

What Neutralizes the Positive?

Yoad Winter

Utrecht University

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Problems

Why do some adjectives allow measure phrase (MP) modification and others do not?

John is five years *old*/**young*

John was five minutes *early*/*late*

And how are adjectives interpreted when they allow MP modification?

John is *five years old* \neq John is *old*

John was *five minutes late* \Rightarrow John was *late*

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Proposal

Semantic structure:

A common semantic “template” for different adjectives helps us develop a notion of adjective *boundedness*.

Boundedness of adjectives:

Only “unbounded” adjectives are modified by MPs.

old, *late* and *early* are unbounded
young is bounded

General Non-Triviality Principle:

Only “unbounded” denotations are non-trivially modified by MPs.

→ Also accounts for “neutralization” under MP modification.

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Two Types of Adjectives

Value Judgment Type

Standard degree varies:

John is five years old
#John is old

Zero degree is fixed:

John is five years old
Mary is seven years old
Mary is two years older than John

old/young
wide/narrow
long/short
etc.

Comparative Type

Standard degree is fixed:

Train A is five minutes late
Train A is late

Zero degree varies:

Train A is five minutes late
Train B is seven minutes late
#Train B is two minutes later than Train A

early/late
(my watch is 5 minutes)
slow/fast
(my C is 30Hz)
flat/sharp (Kennedy 2001)

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Semantic Structure

An adjective denotes an *ordered* set S of *degrees*:

1. Determined using a *standard* degree d ;
2. Relative to a given *zero* degree z .

S is the set of degrees “bigger” than d , relative to z .

<p>John is old John’s age degree is ordered higher than the old age standard, where the “zero age” is set to 0.</p>	
<p>John is late John’s degree of lateness is ordered as higher than 0, where the “on time” zero degree is set to some point in time.</p>	

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One-Plug Generalization

It is either the standard degree or the zero degree that is context-dependent (fixed), not both.

Thus, there are no adjective *blik*, such that:

<u>A is MP_1 blik</u>	<i>d varies</i>	OR	<u>A is MP_1 blik</u>	<i>d is fixed</i>
#A is blik			A is blik	
<u>A is MP_1 blik</u>	<i>z varies</i>		<u>A is MP_1 blik</u>	<i>z is fixed</i>
B is MP_2 blik			B is MP_2 blik	
#B is MP_1 - MP_2 blikker than A			B is MP_1 - MP_2 blikker than A	

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Remaining Question

The one-plug generalization expects the “plugged in” degree to be freely determined by context. But in one notable case, this is not the case.

A:	B:
John is five years old	≠> John is old
John is five feet tall	≠> John is tall
The team is five people strong	≠> The team is strong

What neutralizes the standard degree in the A cases?

Proposal: The same mechanism that rules out the following –

- #John is five years young
- #John is five feet short
- #The team is five people weak

Remaining question: What is this mechanism?

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Triviality Filters (1)

Basic idea: Certain constructions rule out expressions that lead to logically trivial statements (tautologies or contradictions).

Exemplar (Barwise and Cooper 1981) – there sentences:
there is some UFO/*every UFO outside

there is NP $\Leftrightarrow E \in [[NP]] < \begin{matrix} \text{contingent} \\ \text{*tautological/contradictory} \end{matrix}$

there is some UFO outside $\Leftrightarrow E \in \{A \subseteq E : \exists x[[UFO(x) \wedge outside(x)] \wedge x \in A]\}$
contingent

there is every UFO outside $\Leftrightarrow E \in \{A \subseteq E : \forall x[[UFO(x) \wedge outside(x)] \rightarrow x \in A]\}$
*tautological

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Triviality Filters (2)

More examples (Gajewski 2009):

- Exceptive constructions (Von Fintel style):
*all/no/*some/*most/*few* drummers but Mary can play this rhythm
- Negative quantifiers in comparatives:
this bookshelf is taller than a
*no/some/most/*all/*few* desks are wide
- Acceptability of *for / in* adverbials with states and achievements:
John believed that *for/*in* 5 hours
John noticed that *in/*for* 5 minutes

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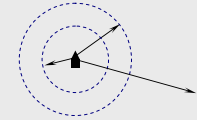
Basic Idea (1)

Zwarts and Winter (2000):

we are *ten meters away from/*close to* the house

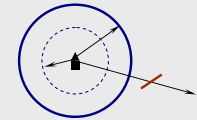
away from

The set of vectors (directed segments) that point from the house outwards.
This set is *unbounded from above*.



close to

The set of vectors (directed segments) that point from the house outwards up to a certain distance.
This set is *bounded from above*.



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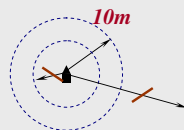
Basic Idea (2)

Zwarts and Winter (2000):

we are *ten meters away from/*close to* the house

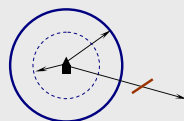
10m away from

The set of vectors (directed segments) that point from the house outwards,
and are ten meters long.



close to

The set of vectors (directed segments) that point from the house outwards up to a certain distance.
This set is *bounded from above*.



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Why is boundedness relevant?

MP Modification: Intersective modification –
[[MP C]] = set [[MP]] intersected with set [[C]]

MP Triviality Filter:

A modified construction [MP C] is acceptable only when it is guaranteed that its denotation is not empty.

Claim:

(Only) unboundedness of [[C]] guarantees that [[MP C]] is not empty.

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When is an adjective unbounded?

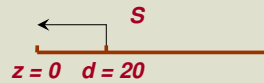
old

The set of degrees above a given standard.
This set is *unbounded from above*.



young

The set of degrees below a given standard.
This set is *bounded from above*.



But boundedness of *old* from still allows
[[MP old]] to be empty.

[[70 years old]]= Φ if $d=80$

The only standard that guarantees non-emptiness
for any MP is $d=0$.

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Consequences

(1) John is *five years old*

(2) \nRightarrow John is *old*

The zero standard in (1) is not preserved in (2).
Pragmatic considerations imply that the
standard in (2) must be non-zero.

John was *five minutes late* \Rightarrow John was *late*

John was *five minutes early* \Rightarrow John was *early*

The comparative-type adjectives *early* and *late*
are unbounded from above and have a standard
degree fixed at zero.

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Independent test for boundedness

John's age is five years

\nRightarrow Nobody is five years *older* than John

\Rightarrow Nobody is five years *younger* than John

Train A arrived five minutes behind schedule

\nRightarrow No train arrived five minutes *earlier* than Train A

\nRightarrow No train arrived five minutes *later* than Train A

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Open question

Why isn't MP modification more generally
allowed?

50 dollars **expensive/*cheap*

100 kmh. **fast/*slow*

Speculation (also Seuren 1978, Kennedy 2001):

It is the possibility of *free* items, *stationary*
objects etc., as opposed to *age-less* people,
length-less towers etc.

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Summary

- **Value-Judgment adjectives vs. Comparative-Type adjectives**

- e.g. *old*
- e.g. *late*
- standard degree varies
- zero degree varies

- **One-Plug Generalization.**

- only one of the degree values may vary in context

- **Triviality filters**

- operational in different semantic domains

- **MP triviality filter**

- operational in the different categories modified by MPs
- responsible for the neutralization of the positive

References

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