

# Subset Comparatives as Comparative Quantifiers<sup>1</sup>

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**Abstract.** This paper is concerned with the meaning of the “subset comparative” construction: *John saw more phonologists than just Mary* seems to assert that John saw more than one phonologist, and presuppose that John saw Mary (the prejacent) and that Mary is a phonologist. Together, the assertion and the two presuppositions entail that John saw other phonologists in addition to Mary. In this paper, I argue that the meaning can be derived by an extension of the analysis originally proposed by Hackl (2000) for comparative quantifiers like *more than three*.

**Keywords:** comparatives, comparative quantifiers, subset comparatives

## 1. Introduction

The “subset comparative” construction, which is illustrated below in (1a), includes the asserted content in (1b) and the two presuppositions in (1c):

- (1)    a.    John saw more phonologists than just Mary.  
      b.    **Assertion:** John saw more than one phonologist.  
      c.    **Presuppositions:**  
            John saw Mary. (prejacent)  
            Mary is a phonologist. (subset presupposition)

These presuppositions project in the usual way: the sentences in (2a)-(2c) all presuppose that Mary is a phonologist that John saw or talked to, and John’s seeing or talking to more than one phonologist is what is denied or called into question.

- (2)    a.    It’s not the case that John saw more phonologists than just Mary.  
      b.    Did John see more phonologists than just Mary?  
      c.    If John had talked to more phonologists than just Mary, he might have heard the news sooner.

These constructions were named “subset comparatives” by Grant (2010), because the denotation of the NP in the than-clause — *Mary* in (1a) — can be analyzed as denoting a subset of the NP

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in the matrix clause (*phonologists*). This is also the case for bare plurals: the subset comparative in (3b) resembles a subcomparative like (3a), except that the two NPs are in a subset relationship rather than being disjoint.

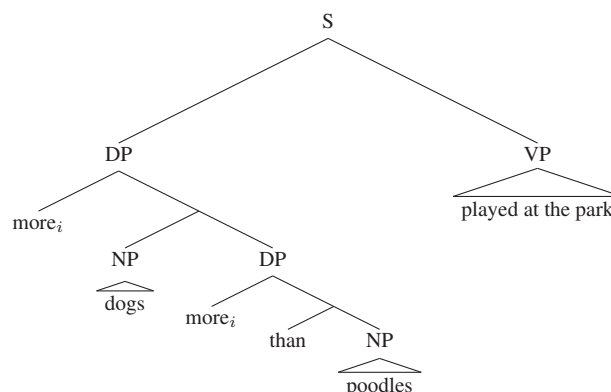
- (3) a. More men than women watched the film.  
b. More computers than just laptops were stolen.

In this paper, I will argue for a clausal analysis of subset comparatives, whereby (1a) has a structure akin to the one proposed by Hackl (2000) for comparative quantifiers like *more than three*. I will be mostly discussing English, but bringing in examples from other languages to illustrate particular issues.

### 1.1. Previous analyses

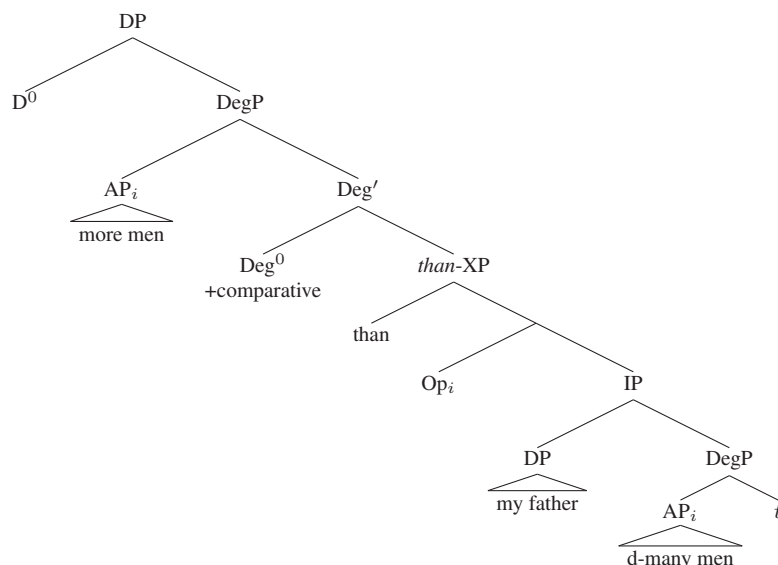
Grant (2010, 2013) gives two analyses for different kinds of subset comparatives, based on whether the DP in the *than*-clause is singular or plural. For bare plurals, she uses the DP-shell analysis that was previously proposed by Izvorski (1995) for DP-internal subcomparatives like *more men than women*; while for subset comparatives with a singular DP in the *than*-clause, she suggests an attributive NP analysis like that of Lechner (2001).

- (4) DP-shell analysis (Izvorski 1995):  
a. More men than women watched the film.  
b. More dogs than (just) poodles played at the park.  
c.



- (5) Attributive NP analysis (Lechner 2001):  
a. A taller man than my father ~~is a d-tall man~~ came to the party.  
b. More men than my father ~~is d-many men~~ came to the party.

C.

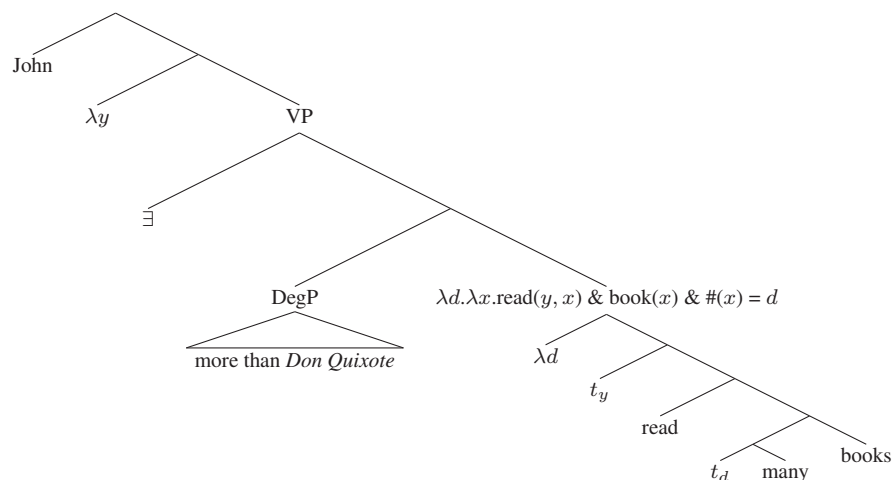


Grant (2013) additionally suggests that the two could be unified under the DP-shell analysis, by coercing individual-denoting expressions like *my father* into type  $\langle e, t \rangle$  predicates.

Aparicio (2014)'s proposal for subset comparatives gives them a direct phrasal analysis, using the phrasal comparative operator of Heim 1985. *More* takes an individual like *Don Quixote* as its first argument, and moves with it to the VP edge, as shown in (6). The silent *many* in the matrix clause is a function that maps individuals to their cardinalities. The predicate *d-many books* acts as a predicate modifier for the main verb, forming the second argument of *more*. Existential closure then applies at the VP level.

(6) a. John read more books than (just) *Don Quixote*.

b.



c.  $\llbracket \text{more} \rrbracket = \lambda y. \lambda g_{\langle d, et \rangle}. \lambda x. \max\{d' : g(d')(x) = 1\} \succ \max\{d'' : g(d'')(y) = 1\}$

- d.  $\llbracket \text{John read more books than } Don\ Quixote \rrbracket =$   
 $\exists x[\max\{d: \text{read}(j, x) \wedge \text{book}(x) \wedge \#(x) = d\} \succ \max\{d': \text{read}(j, DQ) \wedge \text{book}(DQ) \wedge \#(DQ) = d'\}]$

The sentence is true iff there exists a plurality of books John read, whose cardinality is greater than the number  $d$  such that John read *Don Quixote* and *Don Quixote* is a book and the cardinality of *Don Quixote* is  $d$ . If *Don Quixote* is not a book, or if John did not read it, then there is no such number, and presupposition failure results. But if the presupposition that *Don Quixote* is a book that John read is met, then the sentence is true iff John read more than one book.

I will present my own proposal in section 2.2. In section 3, I will compare some of its predictions with those made by the phrasal analyses of Grant (2013) and Aparicio (2014).

## 1.2. A note on *just*

Before proceeding, a few words about the role of *just* in subset comparatives are in order. In previous work on subset comparatives, it has been assumed that *just* does not necessarily have any role of its own in the derivation of the meaning of subset comparatives. The analysis in Aparicio 2014 is based primarily on Spanish, where examples like (7) are fully grammatical without any *just*-like element:

- (7) Juan ha leído más libros que *El Quijote*.  
 J. has read more books than  
 lit. ‘Juan read more books than *Don Quixote*.’ (Aparicio 2014)

There is a considerable amount of cross-linguistic variation in this regard. In some languages, an *only*-like element is obligatory in subset comparatives, as in the German example in (8a). In Irish, on the other hand, this is impossible, as (8b) shows.

- (8) a. Ich habe mehr Leute als \*(nur) den Hans gesehen.  
 I have more people than only the-ACC H. seen  
 ‘I saw more people than just Hans.’  
 b. Chonaic mé níos mó daoine ná Niamh (\*amháin).  
 saw I COMPAR many people than N. only  
 ‘I saw more people than (just) Niamh.’

In English, judgments vary: the sentence in (9) is uniformly judged to be grammatical when *just* is present, but some speakers find it degraded without.<sup>2</sup>

- (9) John read more books than *%(just) War and Peace*.

The strongest contrast in judgments comes when considering subset comparatives with bare plurals:

- (10) More dogs than poodles played in the park.

For speakers who accept (9) without *just*, (10) can have a sensible subset reading: in addition to the poodles that are presupposed to have been in the park, there were other kinds of dogs in the park as well. Speakers for whom *just* is obligatory in (9) find (10) infelicitous: the proposition that poodles are not dogs is presupposed, and the sentence asserts that the animals that do “count” as dogs (i.e. the non-poodle dogs) outnumbered the poodles.

The contrast between the judgments reported by Grant and those of speakers who reject (10) on a subset reading suggests that there is a dialect difference here: the former dialect, where subset readings are available without *just*, patterns with Spanish, while the latter patterns with German.

Grant (2013) suggested that all subset comparatives might include *just* or a covert counterpart. In what follows, I will assume that this is in fact the case, and that some languages — German and one dialect of English among them — lack the covert version. In my analysis, *just* will be used in the derivation of the presuppositions of subset comparatives.

## 2. Comparative quantifiers

### 2.1. Properties of comparative quantifiers

The meanings of subset comparatives have certain properties in common with those of comparative quantifiers with numerals, like (11b):

- (11) a. John saw more phonologists than just Mary and Bill.  
b. John saw more than two phonologists.

<sup>2</sup>For these speakers, the sentence only has an implausible reading equivalent to “John read more books than *War and Peace* did.”

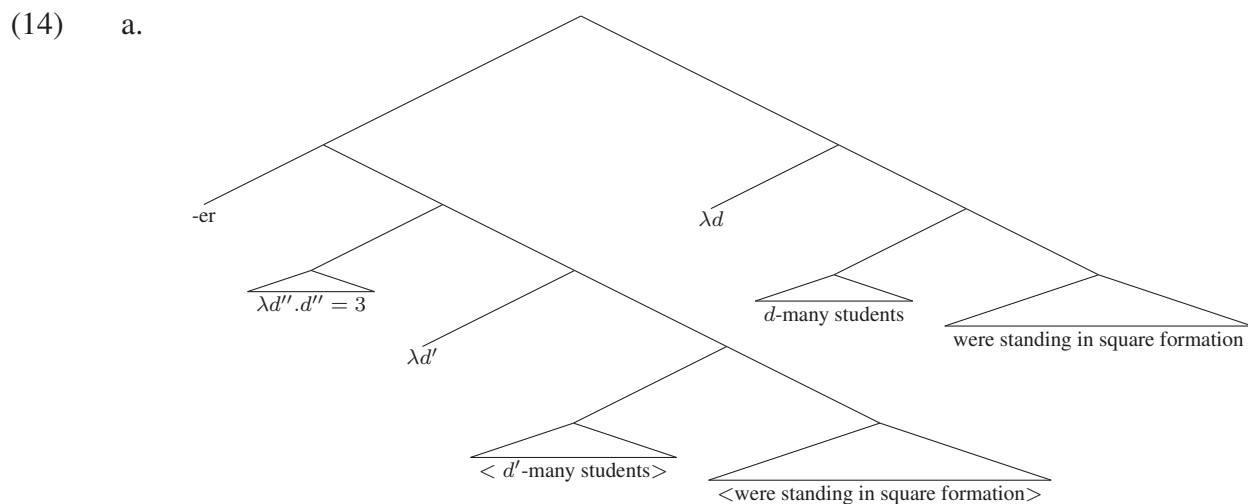
Provided that Mary and Bill are indeed phonologists that John saw (as the sentence presupposes), (11a) is true just in case John saw more than two phonologists — that is, the number of phonologists that “just Mary and Bill” amounts to.

Comparative quantifiers also have presuppositions of their own. As pointed out by Hackl (2000), the (a) sentences in (12) and (13) are significantly degraded compared to the (b) sentences:

- (12) a. #More than one student met in the hallway.  
b. At least two students met in the hallway.
- (13) a. #More than three students stood in square formation.  
b. At least four students stood in square formation.

This is in spite of the fact that the sentences in each pair have the same truth conditions: if the number of students standing in square formation exceeds three, then it must be at least four. Unlike the versions with *at least*, the comparative-quantifier variants have a status similar to that of the contradictory or paradoxical *One student met in the hallway* and *Three students stood in square formation*. Hackl (2000) calls this phenomenon the Minimal Number of Participants Generalization (MNPG).

Hackl (2000) proposes an elliptical structure, predicting presupposition failure in the *than*-clause: the *than*-clause refers to a degree  $d'$  such that  $d'=3$  and  $d'$ -many students are standing in square formation, which is impossible because the predicate *standing in square formation* requires four or more participants.



- b.  $\llbracket \text{-er} \rrbracket = \lambda D_{\langle d, t \rangle} . \lambda D'_{\langle d, t \rangle} . \max(D) < \max(D')$

- c.  $\max(\lambda d. d = 3 \ \& \ d\text{-many students were standing in square formation})$   
 $< \max(\lambda d. d\text{-many students were standing in square formation})$

The sorts of paraphrases that comparative quantifiers can have, if the *than*-clause is made overt, illustrate the intuition behind the clausal semantics:

- (15) More than three students came to the party.  
 ‘More students came to the party **than if there had only been three students who came to the party.**’

Subset comparatives also show a version of the MNPG. Moreover, as (17) shows, they can also have counterfactual paraphrases:

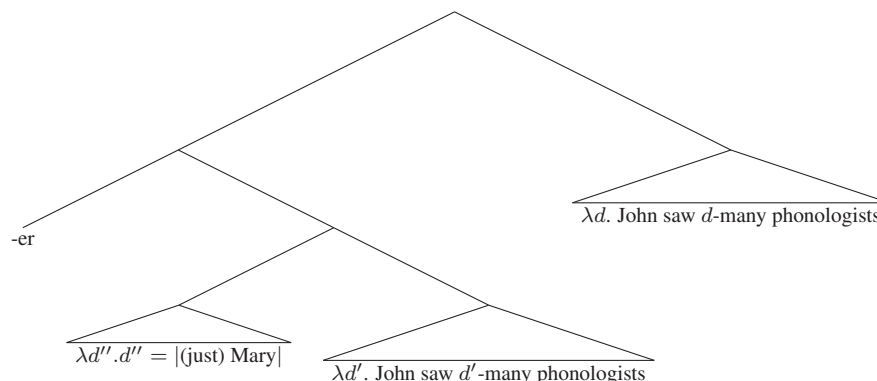
- (16) a. #More people than just Mary met in the hallway.  
 b. #More musketeers than just Athos, Porthos, and Aramis were standing in square formation.
- (17) More phonologists than just Mary came to the party.  
 ‘More phonologists came to the party than if only Mary had come to the party.’

These semantic similarities, along with the fact that sentences with subset comparatives have at-issue entailments equivalent to those of numerical comparative quantifiers, suggest that the meaning of subset comparatives can be properly accounted for by unifying the two.

However, adopting this structure for subset comparatives with no modifications will not work: simply mapping the individual *Mary* into its cardinality and treating it like a numeral will make the truth-conditions come out too weak.

- (18) a. John saw more phonologists than just Mary.

b.



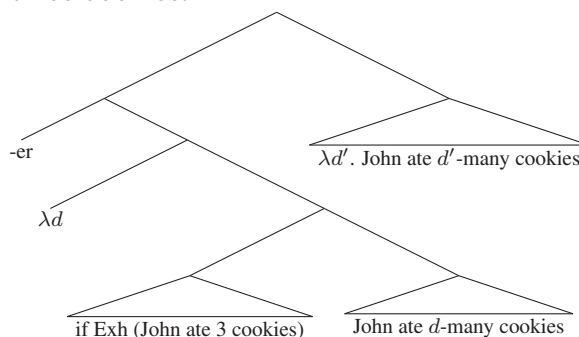
- c.  $\llbracket \text{John saw more phonologists than just Mary} \rrbracket = 1$  iff  $\max(\lambda d'.d' = |\text{Mary}| \ \& \ \text{John saw } d\text{-many phonologists}) < \max(\lambda d. \text{John saw } d\text{-many phonologists})$

These truth-conditions require only that John saw more than one phonologist; the connection between the degree standard and the identity of the individual in the *than*-clause is lost.

## 2.2. The proposal

In order to project the presuppositions that we observe with subset comparatives, the *than*-clause will have to be enriched. Here, I follow Al Khatib (2013), who modifies Hackl (2000)'s comparative-quantifier structure by putting a conditional component (with an exhaustified antecedent) into the *than*-clause.

- (19) a. John ate more than three cookies.  
b.



Here, the number of cookies John ate is asserted to exceed the number  $d$  such that if John only ate three cookies, then John ate  $d$ -many cookies.



In the case of *More than three students stood in square formation*, the degree predicate in the *than*-clause is  $\{d: (\text{Exh}(\mathbf{3 \text{ students stood in square formation}})) \rightarrow d\text{-many students stood in square formation}\}$ , which still results in presupposition failure by making reference (in the antecedent) to the impossible state of affairs that is “only three students standing in square formation”.

In order to adapt this analysis for subset comparatives, I will give this conditional a situation-semantic implementation. Situations are parts of worlds (Kratzer 2007), in which — as in possible worlds — propositions can be true or false. In particular, I will make use of the notion of minimal situations:

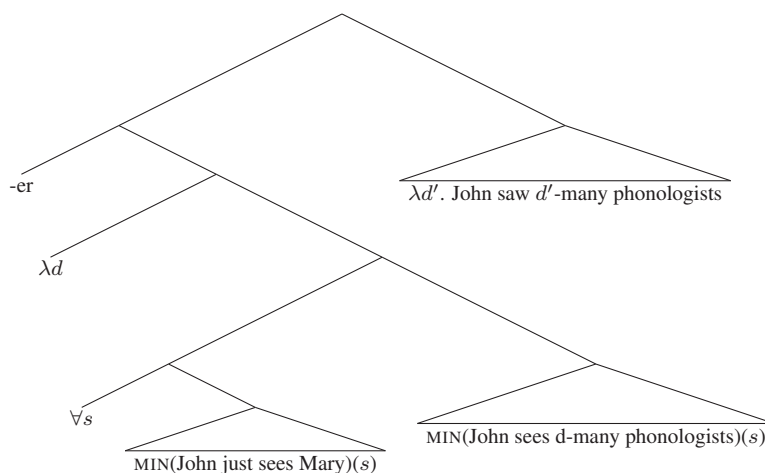
(20) **Definition of a minimal situation** (Kratzer 2007):

A situation is a minimal situation in which a proposition  $p$  is true iff it has no proper parts in which  $p$  is true.

A situation is a minimal situation of John seeing Mary, for instance, if it does not contain anything irrelevant to the truth of the proposition “John saw Mary.” This would be a situation consisting of John seeing Mary, and nothing else.

To see how this works, consider (21), below.

(21) a.



b. **Truth-conditions of (21a):**

$\max(\lambda d. \forall s[\text{MIN}(\text{John sees Mary})(s) \rightarrow \text{MIN}(\text{John sees } d\text{-many phonologists})(s)]) < \max(\lambda d'. \text{John saw } d'\text{-many phonologists})$

c. In other words:

The number of phonologists that John saw is greater than the number  $d$  such that a minimal situation of John seeing Mary is a minimal situation of John seeing  $d$ -many phonologists.

The two presuppositions follow from the above semantics:

- (22) a. **Subset presupposition: Mary is a phonologist.** If Mary is not a phonologist, then the degree in the *than*-clause does not exist: a minimal situation of seeing Mary cannot be a minimal situation of seeing  $n$  phonologists, no matter what number  $n$  is. That is, a situation containing a non-phonologist is not a minimal phonologist-seeing situation.
- b. **Prejacent: John saw Mary.** Like in other uses of *just*, the prejacent is presupposed.

The account depends crucially on the situations in both antecedent and consequent being minimal. Minimality is necessary in the antecedent to ensure that the conditional is defined: otherwise, the situations in the antecedent would include every arbitrarily large situation that happened to include John seeing Mary.

The consequent must make reference to minimal situations in order to properly account for the presuppositions that arise when the standard is plural.

- (23) a. John saw more phonologists than just Mary and Bill.
- b. Observed presuppositions:
- (i) **Mary and Bill are both phonologists.**
- (ii) John saw both Mary and Bill.
- c. At-issue entailment: John saw more than two phonologists.

It is the subset presupposition — that Mary and Bill are both phonologists — that will be troublesome in this case. Without the minimal-situation requirement in the consequent, the truth-conditions of (23a) are as below:

- (24)  $\max(\lambda d. \forall s[\text{MIN}(\text{John only sees Mary and Bill})(s) \rightarrow (\text{John sees } d\text{-many phonologists})(s)])$   
 $< \max(\lambda d'. \text{John saw } d'\text{-many phonologists})$

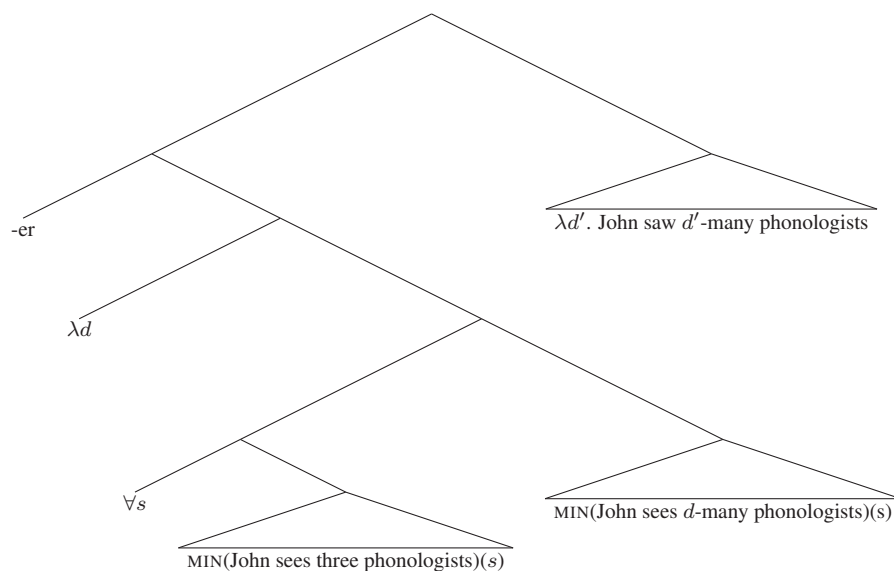
Consider a situation where Mary is a phonologist, but Bill is not; and John saw Mary, Bill, and some other phonologist besides Mary. The at-issue component is true because John saw more than one phonologist, and 1 is the number of phonologists that John sees in every minimal situation where he sees Mary and Bill together. In order to satisfy the subset presupposition, at least one of Mary and Bill must be a phonologist; however, the subset presupposition that we actually observe in (23a) is that they both are. So the subset presupposition that (24) derives is too weak.

If the minimal-situations requirement is present in both antecedent and consequent, on the other hand, we predict presupposition failure in (23a) as we did above with the singular. There is no number  $d$  such that every minimal situation of seeing Mary and Bill is a minimal situation of seeing  $d$  phonologists. In other words, a situation with the non-phonologist Bill in it cannot be a minimal situation of seeing any number  $d$  of phonologists, because seeing him is irrelevant to seeing phonologists.

Looking back at numerals, we can see in (25)-(26) that implementing the comparative in this way can still account for their truth-conditions and presuppositions.

(25) a. John saw more than three phonologists.

b.



c. **Truth-conditions of (25a):**

$\max(\lambda d. \forall s[\text{MIN}(\text{John sees 3 phonologists})(s) \rightarrow \text{MIN}(\text{John sees } d\text{-many phonologists})(s)])$   
 $< \max(\lambda d'. \text{John saw } d'\text{-many phonologists})$

i.e.: The number of phonologists John saw is greater than the number  $d$  such that every minimal situation of John seeing 3 phonologists is a minimal situation of John seeing  $d$ -many phonologists.

(26) Derivation of MNPG presupposition failure:

a. #More than three students stood in square formation.

b.  $\max(\lambda d. \forall s[\text{MIN}(\mathbf{3 \text{ students stand in square formation}})(s) \rightarrow \text{MIN}(d\text{-many students stand in square formation})(s)]) < \max(\lambda d'. d'\text{-many students stood in square formation})$

The impossible state of affairs that is “a minimal situation of 3 students standing in square formation” can still produce the observed MNPG effect on this modified account.

### 3. Evidence that subset comparatives are clausal

An analysis along the lines proposed above will have as a consequence that subset comparatives have the properties of clausal comparatives, rather than phrasal comparatives. In this section, I provide evidence of clausal structure in subset comparative constructions, both in English and in other languages.

#### 3.1. Case and preposition matching

In many languages, including German, the case of a DP in a *than*-clause must match that of the corresponding constituent in the matrix. Subset comparatives are no exception:

- (27) a. Ich habe dir mehr **Leute** als nur **den** **Hans** empfohlen.  
 I have you-DAT more people.ACC than only the-ACC H. recommended  
 ‘I recommended more people than just Hans to you.’  
 b. Ich habe dich mehr **Leuten** als nur **dem** **Hans** empfohlen.  
 I have you-ACC more people-DAT than only the-DAT H. recommended  
 ‘I recommended you to more people than just Hans.’

To the extent that case-matching in general is evidence of a clausal source containing a silent case assigner, the fact that subset comparatives do show case-matching effects can be seen as evidence of clausal structure.

A possibly related phenomenon concerns prepositions in the *than*-clause. In Spanish, for example, the standard can optionally occur with a preposition that matches one in the matrix. As Aparicio (2014) notes, this is a potential problem for a phrasal analysis, since the standard here is a PP rather than a DP. In Irish, the inclusion of the preposition is actually obligatory, as shown in (29).

- (28) Juan se ha deshecho **de** más libros **que (d)el** **Quijote**.  
 J. SE has got.rid of more books than (of)-the Q.  
 ‘Juan got rid of more books than just *Don Quixote*.’ (Aparicio 2014)

- (29) a. Chónaigh Niamh i níos mó cathracha ná **i** [mBaile Átha Cliath].  
 lived N. in COMPAR many cities than in Dublin  
 ‘Niamh has lived in more cities than just Dublin.’

- b. #Chónaigh Niamh i níos mó cathracha ná [Baile Átha Cliath].  
 lived N. in COMPAR many cities than Dublin  
 ('Niamh has lived in more cities than Dublin.')

Without the preposition, a subset reading is impossible: only an implausible clausal reading is available (one where the city of Dublin itself is moving around). The requirement of the matching preposition in Irish (and perhaps the option of including it in Spanish) may be evidence of the presence of a full *than*-clause, the rest of which is elided.

Finnish is another language that shows case-matching effects, as well as providing further evidence for a clausal source on the basis of the standard marker.

### 3.2. A language that marks the phrasal/clausal distinction

In Finnish, the distinction between phrasal and clausal comparatives is marked overtly. The standard can be marked with the partitive case, as in (30a), or with *kuin* 'than' as in (30b).

- (30) a. Liisa on **minua** pitempi.  
 L.NOM is me-PART tall-COMP.NOM  
 'Liisa is taller than me.' (phrasal)  
 b. Liisa on pitempi **kuin minä**.  
 L.NOM is tall-COMP.NOM than I.NOM  
 'Liisa is taller than I am.' (clausal)

In comparatives with *kuin*, the standard matches its matrix correlate in case: nominative in (30b), and allative in (31).

- (31) Matti antoi **Liisalle** enemmän kirjoja **kuin minulle**.  
 M. gave L.-ALLAT more books-PL.PART than me-ALLAT  
 'Matti gave Liisa more books than (he gave) me.'

The choice of standard marker can also affect interpretation, as seen in (32). With *kuin*, the standard is nominative, matching the matrix subject *Matti*, and is interpreted as a subject; if it appears in the partitive construction, the comparative is interpreted as a predicate modifying the object of the verb 'like'.

- (32) a. Matti tykkää pitemmästä tytöstä **kuin minä**.  
 M. likes tall-COMP-ELA girl-ELA than I.NOM  
 ‘Matti likes a taller girl than I do.’  
 b. Matti tykkää **minua** pitemmästä tytöstä.  
 M. likes me-PART tall-COMP-ELA girl-ELA  
 ‘Matti likes a girl who’s taller than me.’

Given these facts about Finnish comparatives, it is interesting to observe that it is the clausal strategy, with the standard marker *kuin*, that is used to form subset comparatives. The standard is marked accusative to match the direct object in (33a); in (33b), it is marked ablative (as is its correlate, ‘more people’), since this is the case that the verb *kysyä* ‘to ask’ takes.<sup>3</sup> Moreover, comparative quantifiers with numerals occur with the clausal standard marker as well, as shown in (34).

- (33) a. Matti näki **enemmän ihmisiä** **kuin vain Liisan**.  
 M. saw more person-PL-PART than only L.-ACC  
 ‘Matti saw more people than just Liisa.’  
 b. Kysyin siitä **useammilta ihmisiltä** **kuin vain Liisalta**.  
 asked.1SG DEM-ELAT more-PL-ABL person-PL-ABL than only L.-ABL  
 ‘I asked more people than just Liisa about it.’
- (34) Kysyin siitä **useammalta kuin kolmelta ihmiseltä**.  
 asked.1SG DEM-ELAT more-ABL than three-ABL person-ABL  
 ‘I asked more than three people about it.’

### 3.3. Multiple remnants

Another hallmark of reduced clausal comparatives is the possibility of multiple remnants in the *than*-clause (Merchant 2009). Subset comparatives in English are capable of hosting multiple remnants, as long as the subset presupposition is met: for instance, (35) presupposes both that *Treasure Island* is a book and that Mary is one of the children.

- (35) John read more books to the children than just *Treasure Island* to Mary.

<sup>3</sup>The choice between the two words for ‘more’ – *enemmän* and *useampi* – depends on what case the relevant DP is in. *Enemmän* is the comparative of *paljon* ‘much/many’; like *paljon*, its distribution is limited to certain direct-object positions (Zimmermann 1999). Elsewhere, the synonymous quantifier *usea* and its comparative *useampi* are used, as in (33b).

To see more clearly that the subset presupposition extends to all remnants, consider the contrast in (36). The problem with (36a) is that an event of reading *Treasure Island* in Boston is not an event of reading a book in New York. The minimally different (36b), on the other hand, is acceptable: here, the locative adjunct in the *than*-clause is one of which the subset presupposition holds.

- (36) a. #John read more books in New York than just *Treasure Island* in Boston.  
 b. John read more books in Massachusetts than just *Treasure Island* in Boston.

In addition, as (37) shows, it is possible for one of these multiple remnants to bind the other:

- (37) *Context: Bill is listening to pairs of CDs. Each pair consists of two recordings of the same piece of music, one by a flutist and one by a violinist. After listening to both versions of each piece, Bill compares the performances. He doesn't know the identities of the musicians. Unbeknownst to him, Sue is the performer – once as a flutist and once as a violinist – on both recordings of the same piece in one of the pairs.*  
 Bill compared more flutists to violinists **than just Sue<sub>i</sub> to herself<sub>i</sub>**.

This points to the existence of a larger elided clause, where *Sue* and *herself* appear in their usual binding configuration. The possibility of subset comparatives with multiple remnants can be accounted for by a clausal analysis, but is problematic for an analysis like that of Aparicio (2014), whereby *than* takes a type *e* argument rather than a full clause.

### 3.4. Disjunction in the *than*-clause<sup>4</sup>

Another potential advantage of a clausal analysis is in accounting for subset comparatives whose standard involves disjunction, as in (38).

- (38) John saw more phonologists than just Mary or Bill.

The clausal analysis based on minimal situations gives the truth-conditions in (39):

- (39)  $\max(\lambda d. \forall s[\text{MIN}(\text{John sees Mary or Bill})(s) \rightarrow \text{MIN}(\text{John sees } d\text{-many phonologists})(s)])$   
 $< \max(\lambda d'. \text{John saw } d'\text{-many phonologists})$

<sup>4</sup>Thanks to Bernhard Schwarz for bringing this issue to my attention.

In other words, (38) is true just in case John saw a number of phonologists greater than the number of phonologists he sees in every minimal situation of seeing Mary or Bill (and the prejacent, that John saw Mary or Bill, is presupposed). A minimal situation of John seeing Mary or Bill either consists only of John seeing Mary, or of John seeing Bill. If the subset presupposition that both Mary and Bill are phonologists is met, then a minimal situation of John seeing Mary or Bill is a minimal situation of John seeing one phonologist. So (38) entails that John saw more than one phonologist, and presupposes that at least one of the phonologists he saw was Mary or Bill.

The challenge for an analysis like Aparicio (2014)'s, which involves mapping individuals to their cardinalities, is how to map *Mary or Bill* into a cardinality (if there is any way that it can be said to have one).

However, (38) is potentially problematic for a clausal analysis as well. The truth-conditions in (39) require that John saw more than one phonologist, one of whom was Mary or Bill. The prediction is that the sentence should be true in a scenario where John saw both Mary and Bill, and no other phonologists. Therefore, it is somewhat surprising that the continuation in (40) is infelicitous:

(40) John saw more phonologists than just Mary or Bill — #he saw Mary and Bill.

One thing to note is that although (41a) is better than (40), it is still not perfect. (41b), on the other hand, does not suffer from the infelicity that (41a) does.

- (41) a. John saw more phonologists than just Mary or Bill — #?he saw Mary, Bill, and Sue.  
 b. John saw more phonologists than just Mary and Bill — he saw Mary, Bill, and Sue.

The contrast between (41a) and (41b) suggests that the problem with (40) comes from *or* itself: we may be seeing the effects of an implicature that John didn't see both Mary and Bill, which is acting as a confound here.

Nevertheless, it is possible to construct contexts where sentences with disjunctions in the *than*-clause can be judged as true under such circumstances. Consider the following dialogue:

(42) *Context: A college student is meeting with his advisor to select courses for the upcoming semester.*

Student: So far, I've picked three classes. For my fourth and final class, I want to take something in linguistics so that I can declare the major at the end of the semester. I've narrowed it down to two classes: either Semantics or Phonology.



Advisor (consulting the official requirements): If you want to declare the major this semester, **you'll need to take more linguistics classes than just Semantics or Phonology.** You need at least two more classes' worth of credits before you can do that.

In this scenario, the student could fulfill the requirement if he took both of the linguistics classes he mentioned, and no others. So it is possible to interpret “taking more linguistics classes than just Semantics or Phonology” as “taking more than one linguistics class,” which is what the analysis proposed here predicts. The difference between (42) and (40), and the effect of the modal environment in (42) on the presuppositions of the subset comparative, are beyond the scope of this paper.

#### 4. Conclusion

This paper has proposed a novel analysis of subset comparative constructions, motivated by the properties that they have in common with comparative quantifiers involving numerals. The major difference between this analysis and previous ones is that it uses a reduced clausal structure to derive the meanings of subset comparatives. The appeal of this analysis is that it unifies subset comparatives and numerical comparative quantifiers as two variants of the same phenomenon (depending on the content of the *than*-clause), additionally deriving subset presuppositions and the Minimal Number of Participants Generalization from the same source. The analysis predicts that subset comparatives should have clausal, rather than phrasal, properties. This prediction appears to be borne out, on the basis of evidence from English as well as other languages.

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