Compositionality in Comparative Constructions

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1 General considerations on the syntax-semantics of comparatives

- *Compositionality issues*
  The syntax-semantic mapping of comparative constructions provides a number of challenges.

  - $[\![more]\!] = [\![many]\!] + [\![\text{-er}]\!]$ or $[\![more]\!]$?

  - $[\![more\ than\ XP]\!] = [\![more]\!] \cap [\![than\ XP]\!]$ or $[\![more]\!]([\![than\ XP]\!])$?

  - $[\![than\ XP]\!] = [\![XP]\!]$ or $[\![than]\!]([\![XP]\!])$?

  - $[\![more_2]\!]$ and $[\![more_3]\!]$? $[\![more_{deg}]\!]$ and $[\![more_{ind}]\!]$? $[\![more_{phrsal}]\!]$ and $[\![more_{clausal}]\!]$?

- *Phrasal* vs. *Clausal Comparatives*
  Virtually all studies of comparative constructions draw a distinction between *clausal* and *phrasal* standards of comparison. The difference amounts to the syntactic category of the complement of the standard marker.
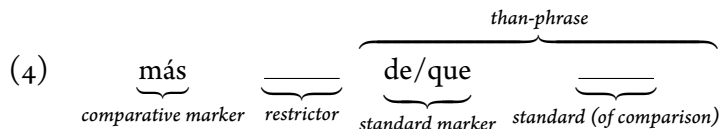
  - CLAUSAL STANDARDS: XP in $\ulcorner than\frown XP \urcorner$ includes a matrix-level verbal predicate or other evidence of non-embedded clausal structure.

    (1) a. Sue has more books than <u>she needs</u>

         b. The door is higher than <u>the table is wide</u>

  - PHRASAL STANDARDS: XP in $\ulcorner than\frown XP \urcorner$ is a single non-clausal constituent, usually a nominal, a measure phrase or a quantified phrase with no detectable verb/tense layers.

    (2) a. Sue has more books than <u>magazines</u>

         b. The door is higher than <u>six feet</u>

- Some languages have a construction specific standard marker in comparatives, like English *than* or Japanese *yori*, whereas others, like Romance languages, do not.

- Languages with no such dedicated morphology often have more than one standard markers; when that is the case, one of the markers is usually related to a complementizer, and the other one is usually a pre-/postposition (Stassen 1985).

(3) a. *Clausal comparative* $[_{XP}$ than $[_{CP}$ YP$]]$

      Ja lublju Ivana bolše čem [*jego ljubit Maša*]

      I love Ivan.ACC more what.INSTR him loves Masha.NOM

      'I love Ivan more than Masha does'

   b. *Reduced clausal comparative* $[_{XP}$ than $[_{CP}$ *op* [DP ~~YP~~ $]]]$

      Ja lublju Ivana bolše čem [*Maša*]

      I love Ivan.ACC more what.INSTR Masha.NOM

      'I love Ivan more than Masha'

   c. *Phrasal comparative* $[_{XP}$ than $[_{DP}$ YP$]]$

      Ja lublju Ivana bolše [*Maši*]

      I love Ivan.ACC more Masha.GEN

      'I love Ivan more than Masha'

- The precise role of these different markers is contentious, the debates centering on whether (*i*) they are semantically vacuous elements that surface solely for purposes of syntactic well-formedness, or instead (*ii*) they introduce their own further, semantically meaningful, selectional restrictions.

⇛ The received view: it has been argued that the choice of the standard marker depends on the phrasal (nominal) or clausal nature of the standard; i.e. it's a solely *syntactic* constraint on the distribution of standard markers.

- **Goal today**
  Discuss some data from Peninsular Spanish that calls into question the notion that the conditions governing the distribution of standard markers across languages is solely syntactic.

- Terminology:

(4) más   _____   de/que   _____

   comparative marker   *restrictor*   *standard marker*   *standard (of comparison)*

                                than-phrase

2 Case study: Spanish

- **Two standard markers**
  Like many other languages, Spanish may use different standard markers in comparative constructions.[1]

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1 Sáez and Sánchez López (2013) provide a thorough overview of Spanish comparative constructions. Works that have attributed the limited distribution of *de* comparatives to syntactic factors include Bolinger (1950, 1953), Solé (1982) Plann (1984), Price (1990), Gutiérrez Ordóñez (1994a,b), Sáez del Álamo (1999) and Gallego (2013), a.o. Works that have tried to explain it in terms of the denotational properties of *de* comparatives include Bello (1847), Prytz (1979), Rivero (1981), and Brucart (2003), a.o. The main arguments in this section are from Mendia (2020).

(5) a. *Pedro pescó   más peces   **que** yo*
     Pedro fish.PST.3SG more fish.M.PL QUE I
     'Pedro fished more fish than me'

   b. *Pedro pescó   más peces   **de** los   que pesqué   yo*
     Pedro fish.PST.3SG more fish.M.PL DE DEF.M.PL COMP fish.PST.1SG I
     'Pedro fished more fish than I did'

2.1 Semantic properties of *de* comparatives

- *General distribution of* de *comparatives*
  Cases where comparatives allow the *de* standard marker fall mainly into two categories: either the standard of comparison is a measure phrase, or it is a referential expression that points to a quantity, extent or degree and measure phrases.

- *Reference to "simplex" degrees*
  The standard of comparison may sometimes refer to "simplex" degrees, i.e. nominal expression that directly reference a measure, quantity or degree.

  (6) **Comparison to a degree**

     a. [*Context:* The minimum height of the railing is 4 feet.]

        *La   valla   es   más alta   { *que / de } eso$_d$*
        DEF.F.SG railing.F.SG be.PRS.3SG more tall.F.SG QUE   DE DEM.N
        'The railing is higher than that'

     b. [*Context:* No suitcases heavier than 23 kg. are allowed.]

        *La   maleta   pesa   más { *que / de } eso$_d$*
        DEF.F.SG suitcase.F.SG weigh.PRS.3SG more   QUE   DE DEM.N
        'The suitcase is heavier than that'

- In contrast, comparison to individuals—the comparison of two expressions refering to individual entities relative to some dimension—is not allowed with *de*.

  (7) **Comparison to an individual**

     a. [*Context:* Pointing to something in my backyard that is taller than the railing.]

        *La   valla   es   más alta   { que / *de } eso$_e$*
        DEF.F.SG railing.F.SG be.PRS.3SG more tall.F.SG QUE   DE DEM.N
        'The railing is higher than that'

     b. [*Context:* Pointing to a small object.]

        *La   maleta   pesa   más { que / *de } eso$_e$*
        DEF.F.SG suitcase.F.SG weigh.PRS.3SG more   QUE   DE DEM.N
        'The suitcase is heavier than that'

⇾ The difference amounts to the *res* of the comparison itself: *de* comparatives are cases of *comparison to a degree*, whereas *que* comparatives are cases of *comparison to an individual*.[2]

- We can corroborate these facts by looking into the distinction between the neuter and non-neuter forms of the demonstrative.

(8) [*Context:* You said that Pedro read 3 books, but he read more.]

Pedro	*leyó*	*más*	*libros*	{ *que* / **de* }	*ésos$_e$*
Pedro	eat.PST.3SG	more	book.M.PL	QUE DE	DEM.M.PL

'Pedro read more books than those'

- This limitation extends to all instances of *de* comparatives: for instance, with *de*, only the neuter form of the pronominal is allowed, which tracks referece to a degree.

(9) [*Context:* I read a book that is 1200 pages long, and Pedro read a longer book.]

a.
Pedro	*leyó*	*un*	*libro*	*más*	*largo*	{ **que* / *de* }	*eso$_d$*
Pedro	read.PST.3SG	INDF.M.SG	book.M.SG	more	long.M.SG	QUE DE	DEM.N

'Pedro read a longer book than that'

b.
Pedro	*leyó*	*un*	*libro*	*más*	*largo*	{ *que* / **de* }	*ése$_e$*
Pedro	read.PST.3SG	INDF.M.SG	book.M.SG	more	long.M.SG	QUE DE	DEM.M.SG

'Pedro read a longer book than that one'

- The same is true of measure nouns as well.

(10) a.
La	*piedra*	*pesa*	*más*	*de*	{ *dos kilos* / **un*	*coche* }
DEF.F.SG	stone.F.SG	weigh.PRS.3SG	more	DE	two kilos INDF.M.SG	car.M.SG

'The stone is heavier than {two kilos / *a car}'

b.
NYC	*está*	*más*	*lejos*	*de*	{ *100 kilómetros* / **Boston* }
NYC	be.PRS.3SG	more	far	DE	100 kilometers Boston

'NYC is further than {100 kilometers / *Boston}'

(11) a.
La	*piedra*	*pesa*	*más*	*que*	{ **dos kilos* / *un*	*coche* }
DEF.F.SG	stone.F.SG	weigh.PRS.3SG	more	QUE	two kilos INDF.M.SG	car.M.SG

'The stone is heavier than {*two kilos / a car}'

b.
NYC	*está*	*más*	*lejos*	*que*	{ **100 kilómetros* / *Boston* }
NYC	be.PRS.3SG	more	far	QUE	100 kilometers Boston

'NYC is further than {*100 kilometers / Boston}'

- Even when *que* and *de* standard markers combine with identical standards, we can identify noticeable semantic effects, an unexpected state of affairs if the semantics of both comparative constructions was the same.

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2 Some speakers seem to allow *eso$_d$* with *que* standards. Bello (1847, 301) already notes that although *que* may be admissible in some contexts similar to (6), the *de* variants "sound better" (sic).

(12) a. *Pedro comió   más de dos manzanas*
Pedro eat.PST.3SG more DE two apples
'Pedro ate more than two apples'

b. *Pedro comió   más que dos manzanas*
Pedro eat.PST.3SG more QUE two apples
'Pedro ate something more in addition to two apples'

- These examples–and their contrast with the *que* variants–point out the limitation of *de* to appear in contexts where a degree is referenced to and thus cannot be subsumed to a syntactic constraint on the standard of comparison.

✳ From a semantic point of view, the difference between the two standard markers seems to boil down to the object of the comparison itself: unlike *que*, *de* must compare degrees directly, whereas *que* must be recruited to express *comparison to an individual*.

⚠ In most theories of comparatives, standard phrases are usually ascribed a degree type, either $\langle d, t \rangle$ or d (see Morzycki 2016 for an overview), seemingly washing out the intuitive differences between comparison to degrees *vs.* individuals.

❷ Then, why and how are *de* comparatives different from other comparative constructions?

⇒ Comparatives with *de* standard markers are not only semantically but also syntactically restricted.

2.2 Syntactic restrictions on *de* comparatives

- **A long noted contrast**
The syntacitc distribution of *de* comparatives is more restricted than its *que* counterparts. As a starting point, (13) illustrates the long-standing observation that *de* comparatives are incompatible with run-of-the-mill (full) clausal comparatives:

(13) *Pedro leyó   más libros   { que / *de } trabajos   escribiste   tú*
Pedro read.PST.3SG more book.M.PL   QUE   DE   paper.M.PL wrote.PST.3SG you
'Pedro read more books than you wrote papers'

❷ Are *de* comparatives a case of reduced clausal comparatives or phrasal comparatives? They both superficially resemble phrasal comparatives:

– Phrasal comparatives are comparative constructions where the complement of the standard marker is a simple nominal phrase, a DP (e.g. Heim 1985, Kennedy 1997); e.g. *Liz is taller than Sue.*

– Reduced clausal comparatives are derived from full clausal comparatives by a process of reduction/elision (Bresnan 1973, Hankamer 1973, Pinkham 1982, a.o); e.g. *Liz is taller than Sue ⟨is⟩.*

❶ A reliable method of uncovering true phrasal comparatives is by looking into the syntactic size of the standard by checking whether it admits more than one syntactic remnant.

(14) a. *Greek "apo"* [Merchant 2009, 140]
    *Perisoteri anθropi milisan me ton Gianni tin Kyriaki apo   me ton
    more   people spoke with the Giannis the Sunday than.PHRASAL with the
        Anesti to Savato
        Anestis the Saturday
        Int.: 'More people spoke with Giannis on Sunday than with Anestis on Saturday'

    b. *Hindi "-se"* [Bhatt and Takahashi 2011, 593]
    *Tina-ne   aaj Pim kal-se   zyaadaa kitaabē parh-ī
    TinINDF.ERG today Pim yesterday-than.PHRASAL more   book.PL read
    Int.: 'Tina read more books today than Pim yesterday'

- Spanish *de* comparatives, unlike their *que* counterparts, do not allow multiple remnants.

(15) *Context:* In a robotics competition every participant has his robot tested in a long jump test. I compare how well mine performed yesterday to the robot who made a 2″ jump right now, which is very close to what my robot jumped.

(16) [*Pointing to the robot that just jumped*]
    Ayer   mi   robot   saltó   más { que / *de } ése_e
    yesterday my.SG robot.M.SG jump.PST.3SG more   QUE   DE   DEM.M.SG
    'Yesterday my robot jumped more than that one did'

(17) [*Referring to the length of my robot's jump*]
    Ayer   mi   robot   saltó   más { *que / de } eso_d
    yesterday my.SG robot.M.SG jump.PST.3SG more   QUE   DE   DEM.N
    'Yesterday my robot jumped more than 2″'

- In (16) the comparison is relative to an individual (the robot that jumped yesterday). On the other hand, (17) compares directly the lengths of the two jumps. Now we try with multiple remants in the standard:

(18) a. *Ayer   mi   robot   saltó   más que ése_e   hoy*
    yesterday my.SG robot.M.SG jump.PST.3SG more QUE DEM.M.SG today
    'Yesterday my robot jumped more than that one has jumped today'

    b. **Ayer mi robot saltó más de eso_d hoy*

⇒ The fact that *de* comparatives cannot host more than one remnant suggests that they only take phrasal (in this case nominal) standards.

❷ The phrasal status of *de* comparatives is further supported by a ban on reduction. A logical consequence of the full/reduced clausal analysis is that material within the standard of comparison can always be elided (in fact, sometimes it must; Reglero 2007). For instance, eliding the verb is always a possibility for clausal *que* comparatives.

(19) a. *Compró   más   revistas   que   libros   tienes   tú*
        buy.PST.3SG more magazine.F.PL QUE book.M.PL have.PRS.2SG you
        '(She) bought more magazines than the books you have'

    b. Compró más revistas que tú libros

    c. Compró más revistas que libros

    d. Compró más revistas que tú

- The same is not possible with *de* comparatives. As is well-known, it is not possible to elide the verb of a relative clause construction in Spanish. The impossibility to elide the verb from the standard suggests that it must be a DP—a conclusion in line with current assumptions about the constituency of free relatives as well, which are generally argued to be nominal (Jacobson (1995), Caponigro (2002), Ojea (2013), a.o.).

(20) a. *Compró   más   libros   de los   que   tú   *(compraste)*
        buy.PST.3SG more book.M.PL DE DEF.M.PL COMP you buy.PST.2SG
        'He bought more books than the books you bought'

    b. *Compró   más   libros   de cuantos   tú   *(compraste)*
        buy.PST.3SG more book.M.PL DE how many.M.PL you buy.PST.2SG
        'He bought more books than the books you bought'

✳ **Key generalization**
The distribution and range of interpretations of *de* comparatives are the result of the interplay between two independent restrictions:

(21) **Constraints on *de*-comparatives**

    a. *Semantic constraint*
    Comparatives with *de* must combine with *d*-type objects.

    b. *Syntactic constraint*
    Comparatives with *de* must be nominal.

➭ From (21a) it follows that *de* comparatives must always express a comparison to a degree, and the fact that they are limited to DPs of various sorts is accounted for by (21b).

- There are a number of additional facts that fall out of the joint action of the two constraints that speak against the possibility of reducing the limited distribution of *de* comparatives to one or the other.

- **Why a semantic constraint?**
Suppose for the sake of the argument that *de* comparatives were not limited by (21a), that is, that their only restriction was a syntactic necessity to take nominal standards. This syntacto-centric account would lead us to make two wrong predictions.

❶ Subset comparatives are constructions where the restrictor and the standard are in a set membership relation (Grant 2013).

(22) Liz has read more books than El Quijote.

- Aparicio (2014) shows that subset comparatives are phrasal. Evidence comes from their inability to host multiple remnants (23) and their incompatibility with *bona fide* phrasal standard markers in languages like Greek (24).

(23) *Liz has read more books today than El Quijote yesterday

(24) | *I* | *Ariadne* | *diavase* | *parapano* | *vivlia* | { *apo* | / | **apo'ti*} | *tin* |
      |---|---|---|---|---|---|---|---|---|
      | the | Ariadne | read | further | books | than.PHRASAL | | than.CLAUSAL | that |

   Odysseia
   OdysseiINDF.ACC
   'Ariadne read more books than the Odyssey.'

- In addition, the standard of comparison must always denote an individual (or a kind; see Grant 2013).

(25) Liz has read more books today than yesterday

   a. ✓*Ordinary comparative interpretation*
      'Liz read a greater number of books today than she did yesterday'

   b. ✗*Subset comparative interpretation*
      'Yesterday Liz read some books. Today she read those books and at least one more'

- If the only restriction of Spanish *de* comparatives was syntactic, *de* should be grammatical in subset comparatives; however, it isn't.

(26) | *Juan* | *ha leído* | *más* | *libros* | { *que* | / | **de* } | *El* | *Quijote* |
      |---|---|---|---|---|---|---|---|---|
      | Juan | read.PRS.PRF | more | book.M.PL | QUE | | DE | El | Quijote |

   'Juan has read more books than El Quijote'

❷ DP-internal comparatives have also been argued to be bona fide phrasal comparatives in Spanish, and not simply reduced clauses (Brucart 2003).

(27) a. *Nominal*
Un	*niño*	*más*	*travieso*	{ *que*	/	**de* }	*su*	*vecino*
INDF.M.SG	child.M.SG	more	naughty.M.SG	QUE		DE	POSS.3SG	neighbor

      'A child naughtier than his neighbor'

   b. *Adjectival*
Una	*novela*	*más*	*divertida*	{ *que*	/	**de* }	*inspirada*
INDF.F.SG	novel.F.SG	more	funny.F.SG	QUE		DE	inspired.F.SG

      'A novel that is funnier than it is inspired'

   c. *Prepositional*

Más	*preocupado*		*por*	*el*	*dinero*	{ *que* / **de* }	*por*	*el*
more	worry.PTCP.M.SG		for	DEF.M.SG	money.M.SG	QUE DE	for	DEF.M.SG

bienestar
wellbeing.M.SG

'He is more worried about money than about wellbeing'

❸ Nominal comparative phrases in subject position in Spanish must always be phrasal, since there is no licit elision process that could have derived the corresponding surface order seems to exist (Sáez del Álamo 1999).

(28) a.
Más	*chicos*	{ *que* / **de* }	*chicas*	*leyeron*	*ese*	*libro*
more	boy.M.PL	QUE DE	girl.F.PL	read.PST.3PL	DEM.M.SG	book.M.SG

'More boys than girls read this book'

   b. ✘ Más chicos [⟨~~leyeron ese libro~~⟩] que chicas leyeron ese libro

⇨ The conclusion is clear: it is not possible to reduce the overall behavior of *de* comparatives to their syntactic idiosyncratic properties.

- **Why a syntactic constraint?**
  We can ask ourselves the same question in the opposite direction. Suppose that *de* comparatives were not limited by any syntactic considerations, and all they require is a certain semantic constraint on their standards.

❶ There is agreement that expressions like "many athletes" are quantity-denoting, but that is not enough to grant their compatibility with *de*.

(29)
Pedro	*corre*	*más*	*rápido*	{ *que* / **de* }	*muchos*	*atletas*
Pedro	run.PRS.3SG	more	fast.ADV	QUE DE	many.M.PL	athlete.M.PL

'Pedro runs faster than many athletes'

❷ To show that this semantic restriction is *by itself* insufficient we must show that other degree-denoting expressions that do not nevertheless belong to a nominal category are ill-formed with *de*. Subcomparatives with gradable predicates as standards provide such a case.

(30)
La	*mesa*	*es*	*más*	*larga*	{ *que* / **de* }	*ancha*
DEF.F.SG	table.F.SG	be.PRS.3SG	more	long.F.SG	QUE DE	wide.F.SG

'The table is longer than it is wide'

- The sentence in (30) constitutes an instance of comparison to a degree, whereby two distinct degrees pertaining to the same individual are compared along the dimension of length. It cannot be a case of comparison to an individual because there are no two individuals being compared. There is also little doubt that the gradable predicate constitutes a degree expression. The ill-formedness of (30) must therefore be attributed to extra-semantic factors. The syntactic requirement that the standard be nominal is not met in subcomparatives like (30).

(31)   *La   mesa   es   más   larga   { que / *de } ancha   es*
       DEF.F.SG   table.F.SG be.PRS.3SG more long.F.SG   QUE   DE   wide.F.SG   be.PRS.3SG

       la   puerta
       DEF.F.SG   door.F.SG

       'The table is longer than the door is wide'

➠ These examples show that establishing a comparison to a degree is a necessary but not sufficient condition to form *de* comparatives in Spanish.

✳ The main conclusion so far is that, taken independently, none of the two requirements in (21) suffices to account for the distribution and range of interpretations observed in *de* comparatives.

3   A formal implementation

- **Background assumptions in degree semantics**
  Degrees are ways of representing measurements along a scale, that is, they are measures of some property, like being *d*-tall, *d*-big, *d*-many, etc. (Seuren 1973, Cresswell 1976, von Stechow 1984, Heim 1985, Bierwisch 1989, a.o.).

  (32) $[\![\text{GP}]\!] = \lambda n_d.\lambda x_e.\mu_{\text{GP}}(x) \geq n$ for any gradable predicate GP

- The degree argument in (32) can be provided by either degree expressions like 6″ and 20°C, demonstratives like *that$_d$* (or can even be contextually supplied through POS).

- **Comparatives with *que***
  I assume the standard framework pioneered by Bresnan (1973) and von Stechow (1984) as spelled-out by Heim (2001) and others: (*i*) standards of comparison have an underlying clausal structure and are generated as complements of the comparative marker *más*, which constitutes the head of its own projection (DegP).

  (33)
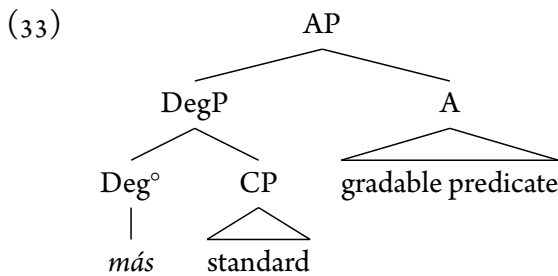
- DegP denotes a GQ over degrees and undergoes QR leaving a trace of type *d*. The comparative marker itself is a GQ-Det over degrees (Heim 2001).

  (34)   a. $[\![\textit{más}_{\text{CLAUSAL}}]\!] = \lambda P_{\langle dt \rangle}.\lambda Q_{\langle dt \rangle}.\text{MAX}(Q) > \text{MAX}(P)$

         b. $[\![\text{MAX}]\!] = \lambda N_{\langle dt \rangle}.\iota n[N(n) \wedge \forall n'[N(n') \rightarrow n' < n]]$

- A silent operator *Op* launches out of the degree argument position of the gradable adjective and yields a set of degrees that restricts the comparative marker.

(35) | *La* | *mesa* | *es* | *más* | *larga* | *que* | *ancha* | *es* | *la* |
|---|---|---|---|---|---|---|---|---|
| DEF.F.SG | table.F.SG | be.PRS.3SG | more | long.F.SG | QUE | wide.F.SG | be.PRS.3SG | DEF.F.SG |

puerta
door.F.SG

'The table is longer than the door is wide'

(36)
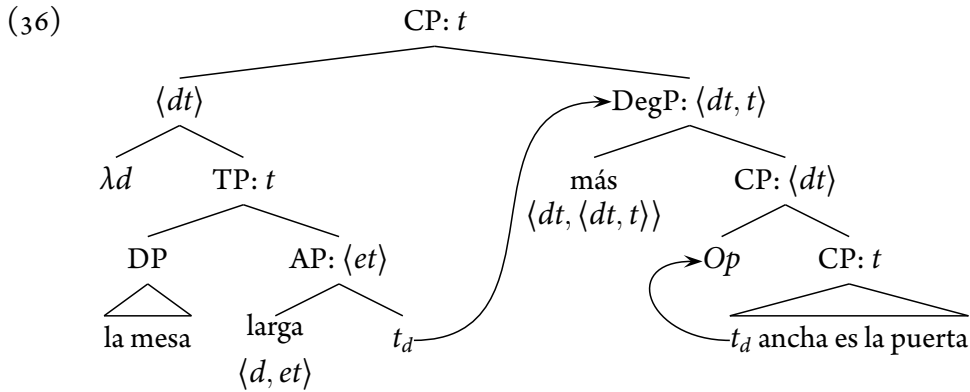
- **Standards as definite descriptions of degrees**
  The lexical entry for the comparative marker takes a gradable predicate as its first argument, and then it relates a degree and an individual along the dimension established by said gradable predicate degree (cf. Pinkal 1989, Beck et al. 2012, a.o.).[3]

(37) $[\![más_{\text{DEGREE}}]\!] = \lambda R_{\langle d,et\rangle}.\lambda n_d.\lambda x_e.\text{MAX}(\lambda n'.R(n')(x)) > n$

(38)
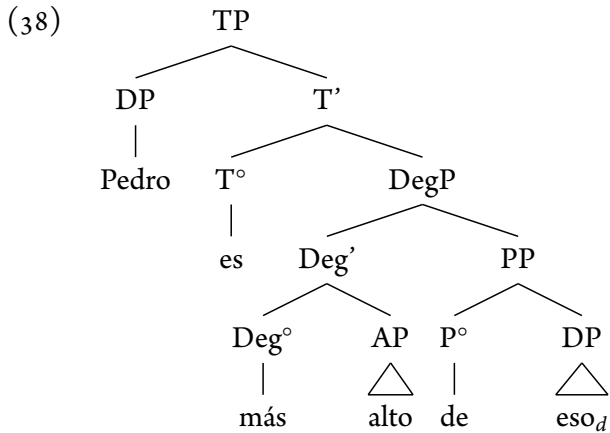
- LF structure matches the surface syntactic structure.

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3 This is the lexical entry suggested by Pinkal (1989) for certain cases of comparative constructions in English and German, and by Beck et al. (2004) for *yori* comparatives in Japanese.

(39) $\llbracket TP \rrbracket = \text{MAX}(\lambda n'.\text{HEIGHT}(Pedro) \geq n') > 6''$

$\qquad = \iota n[\text{HEIGHT}(Pedro) \geq n \,\wedge\, \forall n''[\text{HEIGHT}(Pedro) \geq n'' \to n'' < n]] > 6''$

$\qquad = 1 \text{ iff } \text{HEIGHT}(Pedro) > 6''$

- **Assessment**
  There are two immediate results, one syntactic, one semantic:

  – Comparatives with *de* cannot host multiple remnants, since they can only have DPs/MeasPs/NumPs as standards.

  – Comparison to an individual (in whichever form—e.g. an *eso$_e$* standard—require the *que* standard marker; comparatives with *de* can only express comparison to degree.

- But there are other not so obvious consequences as well.

❶ *Displacement*
Given the two geometries assumed for the *que* and *de* comparatives, and that CPs, unlike at least some PPs, are easier to extrapose, we expect extraposition of the standard of comparison to be easier in the case of *que* comparatives as compared to their *de* counterparts.

(40) [*Context:* a couple of days ago Juan jumped 20 ft.]

    a.   *Pedro saltó   más de eso   [**ayer**   **por la**   **tarde**]*
        Pedro jump.PST.3SG more DE DEM.N yesterday at   DEF.F.SG evening.F.SG
        'Last evening Pedro jumped more than that'

    b.   *Pedro saltó más [**ayer por la tarde**] de eso

- These configurations are not problematic for *que* cases taking an individual denoting standard, given the greater facility to extrapose CPs across the board.

(41) a.   *Pedro saltó   más que Juan [**ayer**   **por la**   **tarde**]*
          Pedro jump.PST.3SG more QUE Juan yesterday at   DEF.F.SG evening.F.SG
          'Last evening Pedro jumped more than Juan'

       b.   Pedro saltó más [**ayer por la tarde**] que Juan

❷ *Scope*
The present configuration does not require rearrangement at LF—the lexical entry in tandem with the syntactic geometry allows every piece to be interpreted in-situ.

(42) $\left[_{\text{DEGP}} \left[\, más_{\langle\langle d,et\rangle,\langle d,et\rangle\rangle}\; \text{Gradable-Predicate}_{\langle d,et\rangle}\,\right] \left[de\; \text{standard}\right]_d \right]$

- In fact, movement from out of the DegP is not possible without further stipulations (assuming traces are never functors): (*i*) if *más* moved, it would not find any other gradable predicate in the structure to take as its first argument; (*ii*) if the standard moved, the same problem arises; (*iii*) if the two moved, there would be a type clash with the gradable predicate. The consequence is that, all else equal, we

expect DegP to take low scope with respect to other operators in the sentence (e.g. subjects, sentential negation, intensional verbs, etc.).

(43) [*Context:* this draft is 10 pages long.] The paper is required to be less long than that.

(44) a. Low DegP require ≫ less
$$\forall w' \in Acc(w, w') : \text{MAX}\big(\lambda n : \text{LONG}(paper, n)(w')\big) < 10pp$$

   b. High DegP less ≫ require
$$\text{MAX}\big(\lambda n : \forall w' \in Acc(w, w') : \text{LONG}(paper, n)(w')\big) < 10pp$$

- In Spanish, too, it is possible to reproduce this ambiguity with *que*. With *de* however, scope is frozen.

(45) **Scopal mobility with *de***

   a. *Pedro   tiene   que   saltar   menos alto   que   Juan*
       Pedro have.PRS.3SG COMP jump.INF less   high.ADV QUE Juan
       'Pedro must jump less than Juan'

   b. ✓ Low DegP require ≫ less
       The requirement is that Pedro jumps less high than Juan

   c. ✓ High DegP less ≫ require
       The minimal height required of Pedro's jump is below Juan's jump

(46) **Scope freezing with *de***
      [*Context:* Juan jumped 2" and Pedro must jump at least 1.8"]
      #*Pedro debe   saltar   menos   alto de   eso* [where ⟦eso⟧ = 2″]
          Pedro must.PRS.2SG jump.INF less   high DE
       'Pedro must jump less than that'

⇒ Comparatives with *de* comparatives are scopally inert. In contrast, the ambiguity of examples like (45) show that *que* comparatives do allow DegP movement.

✳ In the proposed analysis, this new characterization of Spanish *de* comparatives is handled by a new comparative marker *más*$_\text{DEGREE}$, dedicated to directly establish a comparison to a degree (cf. *más*$_\text{CLAUSAL}$). But while descriptively adequate, this type of implementation **ignores the role of standard markers**.

⚠ Languages that morphologically mark a phrasal/clausal distinction usually do so by means of different standard markers (e.g. Alrenga et al. 2012), and yet assuming that these markers are semantically bleached requieres systematically ambiguous comparative markers whose different exponents are *never* reflected morphologically.

❓ Can we coherently distribute (at least some of the) heavy-lifting in *de* comparatives across its multiple components?

✳ The combination of syntactic and semantic well-formedness conditions Spanish *de*-comparatives are subject to points to a hitherto unnoticed locus of cross-linguistic variation: a comparative marker that is subjetct to **both** syntactic as well as semantic constraints.

⚠ Is Spanish unique?

❷ Can we identify other reflexes of such semantic variation effects across languages?

4 Towards stronger compositionality

- *The role of the standard marker de*
  One of the consequences of the proposed analysis for Spanish comparatives is that it requires a systematic ambiguity on the comparative marker that it nevertheless surfaces on the standard marker.

- Let us assume then that there is only a single comparative marker, a vanilla *más* equivalent to our *más*_{CLAUSAL}:

(34a) $[\![m\acute{a}s_{\text{CLAUSAL}}]\!] = \lambda P_{\langle dt \rangle}.\lambda Q_{\langle dt \rangle}.\text{MAX}(Q) > \text{MAX}(P)$

- As is, (34a) cannot take standards that denote definite descriptions of degrees, but it is not hard to reserve engineer a descriptively adequate meaning for the standard marker *de*. What is difficult is to justify such meaning so as to achieve some explanatory advantage. A starting point:

(47)   **Pancheva's (2006) conjecture**
       than is a partitive preposition in the domain of degrees, corresponding to *of* in the domain of individuals.

- The general idea: *de* is a cross-categorical *referential partitive preposition* that takes a definite description as a complement and returns a predicate.

⇒ This corresponds precisely to the role of *de* in "ordinary" (entity denoting) referential partitives: *de* takes a definite description of an individual and returns a predicate of individuals (Ladusaw 1982, de Hoop 1998, Schwarzschild 2002 a.o.).

(48) $[\![[\text{of}_{\text{REF.PART}}[_{\text{DP}}\text{XP}]]]\!] = \lambda x_1.\lambda x_2.x_2 \leq x_1$ type $\langle e, \langle e, t \rangle \rangle$

(49) $[\![\text{de}]\!] = \lambda d_1.\lambda d_2.d_1 \leq d_1$ type $\langle d, \langle d, t \rangle \rangle$

- Assuming the same "classical" syntax for *de* comparatives as we did for *que* comparatives (33), composition works fine:

(50) $\ldots\big[\,[\,\text{más}\,[_{\text{PP}}\,\text{DE dos metros}\,]\,]_1\,\lambda 1\,[_{\text{TP}}\,\text{Lisa es t}_1\,\text{alta}\,]\,\big]$

    a. $[\![\text{TP}]\!] = \text{HEIGHT}(Lisa) \geq t_d$

    b. $[\![\text{DE 2m}]\!] = \lambda d.d \leq 2m$

    c. $[\![\text{more PP}]\!] = \lambda Q_{\langle d,t \rangle}.\text{MAX}(Q) > \text{MAX}(\lambda d.d \leq 2m)$

    d. $[\![\text{more PP TP}]\!] = \text{MAX}(\lambda d.\text{HEIGHT}(Lisa) \geq d) > \text{MAX}(\lambda d.d \leq 2m)$

- *Some immediate thoughts*
  This alternative does not allow *in-situ* interpretations of DegP, and thus extraposition/QR is obligatory with all comparatives in Spanish. But then, why is such extraposition not detectable with numerals?

  – The scope of comparatives with *de* is frozen (low) wrt. other operators in the same clause.

  – They cannot be obviously extraposed:

    (51) a. **La marea está más alta hoy en la playa de   dos metros*
              the tide AUX more tall today in the beach THAN two meters
              'The tide is higher than 2m today at the beach'

          b. *La marea está más alta de dos metros hoy en la playa*

- Could we posit an intermediate landing position? Note: there is no available *t*-type consituent (or "simplex" constituent like *e*).

- Perhaps a different syntactic configuration? That would require a different lexical entry for *más*.

5 Cross-linguistic considerations

- Previously, the main axis of cross-linguistic variation wrt. standard markers was thought to be exclusively syntactic. This may be so form some languages like Greek (Merchant 2009), Russian (Pancheva 2006) or Hungarian (Wunderlich 2001), a.o., which, *syntactically* discriminate between true phrasal comparatives and reduced clausal comparatives.

- In this respect, Spanish should be added to the list of languages that lend support to recent claims that genuinely phrasal comparatives do exist in natural languages (cf. Bhatt and Takahashi 2011 on Hindi-Urdu), but contra e.g. Lechner (2004) for English.

- Unlike those languages, however, the difference between *de* and *que* comparatives in Spanish, however, does not track the differences found in languages previously discussed. Even though *de* comparatives are always phrasal, their distribution is very limited due to additional semantic criteria.

- Can we find traces of such semantic criteria elsewhere?

- *Lithuanian*
  In Lithuanian the clausal/phrasal distinction is morphologically signaled by the use of the standard markers *negu* and *už* respectively (Grinsell 2012).

  (52) a. *Jonas   bėga   greičiau už   { *Marija   / Mariją   }*
            John.NOM run.PRS.3SG faster than.PHRASAL Mary.NOM   Mary.ACC
            'John rusn faster than Mary'

        b. **Jonas   bėga   greičiau už   Mariją   (bėga)*
            John.NOM run.PRS.3SG faster than.PHRASAL Mary.ACC run.PRS.3SG
            'John rusn faster than Mary runs'

        c. *Jonas   bėga   greičiau nagu   { Marija   / *Mariją   } (bėga)*
            John.NOM run.PRS.3SG faster than.CLAUSAL Mary.NOM   Mary.ACC

- The distribution of *už* comparatives however seems to be subject to opposite semantic restrictions viz-a-viz Spanish: only syntactically nominal degree denoting standards are ungrammatical (Vaikšnoraitė 2018, 2021).

(53) a. *Jonas   aukštesnis   už   du   metrus*
           John.NOM tall.M.SG.NOM than.PHRASAL du.ACC metrus.PL.ACC
           Int.: 'John is taller than two meters'

      b. *Jonas   aukštesnis   už   devynis   kilomterus   per valanda*
           John.NOM tall.M.SG.NOM than.PHRASAL nine.ACC kilometers.PL.ACC per hour.ACC
           'John rusn faster than 9 km/h'

⇛ If the semantic conditions like those observed in Spanish *de* comparatives are linguistically attested, there is no reason logical reason why its opposite shouldn't be attested. Lithuanian *už* comparatives seem to be a good candidate in this respect.

- **Japanese**
  Japanese, like English, has two constructions that, on the surface at least, seem to reflect a phrasal/clausal distinction (Beck et al. 2004, Oda 2008, Hayashishita 2009, Shimoyama 2012 a.o.):

(54) a. *Phrasal comparative*
           John-wa   [Mary] –yori kasikoi
           John.TOP   Mary   –than smart
           'John is smarter than Mary'

      b. *Clausal comparative*
           John-wa   [Mary-ga   kitaisita] –yori kasikoi
           John.TOP   Mary.NOM expected   –than smart
   'John is smarter than Mary expected'

- Sudo (2015) focuses on pairs with sharp acceptability contrasts despite sharing identical standards:

(55) a. * *John-wa   [Mary-ga   yatotta] –yori kasikoi*
              John.TOP   Mary.NOM hired   –than smart
              Lit.: 'John is smart than Mary hired'

      b. *John-wa   [Mary-ga   yatotta] –yori kasikoi hito-o   mituketa*
           John.TOP   Mary.NOM hired   –than smart   person.ACC found
           'John found a smarter person than Mary hired'

- He accounts for this contrast by suggesting that, contrary to the general trend observed in the literature, seemingly clausal comparatives in Japanese are underlyingly phrasal—thus reverting the general trend observed in the literature that seeks to derive phrasal comparatives from clausal ones. In his own words: " …a predicative clausal comparative is derived from a phrasal comparative via deletion of a **degree noun** that is semantically related to the comparative gradable predicate. Degree nouns are nouns like *kasikosa* 'smartness' that refer to scalar structures, and generally have corresponding gradable predicates." (Sudo 2015, 7).

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(56)   Relevant structure available in (54a)/(54b), unavailable in (55a)
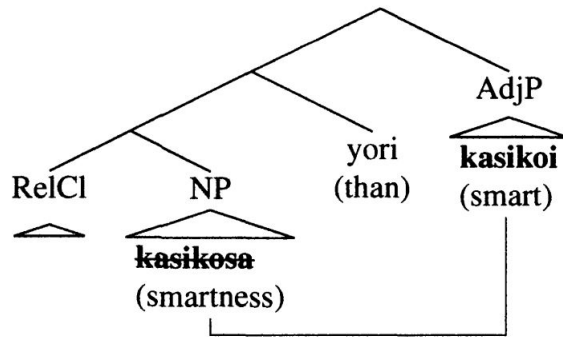
(57)   a.   *Surface structure*
          John-wa [*Bill-ga*   *manga-o*   *yonda*] *–yori takusan shoosetsu-o yonda*
          John.TOP   Bill.NOM comic.ACC read   –than many   novel.ACC read
          'John read more novels than Bill read comics'

        b.   *Underlying structure*
          John-wa [*Bill-ga*   *manga-o*   *yonda* ***ryoo***   ] *–yori takusan shoosetsu-o yonda*
          John.TOP   Bill.NOM comic.ACC read   amount   –than many   novel.ACC read
          'John read more novels than the amount of comics that Bill read'

- These cases in Japanese are very reminiscent of certain (admittedly limited) cases of *de* comparatives with headed relative clauses:

(58)   a.   *Conducía*   *más*   *rápido*   *de* **la**   **velocidad** **que**   *estaba*
          drive.PST.IMPFV.3SG more fast.ADV DE DEF.F.SG speed.F.SG COMP be.PST.IMPFV.3SG

          permitida
          allow.PTCP.F.SG
          'She was driving faster than the speed limit that was allowed'

        b.   Conducía más rápido de **lo que** estaba permitido

(59)   a.   *Fue*   *más*   *caro*   ***del***   ***precio***   ***que***   *pedía*
          be.PST.PRF more expensive.M.SG DE.DEF.M.SG price.M.SG COMP ask.PST.IMPFV

          el   *fabricante*
          DEF.M.SG manufacturer.M.SG
          'It was more expensive than the price that the manufacturer was asking'

        b.   Fue más caro de **lo que** pedía el fabricante//

- In (58) the DPs involve degree/measure nouns that are intrinsically related to some scale (like the nouns *amount, size, height, weight* etc.).

- Although Sudo (2015) does not provide a semantic analysis of the Japanese facts, he does provide good syntactic evidence that the hidden nominal must be present. Assuming that DPs with extent nouns may denote definite descriptions of degrees, an extension the present analysis to Japanese looks promising.

➠ Japanese provides one more case where the well-formedness of a comparative construction relies on both syntactic and semantic considerations.

6 Main take-away

- The main descriptive difference between the *de* and *que* standard markers in Spanish is the highly restricted distribution of *de* when compared to *que*.

    ❶ Comparatives with the standard marker *de* always express comparison to a degree. Formally, this means that the standard of comparison is always, in all these cases, an object whose denotation must be of type *d*.

    ❷ These comparatives can only take nominal standards (DPs, Number/Measure Phrases), and so they always constitute phrasal comparatives.

➠ In Spanish, the criteria for picking one or other standard marker depend on *syntactic* as well as *semantic* properties.

➠ This more complex resulting picture provides additional motivation for rethinking "traditional" semantic accounts of comparative constructions, in particular by considering the semantic role of standard markers across languages and what they have to say about how the multiple ways of expressing comparisons.

A Degree relative clauses

- **Reference to "complex" degrees**
  Spanish provides other means to directly reference degrees. The most commonly used degree expressions that participate in *de* comparatives involve constructions where the complement of *de* is a headless relative clause, either in the form of a quantity free relative or a null NP relative clause.

    (60) **Quantity free relative**
    Pedro pescó   más   peces   { *que / de } cuantos   pesqué   yo
    Pedro fish.PST.3SG more fish.M.PL   QUE   DE   how many.M.PL fish.PST.1SG I
    'Pedro fished more fish than I did'

    (61) **Null NP relative clase**
    Pedro pescó   más   peces   { ??que / de } los   que   pesqué   yo
    Pedro fish.PST.3SG more fish.M.PL   QUE   DE   DEF.M.PL COMP fish.PST.1SG I
    'Pedro fished more fish than I did'

- Both (60) and (61) constitute (semantically equivalent) instances of *comparison to a degree*. Differences between neuter and non-neuter forms track once again the referent of the full relative clause construction:

    (62) *Pescó   truchas   más grandes { que / *de } las   que   pesqué   yo*
    fish.PST.3SG trout.M.PL more big.PL   QUE   DE   DEF.F.PL COMP fish.PST.1SG I
    '(She) fished bigger trouts than I did'

(63) *Pescó   truchas   más grandes { *que / de } lo   que   estaba*
      fish.PST.3SG trout.M.PL more big.PL   QUE   DE   DEF.N COMP be.PST.IMPFV

       permitido
       allow.PTCP.M.SG
       '(She) fished bigger trouts than it was allowed'

- **A formal account with degree relative clauses**
  There are two kinds of relative clauses that are compatible with *de* comparatives in Spanish: free relatives headed by the degree relative pronoun *cuanto* ("how much") and relative clauses with an elided head.

  (60) *Pedro pescó   más   truchas   de cuantas   pesqué   yo*
        Pedro fish.PST.3SG more trout.F.PL DE how many.F.PL fish.PST.1SG I
        'Pedro fished more trouts than me'

  (61) *Pedro pescó   más   truchas   de las   que   pesqué   yo*
        Pedro fish.PST.3SG more trout.F.PL DE DEF.F.PL COMP fish.PST.1SG I
        'Pedro fished more trouts than me'

- *Syntactic Assumptions*
  The relative clauses that participate in *de* and *que* comparatives are *different* (Sáez del Álamo 1999 and Brucart 2003):

  – The standard of comparison in *de* comparatives constitute free relatives, where the cluster [D *que*] functions as a complex relative pronoun akin to *cuanto* (Real Academia de la Lengua Española 2010).

      (64) $[_{\text{DP}} [\{\text{D que / cuanto}\}]_1 [_{\text{RC}} t_1]]$ [Ott 2011, Cecchetto and Donati 2015]

  – Comparatives with *que*, instead, take regular headed relative clauses whose head, when missing, has simply been elided; they thus conform to the following geometry:

      (65) $[_{\text{DP}} \text{D} [_{\text{NP}} \{\varnothing / \text{NP} \} [_{\text{CP}} \text{que} \dots]]]$

- *Semantic assumptions*
  Free relatives are semantically equivalent to definite descriptions (Jacobson 1995, Caponigro 2002 a.o.), in particular definite descriptions of degrees.

- The relative pronouns *cuanto* and the [D *que*] cluster embody the otherwise null operator *Op* which $\overline{A}$-moves to the edge of CP and is interpreted as λ-abstract over degrees. Schematically:

  (66) $[_{\text{CP}} [\text{cuanto / D que}]_i \, \lambda d \, [_{\text{TP}} \text{NP VP } t_i]]$

  (32) $[\![\text{GP}]\!] = \lambda n_d.\lambda x_e.\mu_{\text{GP}}(x) \geq n$ for any gradable predicate GP

  (67)   a. $[\![\text{MANY}_\mu]\!] = \lambda n_d.\lambda x_e.|x| \geq n$ [count nouns]

         b. $[\![\text{MUCH}_\mu]\!] = \lambda n_d.\lambda x_e.\mu_{\text{VOLUME}}(x) \geq n$ [mass nouns]

(68)　$[\![D\ que]\!] = \lambda P_{\langle\sigma,t\rangle}.[\text{MAX}(P(x))]$　　　　　　　　　　where σ is of type e or d.

- The general structure of the relative clause looks as in (69b). The result of the derivation is the maximal degree d, such that the number of things x that Pedro ate is d.

(69)　a.　*Juan comió　　más　bombones　de los　　que　Pedro comió*
　　　　　Juan eat.PST.3SG more bonbon.M.PL DE DEF.M.PL COMP Pedro eat.PST.3SG

　　　b.　$[_{\text{CP}}\ [los\ que]\ \lambda d\ [\ \exists\ [_{\text{TP}}\ \text{Pedro ate}\ [_{\text{DP}}\ t_d\ \text{MANY}_\mu\ \langle\text{bonbons}\rangle\ ]\ ]\ ]\ ]$

　　　c.　$[\![\text{CP}]\!] = \text{MAX}\big(\lambda d.\exists x[ate(Pedro,x) \wedge bonbons(x) \wedge |x| \geq n]\big)$

- ***Degree Relatives in comparative constructions***

(70)　*Pedro es　　　más　alto　de lo　　que　tú　eres*
　　　Pedro be.PRS.3SG more tall.M.SG DE DEF.N COMP you be.PRS.3SG
　　　'Pedro is taller than you are'

(71)　a.　$[_{\text{RC}}\ [_{\text{DP}_1}\ lo\ que]\ [_{\lambda P}\ \lambda d\ [_{\text{TP}_1}\ \text{tú}\ [_{\text{T'}_1}\ \text{eres}\ [_{\text{AP}_1}\ t_d\ \langle\text{alto}\rangle]]]]]$

　　　b.　$[\![\text{RC}]\!] = \text{MAX}(\lambda n.\mu_{\text{HEIGHT}}(you) \geq n)$

(72)　a.　$[_{\text{TP}_2}\ \text{Pedro}\ [_{\text{T'}_2}\ \text{es}\ [_{\text{DEGP}}\ [_{\text{DEG'}}\ \text{más alto}\ ]\ [_{\text{PP}}\ \text{de}\ (71)\ ]]]]$

　　　b.　$[\![\text{TP}_2]\!] = \text{MAX}\big(\lambda n.\mu_{\text{HEIGHT}}(Pedro) \geq n\big) > [\![\text{RC}]\!]$

　　　　　$= \text{MAX}\big(\lambda n.\mu_{\text{HEIGHT}}(Pedro) \geq n\big) > \text{MAX}\big(\lambda n.\mu_{\text{HEIGHT}}(you) \geq n\big)$

　　　　　$= 1$ *iff Pedro is taller than you*

⇒ These are the right truth-conditions: they simply state that Pedro's maximal height exceeds yours.

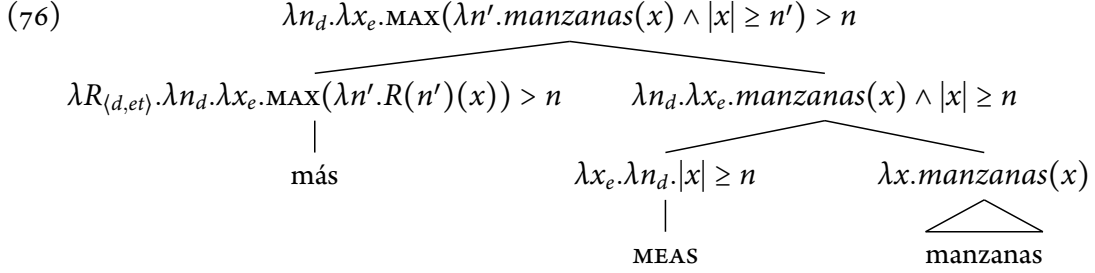- Attributive comparatives like (73) are different in two ways.

(73)　*Pedro comió　　más　manzanas de las　　que　Juan trajo*
　　　Pedro eat.PRS.3SG more apple.F.PL DE DEF.F.PL COMP Juan bring.PST.3SG
　　　'Pedro ate more apples than apples brought Juan'

① Nominals come with a silent Measure Phrase (e.g. Krifka 1995 a.o.), where the head denotes a function MEAS that relates an individual to a degree, so as to create a gradable predicate [MEAS NP]. This requires the mode of composition Argument Introduction, suggested and independently motivated by Solt (2015) (cf. Variable Identification in Kratzer 1996).

(74)　$[\![\text{MEAS}]\!] = \lambda x_e.\lambda n_d.|x| \geq n$

(75) *Degree Argument Introduction (DAI)*:
If α is a branching node, $\{\beta, \gamma\}$ are the set of α's daughters, and $[\![\beta]\!] = \lambda x_e.P(x)$, $[\![\gamma]\!] = \lambda x_e.\lambda n_d.Q(n)(x)$, then $[\![\alpha]\!] = \lambda n_d.\lambda x_e.P(x) \wedge Q(n)(x)$.

(76) $$\lambda n_d.\lambda x_e.\text{MAX}(\lambda n'.manzanas(x) \wedge |x| \geq n') > n$$

$\lambda R_{\langle d,et\rangle}.\lambda n_d.\lambda x_e.\text{MAX}(\lambda n'.R(n')(x)) > n \qquad \lambda n_d.\lambda x_e.manzanas(x) \wedge |x| \geq n$

más

$\lambda x_e.\lambda n_d.|x| \geq n \qquad \lambda x.manzanas(x)$

MEAS $\qquad$ manzanas

② Rather than providing an argument to the verb, the comparative in object position *semantically restricts* its denotation.

(77) $\text{RESTRICT}\left([\lambda x_\sigma.\lambda y_\sigma.P_{\langle\sigma,\sigma t\rangle}(y,x)], \lambda z_\sigma.Q_{\langle\sigma t\rangle}(z)\right) = \lambda y_\sigma.\lambda x_\sigma.P(y,x) \wedge Q(x)$

- The LF of the free relative is as in (78).

(78) a. $[_{\text{RC}} [_{\text{DP}_3} \text{ las que}] [_{\lambda\text{P}} \lambda d [_{\text{TP}_2} \exists [_{\text{TP}_1} \text{Juan} [_{\text{T}'_1} \text{trajo} [_{\text{DP}_1} t_d \text{ MANY}_\mu \langle \text{manzanas}\rangle]]]]]]]$

b. $[\![\text{RC}]\!] = \text{MAX}\left(\lambda n.\exists y[trajo(Juan, y) \wedge manzanas(y) \wedge |y| \geq n]\right)$ $\qquad$ by FA

(79) a. $[_{\text{TP}_4} \exists [_{\text{TP}_3} \text{Pedro} [_{\text{T}'_3} \text{comió} [_{\text{DEGP}} [_{\text{DEG}'} \text{más} [_{\text{MP}} \text{MEAS manzanas}]] [_{\text{RC}} \text{de (78)}]]]]]$

b. $[\![\text{TP}_4]\!]$ $\qquad\qquad\qquad$ by (78b) & EC
   $= \exists x[comió(Pedro, x) \wedge \text{MAX}(\lambda n'.manzanas(x) \wedge |x| \geq n') >$
   $\text{MAX}(\lambda n.\exists y[trajo(Juan, y) \wedge manzanas(y) \wedge |y| \geq n])]$

⇨ The resulting truth-conditions correctly claim the existence of some apples that Pedro ate in an amount greater to the amount of (different) apples that Juan ate.

- *Scope freeizing*
  As before, no scopal interactions between standard and higher operators are expected without further stipulations.

(80) a. *El   salto   debe   ser   menos alto   de lo   que*
        DEF.M.SG jump.M.SG must.PRS.3SG be.INF less   high.M.SG DE DEF.N COMP

      mide   Juan
      measure.PRS.3SG Juan
      'The jump must be less high than Pedro's height'

b. ✓ Low DEGP
   The requirement is that the jump is not as high as Juan's height

c.   ✘ HIGH DEGP
The minimum height of the jump does not have to be as high as Juan

- These facts are in line with the use of Restrict as the main mode of composing Degree Phrases with verbal predicates in *de* comparatives.

- A second welcome prediction is that the contrast in (62) is captured in terms of semantic ill-formedness, as it attempts an inconmesurable comparison across two dimensions, size and quantity.

(62)   *Pescó   truchas   más   grandes { que / *de } las   que   pesqué   yo*
         fish.PST.3SG trout.F.PL more big.F.PL   QUE   DE   DEF.F.PL COMP fish.PST.1SG I
         '(She) fished bigger trouts than I did'

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