

# Superlatives and Co.

## Szabolcsi seminar 2-9-11

Starting point: An ambiguity

*Who climbed the highest mountain?*

(i) absolute reading:

‘Who climbed Mt. Everest?’

(ii) comparative (a.k.a. relative) reading:

‘Who climbed a mountain that was higher than how high a mountain anyone else climbed?’

# Why superlatives?

#1 How to argue for an analysis  
(methods)

#2 Grammar vs. context, compositionality  
(meaning of life)

#3 Similar ambiguities in other domains  
(possible extensions)

# #1 How to argue for an analysis

Look at a phenomenon

which involves a very small and very well-described set of data, and

practically all logically possible analyses of it have been defended in the literature, often by well-respected semanticists.

Scrutinize argumentation (both good and bad)

and see how the same facts can (or cannot) be accounted for in more than one way.

## #2 Grammar vs. context -- compositionality

One extreme:

The absolute/comparative distinction is a matter of **grammar**; plausibly, **scope**. Context figures at most in restricting the domain.

Other extreme:

The absolute/comparative distinction is a matter of **context**. There really aren't two "readings".

*[More details on the analytical positions below.]*

# How to use context?

Option 1: Use of context restricted to a space-time location (Austinian topic situation, cf. Kratzer re: quantifier domain restriction)

Option 2: Intensionally-defined properties are also available if linguistically given (e.g. focus-induced alternatives, cf. Rooth)

Option 3: Anything goes...

## #3 Similar ambiguities

The (alleged) ambiguity in superlatives is reminiscent of other (alleged) ambiguities that you are already familiar with or have even worked on:

*Same and different*

Gradable modals

Adverbs of quantification

*Know*, on a comparativist analysis

...

## *Same*

(Alex read *The Plague*, and)

*John and Mary read the same book.*

(they read the same book that Alex read)

(Kim and Pat read different books, but)

*John and Mary read the same book.*

(the book that John read is the same as the book that Mary read)

Heim 85, Barker 2007, Solomon 2009

# *Probably*

*The Baron will probably win.*

`The probability of the Baron being the winner is higher than the probability of the Baron not being the winner`

`The probability of the Baron being the winner is higher than the probability of anyone else (in the competition) being the winner`

Yalcin 2009, Lassiter 2010



# *Lucky*

*It is lucky that malaria was eliminated in the US in 1951.*

If the US still had malaria, we'd be in danger.

If it had been eliminated in 1949, your aunt and uncle would have never met.

Dretske 1972, Villalta 2008

# *Always*

*Mary always wears earrings.*

`Mary got earrings right after she was born and never removed them'

`Whenever Mary wears jewelry, she wears earrings'

Rooth 1985, Beaver & Clark 2003

Which (if any) of these work like superlatives?

Previous experience with these domains will be useful in dealing with superlatives.

And conversely, if studying superlatives teaches us to detect similarities and dissimilarities in these other domains, we may be able to identify what causes the (dis)similarities.

## Szabolcsi 86, Comparative Superlatives

- (50) a. **Absolute** superlatives have the the -est part as an N'' specifier, hence they are **definite**. The scope of the the -est is **NP-internal**.
- b. **Comparative** superlatives have the the -est part as an N'' specifier, hence they are **indefinite**. They are uninterpretable unless the -est takes **scope over an open proposition**.
- c. The -est can adjoin to INFL at LF and hence acquire the intended scope. The **syntactic restrictions** on the availability of the comparative reading follow from the assumption of INFL-adjunction.

- Focus, non-focus, interrogative and relative wh in a language that overtly distinguishes these.
- Analyses based on unambiguous amount superlatives.
- Grammar vs. context.
- **Not** association with focus.
- Syntactic restrictions on the –est scope.
- Definiteness effects: extraction from NP, *there*, relational *have*, *ago*, Hungarian NP-splitting.

# Focus

- (5) János meg-mászta a legmagasabb hegy-et. (no FOCUS)  
John pfx-climbed the highest mountain-acc  
'John climbed the highest mountain  
= John climbed Mt. Everest'
- (6) János mászta meg a legmagasabb hegy-et. (JÁNOS = FOCUS)  
John climbed pfx the highest mountain-acc  
'JOHN climbed the highest mountain  
= It was John who climbed Mt. Everest or  
= John climbed a mountain that was higher than what anybody else climbed'
- (7) Ki mászta meg a legmagasabb hegy-et? (WH)  
who climbed pfx the highest mountain-acc  
'Who climbed the highest mountain?  
= Who climbed Mt. Everest? or  
= Who climbed a mountain that was higher than what anybody else climbed?'
- (12) John climbed the highest mountain. ?
- (13) JOHN climbed the highest mountain. (JOHN=FOCUS)
- (14) Who climbed the highest mountain? (WH)

*the fewest NP / le moins fort*

**Decreasing amount/free superlatives  
have no absolute reading; unique value;  
directly test the comparative reading:**

(15) Who got the fewest letters from Peter last year?

(16) From whom did John get the fewest letters last year?

(17) When did John get the fewest letters from Peter?

Barbaud 1976:

- (i) \* Nestor parle le moins fort.
- (ii) C'est Nestor qui parle le moins fort.

## Grammar vs. context

... we are dealing with a grammatical, rather than merely contextual phenomenon. If the ambiguity of (6) and (7) were due merely to differences in what happens to count as a relevant universe of discourse, we ought to expect the “frame of comparison” to vary randomly. But it does not: it varies precisely with which constituent of the sentence is WH-moved.

See also (15)-(16)-(17) above. We conclude,

(11) The comparative reading of the superlative is available in the environment of a WH/FOCUS phrase, and the “frame of comparison” is a function of which constituent the WH/FOCUS phrase is.



## Heim 1999, devil's advocate

We cannot exclude, after all, that the **context-variable** C1 in an LF like (30) **happens to refer** to the set of mountains climbed by John, Mary, or Bill.

(30) John climbed [THE [C1 -est]  $\lambda d$ [d-high mountain]]

If it does, this LF **expresses a reading** that is practically **indistinguishable** from the one that (31) expresses when C2 consists of John, Mary, and Bill.

(31) John [C2 -est]  $\lambda d$ [climbed [A d-high mountain]]

## Not association with focus

... we are entitled to adopt Rooth's framework for comparative superlatives if the explanation he gives for "association with FOCUS" carries over to this case. It appears, however, that it does not carry over... Rooth does not generalize over interrogative and relative WH ...

(23) I have seen the girl from whom Peter got the fewest letters.

(24) WH/FOCUS license the comparative reading of the superlative, because they give rise to a proposition containing a variable, and the "frame of comparison" can be defined in terms of this open formula.

## 2011 comment on 1986

Szabolcsi 1986 proposed that subjects in English may have a Focus feature even if they do not have focus accent.

This was unnecessary (whether tenable or not).

What the 1986 analysis needed was a property that defines the frame of comparison (her “open formula”).

Subjects, and only subjects, automatically combine with a property (cf. no type mismatch forces subjects to QR in Heim&Kratzer). This extends to phonetically null subjects, e.g. PRO.

## Heim 1999, devil's advocate

Since the movement theory does not exclude the LFs we employed in the in-situ theory, it predicts that, if a given instance of a comparative reading happens to be caused by context dependency, then focus may contribute as in:

(13a) John<sub>F</sub> put the tallest plant on the table

(16) [the [ $\cup C$  –est] [tall plant]]

[ $\lambda x$ [John put x on the table] $\sim C$ ]

Presupp:  $\cup C \subseteq \lambda x \exists y [y \text{ put } x \text{ on the table}]$ ,

which the set of plants someone put on table satisfies.

- (26) a. \*Who e said [that you got the fewest letters]?  
 b. \*Who did you warn the fewest people [that you were going to arrest e]?  
 c. Who did you claim [e [e got the fewest letters]]?
- (26c') 'Who did you claim got fewer letters than anybody else got?'  
 \*'Who did you claim got fewer letters than you claimed anybody else got?'
- (27) a. Who e expected [PRO to get the fewest letters]?  
 b. Who e expected [Mary to get the fewest letters]?  
 c. Who e demanded [that you get the fewest letters]?
- (27a') 'Who expected to get fewer letters than anybody else expected to get?'  
 (27b') 'Who expected Mary to get fewer letters than anybody else expected her to get?'  
 (27c') 'Who demanded that you get fewer letters than anybody else demanded that you get?'
- (29) a. When did the fewest people want to vote?  
 b. When were the fewest people killed?  
 c. When did the fewest guests arrive?  
 d. When do you expect the fewest guests to arrive?
- (30) a. Who did the fewest witnesses see e?  
 b. Who did you expect the fewest people to like e?

(28) In order for the comparative reading to obtain, the licensing variable must be in the same domain with independent tense as the superlative.

# Indefiniteness paradox

- (1) a. Who did you take a picture of?  
b. \*Who did you take the/every picture of?  
c. Who did you take the best picture of?

Suppose that superlatives on the comparative reading and superlatives on the absolute reading do not start out as the same animal. Rather, the absolute superlative is always definite, whereas the comparative superlative is always indefinite -- but it is ill-formed unless it has a variable within its scope. ... adjunction to INFL does not “create” a comparative superlative from an absolute one -- it only helps the originally comparative superlative acquire scope over an open proposition.



# Informal semantics

... converge with Heim's (1985) [talk handout]  
independent results:

(51) [Of those three men] John recommended the  
youngest one to Bill.

a. -est <John, those 3>

$\lambda x \lambda y$  [x recommended a y-young one to Bill]

b. -est <Bill, those 3>

$\lambda x \lambda y$  [John recommended a y-young one to x]

c. John recommended Iz [-est <z, those 3>

$\lambda x \lambda y$  [a y-young one (x)]]



# Looking forward

## Some recurrent issues in the literature

- What is compared; how is comparison class defined?
- Upstairs de dicto reading: can DP-internal analysis get it right?
- Multiple mountains climbed, sandwich scenarios
- [Latent issue] Amount vs. adjectival superlatives
- Cross-linguistic syntax
- (In)definiteness
- Is focus necessary? What role does focus play?
- *The shortest* and *the least high*; monotonicity and decomposition in degree semantics

## What is compared in comparative superlatives?

Mountains wrto height

*(Szabolcsi, implied)*

Farkas & Kiss

Sharvit & Stateva

Climbers wrto heights  
of mountains climbed

Heim

... v. Stechow, Hackl

## How is DP-external stuff invoked in the definition of the comparison class?

Non-standard composition;  
context, salience

Farkas & Kiss

Sharvit & Stateva

Teodorescu

Sentential scope of  
-est

*Szabolcsi*

Heim, Hackl

## Fifth (upstairs de dicto) reading

Heim 1999:

(18) John wants to climb the highest mountain.

summarizing responses to survey question: How high a mountain do you want to climb?

Heim regards this as the knock-down argument for the necessity of –est extraction, as compared to the DP-internal, context-dependent, mountain-comparing analysis. But see Sharvit & Stateva.

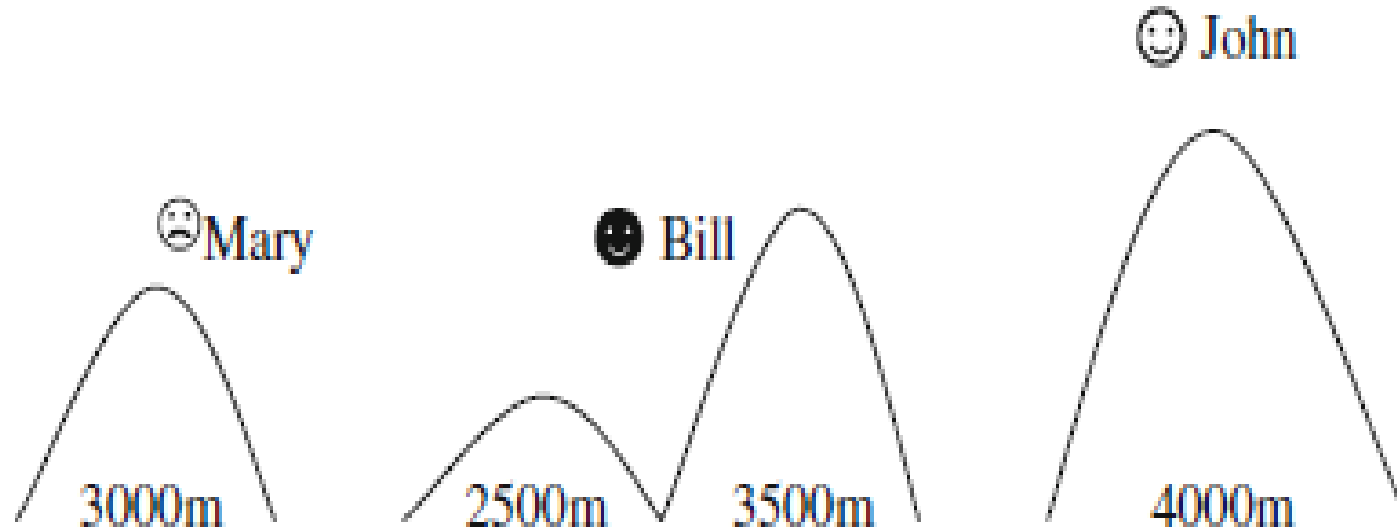
## Sandwich scenarios

Sharvit & Stateva 2002, but see fn 7 in Farkas & Kiss 2000

Mary climbed one mountain—a 3,000 m mountain.

Bill climbed two mountains—a 2,500 m and a 3,500 m mountain.

John climbed one mountain—a 4,000 m mountain.



## **Latent: Amount/free vs adjectival superlatives**

Amount superlatives (the most/fewest letters) and free superlatives ([run] the fastest) do not have absolute readings, have unicity, and don't involve objects-in-the-context.

Are (some of) the puzzles that Heim et al. struggle with artifacts of confusing the highest mountain type examples?

Or are amount/free superlatives vs. adjectival superlatives perhaps two different kinds of beasts?

See some data in Aihara and Rohena Madrazo.

# Monotonicity of interpretation, decomposition of antonyms

Sharvit & Stateva 2002

Heim 2006a,b, 2008

Buering 2007, Comparative sandwichology

v Stechow, 2009 handbook article

Hackl 2009, *most and more than half*