



Z A S

Expressing Similarity

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Features of Comparison

Similarity Demonstratives

König (2012) "Manner demonstratives"

Demonstratives of verbal manner, nominal quality and adjectival degree; e.g. Polish *tak*, Turkish *böyle*, German *so/solch*.

Kaplan (1989) Demonstratives

- (i) take their value from the context,
- (ii) express identity of referent and the target of the pointing gesture.

Umbach & Gust (2014) "Similarity demonstratives"

Polish *tak*, Turkish *böyle*, German *so/solch*

- (i) take their value from the context,
- (ii) express **similarity instead of identity**,
- (iii) generate **ad-hoc kinds** (via similarity)

The German demonstrative *so*

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|---|---------------|
| (1) a. (pointing to a person):
<i>So groß ist Anna auch.</i>
'Anna is this tall, too.' | ad-adjectival |
| b. (pointing to a table):
<i>So einen Tisch hat Anna auch.</i>
'Anna has a table like this, too.' | adnominal |
| c. (pointing to someone dancing):
<i>So tanzt Anna auch.</i>
'Anna dances like this, too.' | adverbial |

The meaning of *so*

Nouns / verbs

multiple features of comparison
restricted by the nouns / verbs meaning

- [[*so ein Tisch*]] = $\lambda Q. \exists x. \text{SIM}(x, x_{\text{target}}, \mathcal{F}) \ \& \ \text{table}(x) \ \& \ Q(x)$
 [[*so tanzen*]] = $\lambda e. \text{SIM}(e, e_{\text{target}}, \mathcal{F}) \ \& \ \text{dance}(e)$

Adjectives

feature of comparison
given by the adjective's meaning

- [[*so groß*]] = $\lambda x. \text{SIM}(x, x_{\text{target}}, \mathcal{F}(\text{height}))$

The similarity relation

SIM ($x, x_{\text{tar}}, \mathcal{F}$)	x	NP referent
	x_{tar}	target of the demonstration
	\mathcal{F}	features of comparison

implemented as as indistinguishability w.r.t. a given set of attributes using multi-dimensional attribute spaces and generalized measure functions (Umbach & Gust 2014)

Adnominal 'so'

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|---|--|
| (4) <i>Anna hat</i>
'Anna has ...' | <i>Berta hat auch</i>
'Berta also has ...' |
| a. ... <i>ein Rad mit 7 Gängen.</i> | ... <i>so ein Rad</i> _{7gears} |
| b. ... <i>ein elektrisches Rad.</i> | ... <i>so ein Rad</i> _{electric} |
| c. ... <i>ein Mountain Bike</i>
'... a bike with 7 gears / electric / ...' | ... <i>so ein Rad</i> _{m-bike}
'... such a bike' |
| d. ... <i>ein griechisches Rad.</i> | ?? ... <i>so ein Rad</i> _{Greek} |
| e. ... <i>ein neues Rad.</i> | # ... <i>so ein Rad</i> _{new} |
| f. ... <i>ein neues Mountain Bike.</i> | ... <i>so ein Rad</i> _{m-bike} |
| g. ... <i>ein altes, verrostetes Rad.</i> | ... <i>so ein Rad</i> _{old+rusty}
'... a Greek/new / old and rusty bike ... such a bike' |

The puzzle: Why do *electric* and *7 gears*, but not *new*, qualify as features of comparison?

Principled connections

Prasada et al. (2013) : Principled (vs. statistical) connections between kinds and properties hold if an entity has the property an because it is the kind of thing it is.

- (5) a. ?? *Barns are red by virtue of being barns.*
 b. *Dogs are four-legged by virtue of being dogs.*
 c. # *A barn is red.*
 d. *A dog is four-legged.*

Hypothesis

A property provides a feature of comparison for a kind if there is a principle connection.

- (6) a. *A bike with gears is a kind of bike.*
 b. ?? *A new bike is a kind of bike.*

Default order of adjectives

Bouchard (2005) : If adjectives combine with nouns denoting ad-hoc concepts, they occur adjacent to the noun.

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

Bouchard, D. (2005) Sériation des adjectifs dans le SN et formation de concepts. *Recherches linguistiques de Vincennes* 34, 125-142.
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 Frey, Werner 2003. Syntactic conditions on adjunct classes. In: E. Lang, C. Maienborn & C. Fabricius-Hansen (eds.), *Modifying Adjuncts*. Berlin: de Gruyter, 163-209.
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Adverbial 'so'

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|--|--|
| (8) <i>Anna hat das eine Huhn</i>
'Anna prepared one chicken ...' | <i>Berta hat das andere auch</i>
'Berta prepared the other one ...' |
| a. ... <i>im Wok zubereitet.</i> | ... <i>so zubereitet</i> _{in the wok} |
| b. ... <i>fettarm zubereitet.</i> | ... <i>so zubereitet</i> _{low-fat} |
| c. ... <i>gebraten.</i>
'... in the wok/ low-fat / fried.' | ... <i>so zubereitet</i> _{fried}
'... like this, too.' |
| d. ... <i>im Garten zubereitet.</i> | # ... <i>so zubereitet</i> _{in the garden} |
| e. ... <i>mühe los zubereitet.</i> | # ... <i>so zubereitet</i> _{easily} |
| f. ... <i>schnell zubereitet.</i> | # ... <i>so zubereitet</i> _{tasty}
✓ ... <i>so schnell zubereitet.</i>
'... in the garden / easily / quickly like this, / so quickly, too.' |

And why do *low-fat* and *in the wok*, but not *in the garden*, qualify as features of comparison?

Event internal vs. – external adverbials

Maienborn & Schäfer (2011) : External adverbials modify the event while internal adverbials modify a manner dimension of the event. Schäfer (2013): Event-internal adverbials denote manner objects.

- (9) a. *Fritz hat laut die Einleitung gesungen.*
 b. *Fritz hat die Einleitung forte gesungen.*
 'Fritz sang the introduction loudly / forte.'
 a'. $\exists e [\dots \ \& \ \text{SING}(e) \ \& \ \text{LOUD}(e)]$
 b'. $\exists e [\dots \ \& \ \text{SING}(e) \ \& \ \exists m [\text{MANNER}_{\text{MUSIC}}(m, e) \ \& \ \text{FORTE}(m)]]$

Event-internal adverbials express principled connection properties of the kind of event they modify

- (10) a. *Prepare chicken in the wok is a way of preparing chicken.*
 b. ?? *Prepare chicken quickly is a way of preparing chicken.*

Base positions of adverbials

Frey (2003): sentence adverbials > frame adverbials > event-external adverbials > the highest ranked argument > event-internal adverbials > process-related adverbials > verb

- (11) a. ... *weil sie in Berlin das Huhn in Zitrone gekocht hat.*
 b. # ... *weil sie in Zitrone das Huhn in Berlin gekocht hat.*
 'because she cooked the chicken in lemon in Berlin.'

Maienborn, Claudia & Schäfer, Martin (2011). Adverbs and adverbials. In: Maienborn, C., von Stechow, P., Portner, P. (eds.), *Semantics. An international handbook of natural language meaning*. Berlin, New York: de Gruyter, 1390-1420.
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