## Modification by similarity

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The German demonstrative 'so' is an element of manner deixis (cf. König to appear) modifying adjectives and nouns as well as verbs. In the example in (1a) the height of the person the speaker point to is used to characterize Anna's height. In (1b) certain properties of the car the speaker points to are used to characterize Anna's car. Finally, in (1c) the manner of the fish-cutting event the speaker points to is used to characterize Anna's way of cutting fish.

(1) a. (speaker pointing to a person): So groß ist Anna. 'Anna is that tall.'

b. (speaker pointing to a car): So ein Auto hat Anna. 'Anna has a car like this.'

c. (speaker pointing to someone dividing a fish): So hat Anna den Fisch auch zerlegt.

'Anna cut the fish like that , too.'

Comparing the demonstrative 'so' to standard demonstratives like 'dieser' raises two questions: (a) What does the demonstrative 'so' refer to, and (b), how is it possible that a demonstrative functions as a modifier? According to the standard Kaplanian interpretation demonstratives are directly referential. Nunberg (1993) proposed an elaboration of this theory addressing the problem of so-called deferred uses, such that the semantics of a demonstrative involves (i) a deictic component picking out a referent, (ii) an interpretation contributed to the proposition, and (iii) a relation between the referent and the interpretation, which need not be identity. This offers a straightforward solution for the interpretation of the demonstrative 'so': (i) The referent of the demonstrative is the individual or event pointed to, (ii) the interpretation contributed to the proposition is the interpretation of the phrase modified by the demonstrative, and (iii) the relation between the referent and the interpretation is similarity. For example, in (1b), the car denoted by 'so ein Auto' has to be similar to the car the speaker points to.

For this idea to be productive, we need a notion of similarity which is not a semantic primitive. Similarity plays a fundamental role in concept formation and there are several mathematical approaches to model similarity. Some ideas combining standard formal semantics with a qualitative similarity concept based on multi-dimensional attribute spaces will be discussed.

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König, E. (to appear) Le rôle des déictiques de manière dans le cadre d'une typologie de la deixis.

Nunberg, G. (1993) Indexicality and Deixis. Linguistics and Philosophy 16: 1-43.