Antonymy and Evaluativity

In the semantics of adjectival constructions, the component of meaning which requires that a degree exceed a contextually-given standard ('evaluativity') is typically analyzed as an exclusive attribute of the positive construction. I argue that evaluativity has a much wider distribution, that of a degree modifier (type $\langle\langle d, t\rangle, \langle d, t\rangle\rangle$). I then show how its distribution is constrained to account for the fact that it occurs differently with different antonyms (e.g. *tall* vs. *short*) and in different degree constructions (e.g. the comparative vs. the equative).

There are two differences between the measure phrase construction (MP) in (1a) and the positive construction in (1b): first, (1a) has an overt degree argument ('6ft'), (1b) does not. Second, (1b) is evaluative, while (1a) is not; (1b) is used to assert that John's height exceeds the standard, while (1a) is used to assert that the degree to which John is tall is 6 feet.

(1) a. John is 6ft tall.
     b. John is tall.

Typical analyses of the semantics of the positive construction assume that evaluativity occurs in the absence of degree morphology (Bartsch and Vennemann, 1972; Cresswell, 1976; Kennedy, 1999, a.o.). They encode evaluativity in a null operator 'POS,' whose distribution is incompatible with degree morphology because POS binds the degree variable, making it unable to be saturated (by an MP) or bound (by a degree quantifier).

However, it's wrong to assume that evaluativity occurs only in the absence of degree morphology (Lyons, 1977; Bierwisch, 1989). Although positive antonyms like *tall* are never evaluative in constructions with overt degree morphology, negative antonyms *can* be.

The positive construction is always evaluative, so we can test whether a construction with degree morphology is evaluative in terms of whether it entails its corresponding positive construction. The equative *John is as tall as Mary* does not entail that John is tall. But its negative-antonym counterpart *John is as short as Mary* entails that John is short, so it is evaluative. In (2), a construction is marked +E when it entails that x is A to a high degree.

(2)

type	form	*tall*	*short*	ex.
Insensitive [+E]	**positive**	+ E	+ E	John is tall/short.
Sensitive	**equative**	− E	+ E	John is as tall/short as Mary.
	interrogative	− E	+ E	How tall/short is John?
Insensitive [–E]	**excessive**	− E	− E	John is too tall/short for his pants.
	comparative	− E	− E	John is taller/shorter than Mary.

I refer to equatives and interrogatives as Polarity-Sensitive Constructions because whether or not a given form is evaluative depends on the polarity of its adjective. The comparative and excessive are Polarity-Insensitive [–E] Constructions because they are non-evaluative regardless of polarity; the positive form is a Polarity-Insensitive [+E] Construction because it is evaluative regardless of polarity. To account for this wider distribution of evaluativity, I propose that it is encoded in a null degree modifier 'EVAL'.

(3) EVAL $\leadsto \lambda D\lambda d.\ D(d) \wedge d > s$

EVAL is a function from a set of degrees to a subset of those degrees that exceed a contextually-set standard s. A derivation of the positive construction is below. The set of degrees that is the range of EVAL is bound via existential closure.

(4) a. $[\![\text{John tall}]\!] = \lambda d.\text{tall}'(j, d)$
     b. $[\![\text{EVAL John tall}]\!] = \lambda d.\text{tall}'(j, d) \wedge d > s \leadsto \exists d.\text{tall}'(j, d) \wedge d > s$

This analysis predicts that evaluativity can occur in any degree construction, with or without overt degree morphology. This requires constraining the distribution of EVAL in two respects to account for the data in (2): I) with respect to the difference between positive and negative antonyms, and II) with respect to the difference between Sensitive Constructions and Insensitive Constructions.

I) I assume that antonyms make use of the same scale, but in reverse directions (Cresswell, 1976; Seuren, 1984; von Stechow, 1984, a.o.). This is because the negative antonym is the negation of the positive antonym, and is therefore morphologically marked in the same way that *incomplete* is marked with respect to *complete*. This is supported by evidence in Rullman (1995) and Heim (2007) that the negative antonyms are composed of the positive antonym and a negative morpheme which displays independent scope relative to quantifiers.

II) Sensitive Constructions differ from Insensitive Constructions in that their negative-antonym forms entail their positive-antonym counterparts.

(5)   a.   Alek is as short as Gisele. $\Rightarrow$ Alek is as tall as Gisele.   *(Sensitive Construction)*
        b.   Alek is shorter than Gisele. $\nRightarrow$ Alek is taller than Gisele.   *(Insensitive Construction)*

The definition in (3) predicts that all of the sentences in (2) are ambiguous between an evaluative interpretation and a non-evaluative one. This is shown for the interrogative below:

(6)   a.   How tall is John? $\lambda p \exists d.\ p = \lambda w.\text{tall}_w(\text{j},d) \wedge p(@)$
        b.   How EVAL tall is John? $\lambda p \exists d.\ p = \lambda w.\text{tall}_w(\text{j},d) \wedge d > s \wedge p(@)$
(7)   a.   How short is John? $\lambda p \exists d.\ p = \lambda w.\text{short}_w(\text{j},d) \wedge p(@)$ Blocked
        b.   How EVAL short is John? $\lambda p \exists d.\ p = \lambda w.\text{short}_w(\text{j},d) \wedge d > s \wedge p(@)$

The two forms without EVAL ((6a) and (7a)) mean the same thing: they both ask John's height. The marked form with *short* is therefore blocked by the unmarked form with *tall*. The two forms with EVAL ((6b) and (7b)) mean different things; one presupposes John is tall, the other that he is short. As a result, there is no blocking. The final effect is that *How short is John?* only surfaces with an evaluative reading.

This effect is relegated to Polarity-Sensitive Constructions (interrogatives and equatives) because they are the only forms that display the entailment relation in (5a). Because Polarity-Insensitive Constructions like *taller than* and *shorter than* are never synonymous, there is no blocking between their non-evaluative forms. The comparative *shorter than* can therefore surface with its non-evaluative meaning. This analysis predicts that although Polarity-Insensitive [–E] Constructions are not *always* evaluative, they *can* have an evaluative meaning. I argue that this is a harmless commitment. Polarity-Insensitive [+E] Constructions are always evaluative because the non-EVAL meanings of the positive form – regardless of polarity – are semantically uninformative.

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