Carla Umbach, Umut Özge

Abstract,
Semantics & Philosophy in Europe,
Barcelona, Dec 2018

Equatives in Turkish – two cognitive strategies across categories

Equative comparison constructions occur across categories – adjectives as well as nouns and verbs. There are two types of semantic analyses discussed at the moment. One is based on the standard degree-based analysis of comparatives, the other makes use of kinds or similarity classes. Degree-based analyses (e.g., Bierwisch 1987, Kennedy 1999) focus on equatives built from gradable adjectives as in (1a), which are inherently scalar. They are not suited to handle the nominal and verbal cases in (1b, c), since nouns and verbs in English are mainly non-scalar. However, the lack of a uniform solution has rarely been considered as a drawback, which is presumably due to the fact that in English there are different standard markers for scalar and non-scalar equatives (*as* vs. *like*).

   Widening the perspective by including languages like German and Polish, in which the standard marker is uniform across categories (see German *wie* in (2a-c)), the need for a uniform solution is evident. Kind-based as well as similarity-based analyses (Anderson & Morzycki 2015 and Umbach & Gust 2014) can handle non-scalar equatives straightforwardly by considering the kind or similarity class of the compared items but have to make extra efforts when handling scalar cases (postulating "degree-kinds" and referring to one-dimensional attribute spaces in constructing similarity classes, rsp.).

(1) a. Anna is as tall as Berta.   (2) a. Anna ist so groß wie Berta.   (adjectival, scalar)

   b. Anna's skirt is like Berta's.   b. Annas Rock ist so wie Bertas. (nominal, non-scalar)
   c. Anna is dancing like Berta.   c. Anna tanzt so wie Berta.   (verbal, non-scalar)

Taking opposite perspectives and featuring complementary strengths, the two types of analyses seem to offer a choice between competing theories. This picture changes significantly, however, when taking Turkish data into account. Turkish has two different standard markers, *kadar* and *gibi*. The former is in origin an Arabic word for *amount*, the latter is equivalent to English *like*. From the perspective of English we expect *kadar* to be used only in adjectival equatives and *gibi* only in nominal and verbal cases. Surprisingly, however, both standard markers may be used across categories, see (4), (5), (6), while expressing systematic differences in meaning: *Kadar* selects a single metric dimension of comparison which is either indicated overtly by a gradable adjective or is implicitly given by the noun or verb, cmp. (4a) vs. (5a)/(6a). In contrast, *gibi* selects multiple, not necessarily metric dimensions, implicitly given by the adjective, noun or verb, cmp. (4b), (5b), (6b).

(4) a. Anna Berta kadar uzun.
        A.   B.   kadar long.Cop3sg   `Anna is as tall as Berta.'
                                                  (scalar, same height, both tall)

   b. Anna Berta gibi uzun.
        A.   B.   gibi long.Cop3sg   `Anna is tall like Berta.'
                                                  (similar in the way of being tall, both tall)

(5) a. Anna'nın eteği Berta'nın-ki kadar.
        A.-Gen skirt.Poss3sg B.-Gen-Rel kadar.Cop.3sg   `Anna's skirt is as long/expensive as Berta's.'
                                                  (scalar, e.g. length or price)

   b. Anna'nın eteği Berta'nın-ki gibi.
        A.-Gen skirt.Poss3sg B.-Gen-Rel gibi.Cop.3sg   `Anna's skirt is like Berta's.'
                                                  (non-scalar, similar w.r.t. e.g. design & color & fabric)

(6) a. Anna Berta kadar dans ediyor.
        A. B. kadar dance.3sg.Prog   `Anna dances as long/much/skillfully as Berta.'
                                                  (scalar, e.g. duration or frequency or talent)

   b. Anna Berta gibi dans ediyor.
        A. B. gibi dance.3sg.Prog   `Anna dances like Berta.'
                                                  (non-scalar, e.g. manner and expression)

The contrast between *kadar* equatives and *gibi* equatives gives rise to a number of intriguing observations concerning (i) the unexpected occurrence of *gibi* in adjectival cases and (ii) the unexpected occurrence of *kadar* in nominal/verbal cases. These observations indicate that *kadar* equatives are scalar in nature while *gibi* equatives are non-scalar.

Ad (i) –   *gibi uzun* ('tall'), as in (4b), allows for different comparison classes (Anna might be a girl and Berta her mother), which is strongly dispreferred with *kadar*;

–   *gibi zeki* ('intelligent') indicates possible ways of being intelligent (e.g., math vs. literary skills);

–   *gibi*, but not *kadar,* is compatible with non-gradable adjectives;

–   *gibi uzun* ('tall') blocks degree modifiers like *en az* ('at least'), which are o.k. with *kadar;*

–   *gibi,* but not *kadar,* blocks measure phrases as the standard of comparison (**Anna 1,90 m gibi uzun* 'Anna is as tall as 1.90m'). However, with *kadar* the sentence has a comparative reading.

The last two observations indicate that Turkish has degree-variables (see Beck et al. 2010).

Ad (ii) – *kadar* in nominal and verbal equatives selects exactly one dimension, which has to be metric, cf. (5b), (6b); (5b) can neither be understood as *Anna's skirt is as long and expensive as Berta's* nor as *Anna's skirt is as stylish as Berta's*;

– dimensions selected by nominal/verbal *kadar* are restricted by the lexical meaning of the noun/verb ; e.g., the dimension of age is licensed for kids but not houses.

– dimensions selected by nominal/verbal *kadar* cannot be evaluative, even though adjectival *kadar* equatives with evaluative adjectives are acceptable – (5a) cannot be understood as *Anna's skirt is as beautiful as Berta's*, even though in a construction analogous to (4a) *güzel* ('beautiful') would be perfect.

In view of the Turkish data presented here, the idea that degree-based and kind- or similarity-based accounts of equatives offer a choice between competing theories can no longer be maintained. We have to acknowledge that – within the same language – two different strategies of performing equative comparison are manifest. This implies that a semantic framework is required that accounts for both strategies (without reducing one to the other). We will argue that the framework developed in Umbach and Gust (2014) is well suited to this purpose because degrees and similarity classes can be handled in parallel. Equatives may thus be interpreted in both a degree-based fashion and a similarity-based fashion, cf. (7a, b).

(7)   a. $[[A.\ B.\ kadar\ tall]] = \mu_{height}(a) \geq \mu_{height}(b)$ where $\mu_{height}: U \rightarrow D_{height}$

b. $[[A.\ B.\ gibi\ tall]] = \mu_F(a) \approx_F \mu_F(b)$ where F is a multi-dimensional space,
$\mu_F: U \rightarrow F$ and $\approx_F$ indicates similarity in F

What makes the semantics of Turkish comparatives interesting from a philosophical perspective is the possibility of two ontological categories' (degrees and similarity classes) co-inhabiting the semantic domain of a single operator in a single language, which have so far been thought to be individually selected by languages and/or theories in an either-or fashion as their primary comparative semantic ontology.

Anderson, C. and Morzycki, M. (2015) Degrees as kinds. NLLT 33:79 -821.
Beck, S. & Krasikova, S. & Fleischer, D. et al. 2010. Crosslinguistic variation in comparison constructions. In van Craenenbroeck, J. & J. Rooryck (eds.) *Linguistic VariationYearbook* 2009. 1-66.
Bierwisch, M. (1987) Semantik der Graduierung. In M.Bierwisch & E. Lang (eds.) *Grammatische und konzeptuelle Aspekte von Dimensionsadjektiven*. Akademie Verlag Berlin, 91-286.
Kennedy, C. (1999) *Projecting the Adjective*. Garland Press, New York.
Tversky, A. (1977) Features of similarity. *Psychological Review* 84:327-352.
Umbach, C. & H. Gust (2014) Similarity demonstratives. *Lingua* 149:74-93.