#### The nature of demonstrations of manner and quality. Evidence from German and Turkish

Carla Umbach and Umut Özge University of Cologne and Middle East Technical University carla.umbach@uni-koeln.de and umozge@metu.edu.tr

### 1. Introduction

There is a variety of demonstratives found across languages addressing manners, qualities and degrees, for example Turkish *böyle*, Polish *tak*, and German *so* (see König & Umbach 2018). They are directly referential (in the sense of Kaplan 1989), which is the hallmark of genuine demonstratives, but on the other hand act as modifiers of nominal, verbal and adjectival phrases, thereby raising the question of what their nature of demonstration is: what kind of entities are targeted by the use of these demonstratives and how do they relate to the referents of the demonstrative phrases? Consider the example in (1). The target of the demonstration is the raba is different from the target – they only share certain features.

- (1) Pointing gesture: speaker pointing at a car in the street
  - a. So ein Auto hat Anna.
  - b. Anna'nın da böyle bir arabası var.
    - 'Anna has a car like this.'

Following Umbach & Gust (2014), this variety of demonstratives will be called *similarity demonstratives*, in contrast to regular pronominal demonstratives like German *das* / *dies*, Turkish *bu* / *şu*, and English *this* / *that*. In König & Umbach (2018), similarity demonstratives are referred to as *demonstratives of manner*, *quality*, *and degree (MQD)*. Quality uses and manner uses, as in (1) and (6), will be included in this paper, while degree uses are set aside. We will consider German and Turkish in parallel, and it will turn out that they behave alike with respect to the phenomena discussed in this paper.

Standard approaches to similarity demonstratives that aim to reconcile their demonstrative characteristics with their modifying capacity are based on the idea that they target a property or a kind. For example, Anderson & Morzycki (2015) argue, following Carlson (1980), for Polish *tak* and German *so*, that in using these demonstratives the speaker points to kinds instead of individuals – in the case of (1) the target of the demonstration is a sub-kind of the car-kind, and the demonstrative phrase *so ein Auto/böyle bir araba* refers to an entity instantiating this sub-kind.

Umbach & Gust (2014) take a different route. They assume that the target of the demonstration in (1) is in fact the individual car the speaker points at, but the referent of the demonstrative phrase is only similar to the target. From this point of view, the difference between similarity demonstratives and pronominal demonstratives is not in the nature of their target but in the relation between target and referent, which is not identity (as in the Kaplanian system) but instead similarity.

The major advantage of this approach is that there is no need for an established kind corresponding to *so ein Auto* in (1) – the denotation of this phrase is, first of all, a similarity class, i.e. a set of similar entities. On the other hand, similarity classes formed with nouns and verbs (but not in the case of degrees) can be shown to exhibit kind-like characteristics. Therefore, in the end the similarity approach agrees with the kind-based approach in that *so ein Auto / böyle bir araba* denote a car sub-kind which, however, is created ad-hoc by similarity,

thereby dispensing with arbitrarily established (sub)-kinds and, moreover, providing insight into the role of similarity in kind formation (Umbach & Stolterfoht in prep.).

Similarity is implemented as a 3-place relation (two items to be compared and a set of features of comparison). Truth-conditions are defined using generalized measure functions ( $\mu_F$ ) and multidimensional attribute spaces equipped with a flexible notion of granularity (see Umbach & Gust 2014, Gust & Umbach 2021). In short, two items count as similar iff their images in a contextually given attribute space F are indistinguishable given a particular granularity grid, see (3a). The denotation of the demonstrative phrase *so ein Auto / böyle bir araba* is show in (3b).

(3) a. sim(x, y, F) iff p\*(μ<sub>F</sub>(x)) = p\*(μ<sub>F</sub>(y)) for all features f ∈ F and granularity grid p\* where F is a free variable
b. [[so ein Auto / böyle bir araba]] = λx. sim(x, x<sub>target</sub>, F) & car(x)

# 2. The nature of demonstrations of manner and quality

The semantic interpretation of *so/böyle* in (3) raises two questions we would like to address in this paper:

- (i) How does the interpretation of *so/böyle* compare to the interpretation of *wie/gibi*, which also denote similarity?
- (ii) How is the interpretation of *so/böyle* affected by using iconic gestures instead of pointing gestures?

# Ad (i)

German *wie* and Turkish *gibi* occur, among other uses, as comparison particles, see (4). It is argued in Umbach & Özge (in prep.) and Umbach, Hinterwimmer & Gust (2022) that German *wie* as well as Turkish *gibi* denote similarity, just as *so* and *böyle*, except lacking a demonstrative component. This would predict that the combination of *wie / gibi* with pronominal demonstratives is semantically equivalent to *so / böyle*, as shown in (5). In nominal cases, as in (5), the prediction is confirmed by the data: Assuming that the pointing gesture targets the same car, there seems to be no difference in interpretation, neither in German nor in Turkish.

- (4) a. Eine Stadt wie Istanbul zieht viele Touristen an.
  - b. İstanbul gibi bir şehir çok turist çeker.'A city like Istanbul attracts many tourists.'
- (5) Pointing gesture: speaker pointing at a car in the street:

[[so ein Auto/böyle bir araba]] = [[ein Auto wie das / bunun gibi bir araba]] =  $\lambda x.sim(x, x_{target}, F) \& car(x)$ 

Similarity demonstratives may also be used in verbal phrases, as in (6a–b). In this use, the target of the demonstration is not an individual but an event, that is, the speaker points to an event instead of an individual. This is evident in impersonal constructions, as in (6a), in which similarity demonstratives are fully acceptable even though there is no distinct agent. However, in the verbal case, substitution of similarity demonstratives by pronominal demonstratives combined with comparison particles is no longer possible, see (6c–d). The reason is that pronominal demonstratives cannot be used to target events proper.

One can, of course, point to an event using a pronominal demonstrative. But in this case, the referent is either a nominalization – *the activity of dancing* – or the agent of the event. The demonstrative may, of course, be combined with comparative particles, but then it still targets something nominal in nature. Thus if a *wie das* phrase is used as a manner modifier (like *so* in (6a)), *das* has to target an individual acting as an agent (... *tanzen wie das* [*Pferd*] 'dance like this [horse]').

- (6) Pointing gesture: speaker pointing to a hall full of dancing
  - a. In den Berliner Techno Clubs wird (auch) so getanzt.
  - b. Berlin Tekno Club'larında böyle dans ediliyor.
  - c. \*In den Berliner Techno Clubs wird wie das getanzt.
  - d. \*Berlin Tekno Club'larında bunun gibi dans ediliyor. 'In Berlin techno clubs people dance like this.'

Further support for the unavailability of genuine events by pronominal demonstratives is provided by events involving two agents, like *divorcing*. In (7) the demonstrative must be plural thus targeting the agents instead of the fighting event.

- (7) Speaker observing a scene of heated argument in the park:
  - a. Anna und Hans haben sich auch so getrennt. / \*getrennt wie das. / getrennt wie die.
  - b. Anna ve Hans da böyle / \*bunun gibi / bunlar gibi ayrıldılar. 'Anna and Hans have also divorced like this.'

#### Ad (ii)

In the examples above, similarity demonstratives (*so, böyle*) were used with index gestures pointing at individuals or events. They may, however, also be used with iconic gestures depicting individuals or events (for the contrast between index gestures and iconic gestures see Clark 2019). The difference in method – pointing vs. depicting – has semantic consequences: When pointing at the target it acts like a "seed" of a similarity class: The denotation of *so ein Tisch / böyle bir masa* ('a table like this') used with a pointing gesture is the set of tables similar to the target while the features of comparison are determined by context. When depicting the target there is no "seed" – elements of the similarity class have to be similar to each other with respect to features of comparison provided by the depiction. The denotation of *so ein Tisch / böyle bir masa* used with a depicting gesture is the set of tables perceptually similar to the depiction, that is, in (8) round tables.

The nature of depictions is a matter of dispute. There is evidence that it is not just a property but something like an "abstract object" or a painting. For example, in the case of (8) the circle has to be horizontal, a vertical one would not depict a table (see Umbach & Ebert 2009, Ebert, Ebert & Hörnig 2020). But whatever it is, it is not an element of the denotation of *so ein Tisch* – depicting a table is not equivalent to being a table.<sup>1</sup> Accordingly, the parameters of the similarity relation have to be slightly adapted integrating the restriction given by the depiction directly into the features of comparison parameter, see (9).

- (8) Depictive gesture: speaker gesturing a horizontal circle
  - a. So einen Tisch hat Anna auch.
  - b. Anna'nın da böyle bir masası var.
  - c. \*Einen Tisch wie das hat Anna auch.
  - d. \*Anna'nın da bunun gibi bir masası var.
    - 'Anna also has a table like this.'

<sup>&</sup>lt;sup>1</sup> This is what Clark calls the *ce ne pas une pipe* principle referring to famous painting by Magritte.

(9) [[so ein Tisch/böyle bir masa]] =  $\lambda x$ .  $\exists y$ .  $\sin(x, y, F_{target})$  & table(x) & table(y)<sup>2</sup>

In (10) the similarity demonstrative is combined with a verbal expression and is, again, used with a depictive gesture. Analogous to the nominal case, the denotation of *so tanzen* 'dance like this' is the set of dancing events that are perceptually similar to the depiction, and as before the depiction is not an element of this class.

- (10) Depictive gesture: speaker mimicking flamboyant dancing
  - a. In den Berliner Techno Clubs wird so getanzt.
  - b. Berlin Tekno Club'larında böyle dans ediliyor.
  - c. \*In den Berliner Techno Clubs wird wie das getanzt.
  - d. \*Berlin Tekno Club'larında bunun gibi dans ediliyor. 'In Berlin techno clubs people dance like this.'

(11) [[so tanzen/böyle dans et] =  $\lambda e$ .  $\exists e'$ . sim(e, e', F<sub>target</sub>) & dance(e) & dance (e')

Let us come back to the combination of comparison particles and pronominal demonstratives (*wie das / bunun gibi* 'like this'). They cannot be used in place of similarity demonstratives if the latter come with a depiction gesture – neither (8c–d) nor (10c–d) are acceptable. This is unsurprising in the verbal case in (10c–d) because these were already blocked in the pointing version, (6c–d). However, with a depiction *wie das / bunun gibi* is also blocked in the nominal case, in contrast to the nominal case with a pointing gesture, see (1) / (5). This finding is strong evidence that pronominal demonstratives (*das / bu*) are not only restricted to individuals (excluding eventive targets), but also to pointing gestures (excluding depictive ones).

#### 3. Conclusion

Summing up, we saw that similarity demonstratives differ in meaning from pronominal demonstratives combined with comparison particles. They are more flexible with respect to target as well as method – they can target events in addition to individuals and they can make use of depiction in addition to pointing gestures. Finally, this leads to the question of how similarity demonstratives behave in anaphoric usage. It is tacitly assumed in Umbach & Gust (2014) as well as König & Umbach (2018) that anaphoric uses are analogous to those with pointing gestures. That would predict equivalence to *wie das / bunun gibi* in nominal cases which is refuted by the example in (12).

- (12) Preceding sentence: Anna should have a speed-limited car.
  - a. So ein Auto gibt es (aber) nicht.
  - b. \*Ein Auto wie das gibt es (aber) nicht.
  - c. Böyle bir araba yok.
  - d. \*Bunun gibi bir araba yok.
    - 'There are no cars like this.'

Does the observation in (12) lead back to the old idea that similarity demonstratives pick up properties, at least in anaphoric usage? We don't think so. The first sentence in (12) does not introduce a property but an individual exhibiting certain properties. Properties do not occur detached from their carrier (unless nominalized). In depictive uses they are exemplified by the depicting gesture. In anaphoric uses properties are conveyed by the DP description. Just as a

 $<sup>^{2}</sup>$  Read F<sub>target</sub> as the set of features (+values) conveyed by the depiction, for details on the F parameter see Gust & Umbach (2021).

depiction does not show a property but a picture exemplifying a property, a DP does not refer to a property (unless nominalized) but to an individual exemplifying a property.

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