A SUPERLATIVE ARGUMENT FOR A MINIMAL THEORY OF DEFINITENESS

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Claim

Distinguishing **definiteness** from **determinacy** allows for an analysis of relative readings of superlatives that maintains the integrity of *the* while explaining their indefinite-like (*indeterminate!*) behavior.

Definiteness & Determinacy

Definiteness: a morphological category.
Determinacy: denoting an individual (≈ type e).

Definite descriptions: fundamentally predicative; presuppose uniqueness ($|P| \leq 1$) but not existence.

$$the_{\langle et,et\rangle} \rightsquigarrow \lambda P\lambda x[\partial(|P| \leq 1) \wedge P(x)]$$

Argumental definites acquire existential import via type-shifting operations:

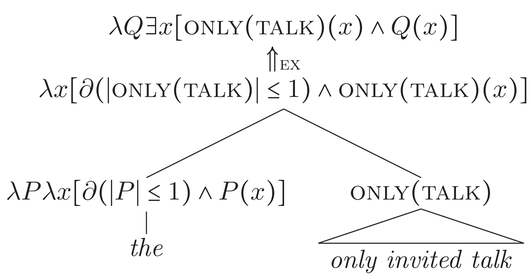
- IOTA (gives determinate interpretations)
  $P \mapsto \iota x[P(x)]$
- EX (gives indeterminate interpretations)
  $P \mapsto \lambda Q\exists x[P(x) \wedge Q(x)]$

Anti-uniqueness effects involve EX option:

(1) Anna didn't give the only invited talk.
⇒ multiple invited talks
⇒ no 'only invited talk'

(2) Sue and Jane both scored goals, so Jane didn't score [the only goal]. #It was a bicycle-kick.

(3) Sue wanted to score the only goal and so did Mary. #Therefore Sue and Mary wanted to score the same goal.



Superlative Indeterminacy

(4) Gloria climbed the/*a highest mountain.
Relative: ... *out of anyone*
Absolute: ... *out of all the mountains*

(5) Gloria climbed (the) most mountains.
(*the most* unambiguously relative)

◆ Indefinite distribution (Szabolcsi 1986, 2012):

(6) Who did you take the *(best) picture of?

(7) There were the fewest guests *yesterday*.

(8) John has the *(smartest) sister.

◆ No presupposition failure (Heim 1999):

(9) If nobody unambiguously climbs the highest mountain, the prize is not awarded.

◆ Denial of existence:

(10) Sue wanted to eat the {most, biggest, #large} apples (#of anyone), but there were no apples.

◆ Anaphora:

(11) Perhaps Sue climbed the {#most, highest, snow-capped} mountains (#of anyone). I took a picture of them.

(12) Mary didn't bake the chocolate/#only/#most cupcakes, since John baked them.

◆ Non-restrictive modification:

(13) Sue wanted to see the {#most, oldest, old} statues (#of anyone), which I had seen.

(14) Mary didn't bake the chocolate/#only/#most cupcakes, which are on the table.

◆ Intensional contexts:

(15) Sue wanted to see the {#most, oldest, old} statues (#of anyone), and so did John. So Sue and John wanted to see the same statues.

Previous analyses

DP-EXTERNAL STRUCTURE
Gloria est$_C$ λd climbed [$_{\text{DP}}$ ~~the~~ d-high mountain]

DP-INTERNAL STRUCTURE
Gloria climbed [$_{\text{DP}}$ the est$_C$ high mountain]

DEGP-INTERNAL STRUCTURE
Gloria climbed [$_{\text{DP}}$ [$_{\text{DEGP}}$ the est$_C$] high mountain]

$est_C \rightsquigarrow \lambda G\lambda x[\exists d[\forall y \neq x \in C[G(d)(x) \wedge \neg G(d)(y)]]]$

THREE STRATEGIES:

	Relative	Absolute
Ex-situ[1]	DP-external	DP-internal
In-situ[2]	DP-internal	DP-internal
DegP[3]	DegP-internal	DP-internal

[1] Szabolcsi, Heim, Hackl, i.a.
[2] Farkas & Kiss, Sharvit & Stateva, Teodorescu, i.a.
[3] Krasikova, Szabolcsi

PROS AND CONS:

	Ex-situ	In-situ	DegP
indeterminacy	yes	unsolved	yes
upstairs *de dicto*	yes	hard...	yes if
integrity of *the*	unsolved	yes & no	yes
rules out ties	yes	yes	no

'Upstairs *de dicto* reading' of (16): John needs to climb a 4000 ft mountain, others need to climb mountains of heights below 4000 ft.

(16) John needs to climb the highest mountain.

Ties: (17) is false if everyone in a choir gets 4 tickets to sell, and Sally sells all 4 but so do most people.

(17) Sally sold the most tickets.

French: ~~la~~ makes no sense, since the rel. reading with *la* is not the comparative reading with *une*:

(18) Il a escaladé la (≠ une) plus haute montagne.

In a nutshell

Intuition: *-est* is an exclusive.
◆ *Absolute:* For some standard d, Gloria climbed the **only** d-high mountain.
◆ *Relative:* For some standard d, **only** Gloria climbed the d-high mountain.

Like *only*, *-est* can form indeterminate definites.

Details

$-est_C \rightsquigarrow \lambda G\lambda x[\exists d[\text{ONLY}_C(\lambda y[G(d)(y)])(x)]]$
'there's some d such that x is the only individual in C that Gs to degree d.'

where $\text{ONLY}_C(P)$ is short for
$\lambda x[\partial(P(x) \wedge C(x)) \wedge \forall y[x \prec y \rightarrow \neg{}^*P(y)]]$

ABSOLUTE READING:
$-est_C$ [d-high mountain] $\rightsquigarrow$
$\lambda x[\exists d[\text{ONLY}_C(\lambda y[\text{HIGH}(d)(y) \wedge \text{MTN}(y)])(x)]]$

RELATIVE READING (ex-situ):
$-est_C$ [climb EX(the d-high mountain)] $\rightsquigarrow$
$= \lambda x[\exists d[\text{ONLY}_C(\lambda z\exists y[\partial(\pi) \wedge \text{HIGH}(d)(y) \wedge \text{MTN}(y) \wedge \text{CLIMB}(y)(z)])(x)]]$
where π is $|\lambda x[\text{HIGH}(d)(x) \wedge \text{MTN}(x)]| \leq 1$

In our logic, *quantifier projection* holds:

$$\exists u[\partial\phi \wedge \psi] \equiv \exists u[\partial\phi] \wedge \exists u[\phi \wedge \psi]$$

Thus existentially bound presuppositions produce existential presuppositions, e.g. *someone stopped smoking* presupposes that someone smoked.

In (4), the uniqueness presupposition contains an existentially bound variable.

Resulting presupposition is 'There is some height such that there is at most one mountain among the set under consideration of (at least) that height.'

Prediction derived: (4) is felicitous when there is a unique highest mountain...
for relative reading add: that someone climbs.

Typology of interpretation types

	Predicative	Indeterminate	Determinate
a(n)	$\lambda x[P(x)]$	$\lambda Q\exists x[P(x) \wedge Q(x)]$	-
the	$\lambda x[\partial(\lvert P\rvert \leq 1) \wedge P(x)]$	$\lambda Q\exists x[\partial(\lvert P\rvert \leq 1) \wedge P(x) \wedge Q(x)]$	$\iota x[\partial(\lvert P\rvert \leq 1) \wedge P(x)]$
p's	$\lambda x[R(x,p)]$	$\lambda Q\exists x[R(x,p) \wedge Q(x)]$	$\iota x[R(x,p)]$

(Coppock & Beaver, submitted)

References

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