rained for two hours yesterday, and it rained for one hour today.
 - true:** It rained for two hours yesterday, and it rained for three hours today.
 - false:** It rained for two hours yesterday, and it didn’t rain today.
- (88) *Kuee, Maria o-jeroky. Ange, o-jeroky-ve.*
 yesterday Maria A3-dance today A3-dance-VE
 ‘Maria danced yesterday and today she danced (some) more.’
- true:** Maria danced for two hours yesterday, and she danced for one hour today.
 - true:** Maria danced for two hours yesterday, and she danced for three hours today.
 - false:** Maria danced for two hours yesterday, and she didn’t dance today.
- (89) *Pedro o-juka mboapy mboi, ha’e Aureliano o-juka heta-ve.*
 Pedro A3-kill three snakes and Aureliano A3-kill many-VE
 ‘Pedro killed three snakes and Aureliano killed some more.’
- true:** Pedro killed three snakes and Aureliano killed four.
 - true:** Pedro killed three snakes and Aureliano killed one.
 - false:** Pedro killed three snakes and Aureliano didn’t kill any.

Constructions with *-ve* that express the termination of a process or a state of affairs can be analyzed as additive uses as well, as illustrated in (90) and (91)

- (90) *Nd-o-ky-ve-i.*
 NEG-A3-rain-VE-NEG
 ‘It is not raining any more.’
- (91) *Haxa o-guereko teĩ nd-o-gueraa-ve-i ka’aguy re ei*
 Axe A3-have still NEG-A3-bring-VE-NEG forest LOC honey
mboguai vy.
 cut SS

‘Eles tem machado mas não o levam mais para o mato para tirar mel.’
 ‘They have axes but they don’t bring them to the forest to get honey
 anymore’

Retrieved from Veríssimo (2002)

Additive uses of *-ve* are not attested with every gradable predicates. (92) for instance only has a comparative interpretation. It has been proposed that additive constructions can only be built with gradable predicates that denote additive measure functions Greenberg (2009a,b, 2010b,a); Thomas (2009, 2010, 2011). A measure function f is additive if and only if it is associated with a grouping operation \circ such that for any entities a and b in its domain, $f(a) + f(b) = f(a \circ b)$. Length is additive with respect to the concatenation operation, since the sum of the length of two objects is equal to the length of the concatenation of these objects. Happiness on the other hand is not additive: there is no grouping operation such that the sum of the happiness of two individuals is equal to the ‘collective’ happiness of these individuals taken as a group. This may explain why additive interpretations are unattested with predicates like *vy’a* (‘happy’), as illustrated in (92):

(92) *Kuee, Maria o-vy’a. Ko’ẽrã, o-vy’a-ve-ta*
 yesterday, Maria A3-happy tomorrow A3-happy-VE-PROSP
 ‘Yesterday, Maria was happy. Tomorrow, she will be happier.’

- a. **true:** Context: Today, Maria is happy because her fiancé brought her flowers. Tomorrow, he is going to visit her again, and he will propose to her. She will be even happier than today.
- b. **false:** Today, Maria is happy because her fiancé brought her flowers. Tomorrow, he is going to visit her again, but he won’t have flowers for her. She will be happy to see him, but she won’t be as happy as today.

Homophony between comparison and additivity is not an idiosyncrasy of Mbyá. It is attested at least in English (*more*), in French (*de plus*), in Portuguese (*mais*), in Spanish (*más*) and in Romanian (*mai*). See Greenberg (2009a,b, 2010b,a) for English and Thomas (2009, 2010, 2011) for Mbyá and English.

5.2 EQUATIVES

There are several ways to form equative constructions in Mbyá. A first strategy uses the equative post-position *rami* and the reciprocal pronoun *joo*, as in (93) and (94). Note that because of the reciprocal meaning of the construction, the individuals whose measurements are being compared are asserted to have equal measurements. This contrasts with the English equative construction in (95), which is true even if Marco's height is strictly greater than Maria's height.

- (93) *Marco ha'e Maria joo rami yvate.*
Marco and Maria RECP EQU tall
'Marco and Maria are as tall as each other.'
a. **true:** Marco is 1m80, Maria is 1m80.
b. **false:** Marco is 1m85, Maria is 1m80.
c. **false:** Marco is 1m80, Maria is 1m85.
- (94) *Marco ha'e Maria joo rami i-karape'i.*
Marco and Maria RECP EQU B3-short
'Marco and Maria are as short as each other.'
a. **true:** Marco is 1m60, Maria is 1m60.
b. **false:** Marco is 1m65, Maria is 1m60.
c. **false:** Marco is 1m60, Maria is 1m65.
- (95) Marco is as tall as Maria.
a. **true:** Marco is 1m60, Maria is 1m60.
b. **true:** Marco is 1m65, Maria is 1m60.
c. **false:** Marco is 1m60, Maria is 1m65.

Alternatively, equative comparison may be expressed without the reciprocal pronoun *joo*, as illustrated in the following example. In this sentence, *Juan* is the subject of the clause and *Pedro* is the complement of the post-position *rami*.

- (96) *Juan Pedro rami yvate.*
Juan Pedro as tall
'Juan is as tall as Pedro.'

5.3 SUPERLATIVES

There is no superlative operator in Mbyá. Superlatives are expressed using the comparative morpheme. Since the language lacks definite and indefinite articles, superlatives cannot be expressed either using a combination of definite article and comparative operator, as is the case in Romance languages for instance. That an individual is the greatest along some dimension in a comparison class can be expressed unambiguously by using a universal quantifier inside the standard of comparison, as in the following example:

- (97) *Juan pavẽ tekoapygua gui yvate-ve.*
Juan all villagers from tall-VE
'Juan is taller than all the villagers.'
- (98) *Jarara ma pavẽ mboi gui inh-arõ-ve va'e.*
Jararaca TOP all snake from B3-angry-VE REL
'De todas as cobras, a Jararaca é a mais brava.'
'The Jararaca is [the one that is] braver than all [other] snakes.'
Retrieved from Veríssimo (2002)

6 CONCLUSION

In this conclusion, I would like to emphasize features of comparative constructions in Mbyá that may be of interest to typologists as well as to theoretical linguists interested in cross-linguistic studies of comparative constructions.

A first feature of interest is the morphological decomposition attested in amount comparatives. The use of the degree predicates *heta* ('many') and *mbovy'i* ('few') in these constructions is reminiscent of the expression of nominal comparison with *fewer* in English. In both cases, the degree predicate is not evaluative when used in amount comparatives, although it is evaluative when modifying a noun phrase on its own. An obvious difference between English and Mbyá is that in the latter language, an overt degree predicate is used in positive as well as in negative amount comparison. However, this difference should not be overstated, since it has been proposed that the comparative marker *more* in amount comparison, e.g. in *more students*, is semantically decomposed into a measure term *many* and a comparative operator *-er*, see Bresnan (1973) and Hackl (2001). From that point of view, the morphology of amount comparatives is simply more transparent in Mbyá than it is in English. Note that the type of decomposition that can be observed in

Mbyá appears to be attested in a wide variety of languages. According to the data set provided by Beck et al. (2009), the non-evaluative use of a degree modifier in amount comparison (‘comparison of quantity’) is attested in Bulgarian, Hungarian, Japanese, Mooré, Motu, Romanian, Russian, Samoan, Thai, Turkish, Yoruba and Paraguayan Guarani, i.e. 12 of the 15 languages under study (the three others being Hindi, Mandarin and Spanish).

Morphological decomposition is also attested in the expression of comparison of inferiority, which is realized by suffixing the comparative marker to a negated degree predicate. Interestingly, the use of a propositional negation in comparatives of inferiority is unattested in the data set of Beck et al. (2009). However, a number of languages in the data set form comparatives of inferiority by combining a negative adjective of degree (glossed as *little*) with a comparative marker, namely Bulgarian, Romanian, Russian, Thai and Turkish. Note that according to Beck et al. (2009), comparatives of inferiority formed by suffixation of the comparative marker to a negated predicate are unattested in Paraguayan Guarani.

Finally, generative linguists working with some form of phrase structure grammar may be interested by the fact that the distribution of the comparative marker *-ve* in the morphological template of gradable predicates follows the so-called ‘mirror principle’ of Baker (1985), according to which the order of suffixes reflects the hierarchy of syntactic projections. To wit, the comparative marker takes scope over all preceding suffixes and the predicative root, while it falls in the scope of suffixes that follow it. The relation between the linear order of comparison and negation and their respective semantic scope is a striking example of the mirror principle at play. This fact may be relevant to theoretical linguists interested in the interface between the morphosyntactic structure of comparatives and their interpretation, since the ‘mirror principle’ is most commonly explained as a consequence of head movement, i.e. as a relation between lexical and functional heads. However, most generative analyses of the morphosyntax/semantics interface of comparison treat comparative markers as quantifiers that are generated as arguments of gradable predicate (see Heim 2000; Schwarzschild & Wilkinson 2002; Bhatt & Pancheva 2004). It is unclear to which extent such analyses make justice to the observation that comparative markers obey the mirror principle in Mbyá.

To conclude, I hope that this overview of comparison and related constructions in Mbyá can serve as a useful reference to linguists interested in cross-linguistic variation in this domain, and that it may stimulate more

focused studies of these constructions in Tupi Guaraní languages.

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