

Demonstratives of Manner, Quality and Degree – constraints on features of comparison

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German demonstrative *so*

- (1) a. (speaker points to a table):
So einen Tisch hat Berta auch.
'Berta has such a table / a table like this, too.' **quality**
- b. (speaker points to someone dancing):
So tanzt Berta auch.
'Berta dances like this, too.' **manner**
- c. (speaker points to a person):
So groß ist Berta auch.
'Berta is this tall, too.' **degree**
- d. (speaker points to someone running):
So schnell rennt Berta auch.
'Berta runs this fast, too.' **degree**

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German demonstrative *so*

- (2) *Anna hat einen Tisch mit 5 Beinen.* **quality**
Berta hat auch so einen Tisch. **anaphoric**
'Anna has a table with five legs. Berta has such a table, too.'

- (3) *Berta hat so einen Tisch wie Anna.* **quality**
'Berta has a table like Anna's.' **equative**

"Demonstratives of manner, quality, and degree" (König & Umbach 2017)

e.g.

Polish <i>tak</i>	manner+quality+degree	(deictic/anaphoric/equatives)
Italian <i>così</i>	manner+quality+degree	(deictic)
	manner+quality	(anaphoric)
English <i>such</i>	quality	(anaphoric)

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Croatian demonstratives (Gärdenfors, Brala-Vukanovic 2018)

Quality	<i>ovakav</i>	<i>takav</i>	<i>onakav</i>
	of this type	of that type	of that type
Manner	<i>ovako</i>	<i>tako</i>	<i>onako</i>
	this way	that way	that way
Degree ?			
Size of objects	<i>ovolik</i>	<i>tolik</i>	<i>onolik</i>
	of this size	of that size	of that size
Duration of event	<i>ovoliko</i>	<i>toliko</i>	<i>onoliko</i>
	this long	that long	that long

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The similarity analysis

dieser Tisch / this table referent **identical** to target of demonstration
so ein Tisch / a table like this referent **similar** to target of demonstration
 --> "similarity demonstratives" (Umbach & Gust 2014)

Similarity demonstratives create sets of similar objects / events

In the nominal and verbal case, but not in the adjectival case,
 these sets provide **ad hoc generated kinds**

$SIM(x, t, \mathcal{F})$ x referent
 t target of the demonstration
 \mathcal{F} representation, including **features of comparison**

intersective interpretation [[*so ein Tisch*]] = $\lambda x. table(x) \ \& \ SIM(x, t, \mathcal{F})$ 5

2 questions

1. How to spell out similarity?

$SIM(x, y, \mathcal{F})$ true iff x and y are indistinguishable w.r.t.
 a given set of features

(Umbach & Gust 2014)

2. Which features qualify as features of comparison?

--> constraints

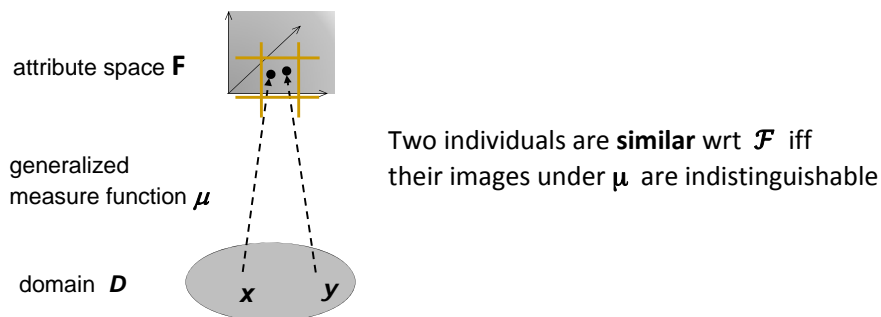
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The similarity framework in Umbach & Gust (2014)

skip?

$SIM(x, y, \mathcal{F})$ \mathcal{F} representation, including

- multi-dimensional attribute spaces \mathbf{F}
- generalized measure functions $\mu: D \rightarrow \mathbf{F}$
- set of classifiers \mathbf{P}^* on points in \mathbf{F}



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Constraints on features of comparison

- (4) a. *Anna hat japanisches Auto.*
Berta hat auch so ein Auto (nämlich ein japanisches).
 'Anna has a Japanese car. Berta has such a car, too (namely a Japanese one).'
- b. *Anna hat neues Auto.*
*Berta hat auch so ein Auto *(nämlich ein neues).*
 'Anna has a Japanese car. Berta has such a car, too (namely a new one).'
- (5) a. *Anna hat das Huhn im Wok zubereitet.*
Berta hat die Ente auch so zubereitet (nämlich im Wok).
 'Anna prepared the chicken in the wok. Berta prepared the duck like this,
 too (namely in the wok).'
- b. *Anna hat das Huhn im Garten zubereitet.*
*Berta hat die Ente auch so zubereitet *(nämlich im Garten).*
 'Anna prepared the chicken in the garden. Berta prepared the duck like this,
 too (namely in the garden).'

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Experimental studies: licit features of comparison

Series of studies: "What are licit features of comparison?"
stimuli analogous to (4), (5), acceptance rating

Core problem: How to spell out predictions?

Tendencies for properties qualifying as features of comparison:

- relational properties / external manner modifier **no**
new car, prepare the chicken in the garden
- evaluative adjectives **no**
expensive car, sing the song beautifully
- properties of concepts / internal manner modifier **yes**
Japanese car, prepare the chicken in the wok

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Experimental study: internal vs. external modifiers

Hypotheses:

- Verbal **so**:
 - modifier of event types (*internal*): **yes**
mit der Hand nähen ('sew by hand')
 - modifier of event tokens (*external*): **no**
in der Schule nähen ('sew at school')
- Nominal **so**:
 - modifier of nominal concepts (*internal*): **yes**
Bluse aus Leinen ('blouse made of linen')
 - modifier of DP referents (*external*): **no**
Bluse mit Flecken ('blouse with stains')

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Experimental study: internal vs. external modifiers

Materials

32 Items (16 with nominal modifiers, 16 with verbal modifiers)
35 Fillers

Independent Variables

SYNTACTIC TYPE (**nominal** vs. **verbal**)
SEMANTIC TYPE (**internal** vs. **external**)

Participants

24 students of Tübingen University

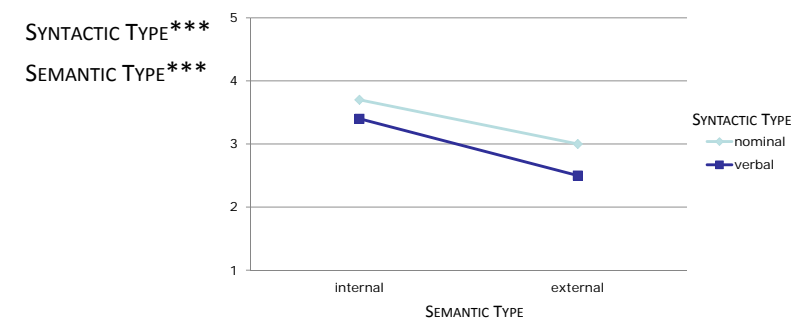
Task

Acceptability rating on Likert Scale:
5(=very good) to 1(=very bad)

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Experimental study: internal vs. external modifiers – Results

Acceptability ratings (Scale 5-1)



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Experimental study: internal vs. external modifiers - Results

- Higher ratings for internal modifiers: evidence for our hypotheses
- Higher ratings for nominal modifiers (BUT: different lexical materials for nominal and verbal stimuli)
- No interaction: Similar behavior of modifiers in the nominal and verbal domain with regard to anaphoric **so**

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How to interpret the results?

The observed distinction is reflected by other phenomena:

- positional effects with attributive as well as adverbial adjectives
- "relational" vs. "intersective" adjectives (McNally & Boleda 2017)
- principled vs. statistical connections between kinds and properties (Prasada et al. (2013)
- indefinite singular generics vs. bare plural generics (Greenberg 2004)

Carlson (1980): *people in the next room ... *such people*

--> "... modifiers apparently referred back to by *such* must be modifiers that delineate a KIND of the nominal modified.

s. also Carlson (2010)

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Positional effects

skip ?

Duden (1984): number < time/space < quality/color < material/origin

- (9) a. *ein neues japanisches Auto*
b. # *ein japanisches neues Auto*
'a new Japanese car / a Japanese new car'

External adverbial modifiers precede internal ones:
(Maienborn 2003, Frey 2003):

- (8) a. ... *weil sie das Huhn im Garten in Zitrone gekocht hat.*
b. # ... *weil sie das Huhn in Zitrone im Garten gekocht hat.*
'because she cooked the chicken in lemon in the garden.'

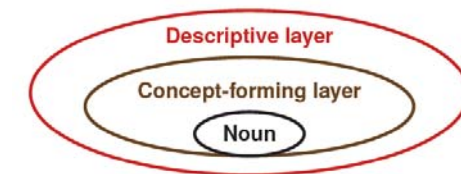
Bouchard (2005): The easier the adjectival property can be understood as denoting an ad-hoc concept when combined with the head noun, the closer to the noun will it be positioned.

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McNally (2017), McNally & Boleda (2017)

skip ?

- Relational adjectives are **properties of kinds**



McNally (2016)

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Principled vs. **statistical** connections between kinds and properties.

Principled connections involve properties an entity has because it is the kind of thing it is.

- (17) a. *Dogs, in general, are four-legged.*
 a'. *Dogs, in general, are brown.*
 b. *Dogs are four-legged because they are dogs / by virtue of being dogs.*
 b' # *Dogs are brown because they are dogs. / by virtue of being dogs.*
 c. *Dogs should have four legs.*
 c'. # *Dogs should be brown.*
 d. *A dog has four legs.*
 d'. # *A dog is brown.*

Greenberg (2003): Indefinite singular generics, but not bare plurals, require principled connections between the kind and the predicated property.

- (99) a. *Carpenters in Amherst give all their sons names ending with 'a'.*
 b. ?? *A carpenter in Amherst gives all his sons names ending with 'a'.*

Conclusion

The similarity analysis argues that

- *demonstratives of manner, quality and degree* express similarity (instead of identity) to the target of demonstration
 German *so*, English *such*, ...
 ... Croatian *ovaka/takav/onakav* and *ovako/tako/onako* (??)
- in the case of manner and quality (but not in the case of degree), similarity sets constitute **ad hoc generated kinds**.

--> opens a window into kind-formation

But,

- *similarity kinds* differ from well-established kinds (*the coke bottle*)
- *similarity kinds* are not intensional (cf. Chierchia 1998)

--> multiple sorts of kinds?

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