

# Antonymy and Evaluativity\*

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A construction is evaluative if it makes reference to a degree that exceeds a contextually-valued standard. The sentence *John is tall* is evaluative because it places John's height above the standard of tallness relevant to John.

I argue here that:

- Evaluativity is pervasive in degree constructions;
- The distribution of evaluativity is conditioned by a combination of two features:
  - The polarity of the predicate in a given construction (e.g. *short* vs. *tall*); and
  - The nature of the degree quantifier (e.g. the equative *as* vs. the comparative *-er*).

## 1 Evaluativity.

### 1.1 The data.

- (1) a. That is a tall man.  
b. That man is tall.

- Evaluativity is:
    - Context-sensitive<sup>1</sup>
    - Not necessarily part of the meaning of the adjective.
      - \* We can test for evaluativity in constructions with overt degree morphology by determining if they entail the corresponding positive construction (Bierwisch, 1989).
      - \* This notion of entailment is one that requires holding fixed the context of utterance, and thus the contextually-valued standard, across the two constructions:  $\varphi$  entails  $\psi$  iff for every context  $c$ , if  $\varphi$  is true at  $c$  then so is  $\psi$  (Kaplan, 1989).
- (2) a. Amy is taller than Betty.      b. Amy is as tall as Betty.
- \* (2a) is not evaluative because it does not entail that Amy is tall.

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<sup>1</sup>See Katz (1972); Bartsch and Vennemann (1972); Seigel (1977); von Stechow (1984); Ludlow (1989); and Kennedy (*to appear*) (among others) for discussion of the nature of the standard of comparison.

## 1.2 Analyses of evaluativity.

- Accounts of the positive construction, and hence evaluativity, have focused on the two constructions in (3).

- (3) a. Amy is 5ft tall.  
b. Amy is tall.

- The MP construction in (3a) suggests that the adjective *tall* takes two arguments: an individual (*Amy*) and a degree (*5ft*) (Larson, 1988; Seuren, 1978; Rullman, 1995; Heim, 2000).<sup>2</sup>

- (4)  $\llbracket \text{tall} \rrbracket = \lambda x \lambda d. \text{tall}(x, d)$

- To be tall to degree *d* is to be at least *d*-tall.

- The dilemma: how to associate the presence of a semantic property with the absence of any additional morphology (and the absence of a semantic property with the presence of additional morphology).
- The standard solution: evaluativity is contributed by a null morpheme that occurs in lieu of overt degree morphology (Bartsch and Vennemann, 1972; Cresswell, 1976; von Stechow, 1984; Kennedy, 1999).

- (5)  $\text{POS} = \lambda P \lambda x \exists d. P(x, d) \wedge d > s$

- As it's characterized in Kennedy's work, POS is incompatible with overt degree morphology on two levels:
  - Syntactically: POS in the head of DegP blocks other degree morphology
  - Semantically: POS binds the degree variable *d*, disallowing it to be further saturated/modified

## 1.3 Evaluativity's wide(r) distribution.

- Is there complementary distribution between overt degree morphology and evaluativity?

- (6) *Comparative*
- a. Amy is taller than Betty.  $\rightarrow$  Amy is tall.  
b. Amy is shorter than Betty.  $\rightarrow$  Amy is short.

- (7) *Excessive*
- a. Amy is too tall for her pants.  $\rightarrow$  Amy is tall.  
b. Amy is too short for her pants.  $\rightarrow$  Amy is short.

<sup>2</sup>Alternative views: adjectives are functions from individuals to degrees ( $\langle e, d \rangle$ ) (Cresswell, 1976; Hellan, 1981; von Stechow, 1984; Bierwisch, 1989; Kennedy, 1999); adjectives are functions from objects to truth values on partitioned domains (McConnell-Ginet, 1973; Kamp, 1975; Fine, 1975; Klein, 1980, 1982; Neeleman et al., 2004).

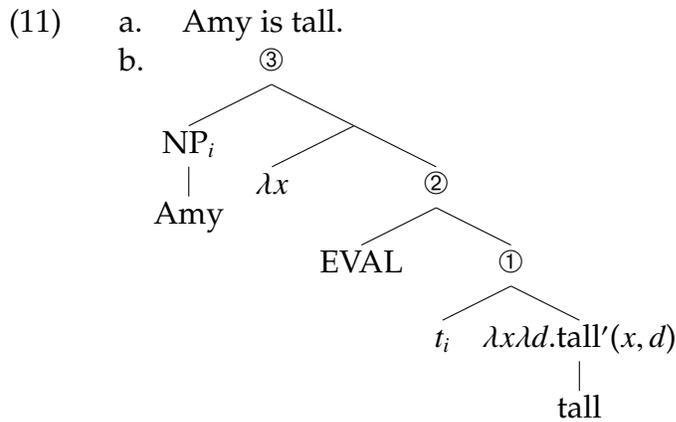
- But:
  - (8) *Equative*
    - a. Amy is as tall as Betty.  $\rightarrow$  Amy is tall.
    - b. Amy is as short as Betty.  $\rightarrow$  Amy is short.
  - (9) *Interrogative*
    - a. How tall is Amy?  $\rightarrow_{presup.}$  Amy is tall.
    - b. How short is Amy?  $\rightarrow_{presup.}$  Amy is short.
- The data in (8b) and (9b) indicate that we need an account of evaluativity that doesn't preclude its occurring with degree quantifiers (§2).
- The data in (6) and (7), as well as (8a) and (9a), indicate that the distribution of evaluativity needs to be constrained to account for:
  1. the difference between positive and negative antonyms (§3.1), and
  2. the difference between e.g. the comparative and the equative (§3.2).

## 2 The Degree Modifier EVAL.

- This first goal can be achieved by encoding evaluativity in a degree modifier, type  $\langle\langle d, t \rangle, \langle d, t \rangle\rangle$ .
- In other work (Rett *to appear*), I argue that 'm-words' like *many* and *much* are degree modifiers (rather than generalized quantifiers).
- Evaluative constructions reference degrees that exceed a standard. So we can think of the degree modifier that encodes evaluativity, 'EVAL,' as a function from a set of degrees to a subset of those degrees (the ones above the standard).

$$(10) \quad \text{EVAL}_i \rightsquigarrow \lambda D_{\langle d, t \rangle} \lambda d. D(d) \wedge d > s_i$$

- ' $s_i$ ' is a pragmatic variable (i.e. is left unbound in the semantics). Each instance of EVAL in a sentence introduces a single pragmatic variable.



$$\textcircled{1} \quad \lambda d. \text{tall}'(x, d)$$

$$\textcircled{2} \quad \lambda d. \text{tall}'(x, d) \wedge d > s_{tall}$$

$$\textcircled{3} \quad \lambda d. \text{tall}'(a, d) \wedge d > s_{tall} \rightsquigarrow \exists d. \text{tall}'(a, d) \wedge d > s_{tall}$$

- Given a situation in which Amy is 5ft tall and the standard of tallness applicable to Amy is 3ft, then the argument of EVAL in (11b) includes the degrees {1ft, 2ft, 3ft, 4ft, 5ft}, and the value includes {4ft, 5ft}.<sup>3</sup>
- This allows us two different mechanisms for resolving the two differences between the constructions in (3): the difference in arguments is resolved by existential closure, and the difference in meaning is resolved by EVAL.
- Notice that this predicts that the positive construction is ambiguous between an evaluative and a non-evaluative interpretation; this is not the case, as positive constructions are evaluative.
  - The fact that EVAL is a modifier predicts that it can optionally occur in degree constructions.

(12) Amy is tall.

- NON-EVALUATIVE:  $\exists d.tall'(a,d)$
- EVALUATIVE:  $\exists d.tall'(a,d) \wedge d > s_{tall}$

(13) Amy is short.

- NON-EVALUATIVE:  $\exists d.short'(a,d)$
- EVALUATIVE:  $\exists d.short'(a,d) \wedge d > s_{short}$

- But the interpretations in (12a) and (13a) are not available. Why?
- They both assert that Amy has a height; this assertion is trivial, and so the reading is out pragmatically.
- The non-evaluative interpretation of the positive form *can* surface. In ‘exceed’ comparatives (Stassen, 1985), the positive form introduces the scale on which the two arguments are being compared.<sup>4</sup>

(14) Mti hu ni mrefu ku -shinda ule                      *Swahili*, (Stassen, 1985, 43)  
 tree this is big    INF -exceed that  
*This tree is taller than that tree.*

### 3 The Distribution of EVAL.

- The above account predicts that EVAL, hence evaluativity, can occur freely in any degree construction. We’ve seen that this is not the case:
  - Comparatives and excessives do not entail that  $x$  is  $A$ ;
  - Equatives and interrogatives with positive antonyms do not entail that  $x$  is  $A$ ;
  - But equatives and interrogatives with negative antonyms do entail that  $x$  is  $A$ .
- The goal is to derive the distribution of EVAL from independent properties of the degree constructions at hand.

<sup>3</sup>Of course, these sets are dense. I restrict the discussion to degrees representing feet for expository reasons.

<sup>4</sup>Other languages which use this comparison strategy include, among others, Hausa, Kirundi, Mandarin, Thai, Vietnamese, Wolof and Yoruba. Thanks to Pam Munro and Russ Schuh for pointing out the significance of this data.

- (15) *The distribution of evaluativity in constructions with overt degree morphology.*

type	form	<i>tall</i>	<i>short</i>	ex.
polar-variant	<b>equative</b>	– E	+ E	Amy is as tall/short as Betty.
	<b>interrogative</b>	– E	+ E	How tall/short is Amy?
polar-invariant	<b>excessive</b>	– E	– E	Amy is too tall/short for her pants.
	<b>comparative</b>	– E	– E	Amy is taller/shorter than Betty.

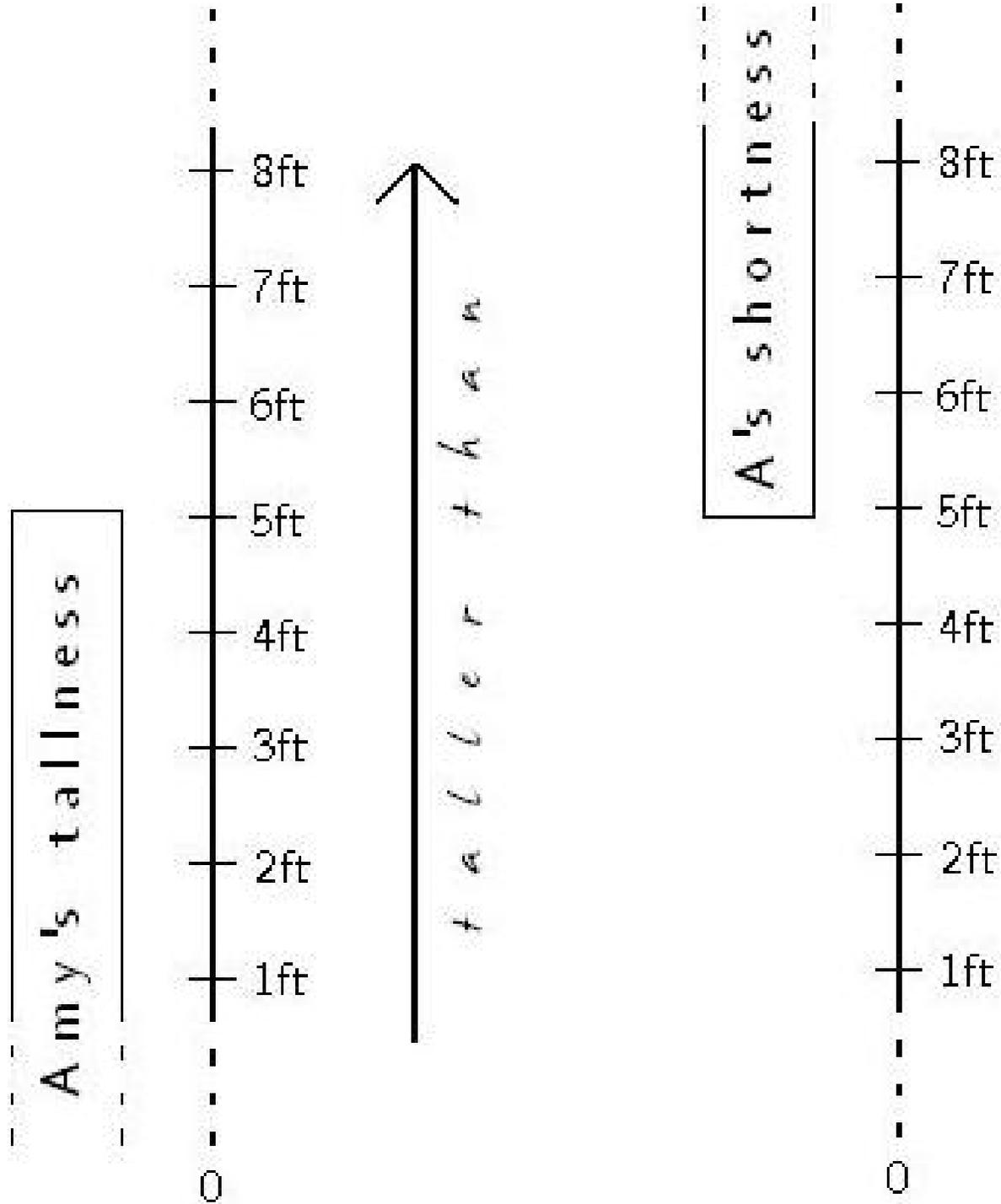
- A construction is [+ E] when it is evaluative in the sense we've been discussing (when it entails 'x is A'). A construction is [– E] if it does not entail that x is A.
- Those constructions whose evaluativity depends on the polarity of the antonym involved are 'polar-variant' constructions. Those whose evaluativity does not depend on the polarity of the antonym are 'polar-invariant'.

### 3.1 Polarity.

- Two antonyms make use of the same scale, but in reverse directions (Cresswell, 1976; Seuren, 1984; von Stechow, 1984; Bierwisch, 1989; Kennedy, 1999).
- (16) a. Amy is taller than Betty. → Amy is not shorter than Betty.  
 b. Amy is shorter than Betty. → Amy is not taller than Betty.

- (17) AMY'S HEIGHT<sup>5</sup>

<sup>5</sup>I assume following Kennedy and McNally (2005) that *tall* and *short* are completely open scales, i.e. they have no upper or lower bound.



- Adjectival scales are triples  $\langle D, <_{\mathcal{R}}, \psi \rangle$ , with  $D$  a set of degrees,  $<_{\mathcal{R}}$  a total ordering on  $D$ , and  $\psi$  a dimension (e.g. 'height') (Bartsch and Vennemann, 1972; Bierwisch, 1989; Kennedy, 1999).
- $D_{tall}$  and  $D_{short}$  differ minimally in their orderings.

(18) a. Amy's tallness:  $\{1ft, 2ft, 3ft, 4ft, 5ft\}_{tall}$

b. Amy's shortness:  $\{5\text{ft}, 6\text{ft}, 7\text{ft}, 8\text{ft}, 9\text{ft}, \dots\}_{\text{short}}$

- Notice that the set of degrees to which Amy is tall and the set of degrees to which Amy is short have an endpoint in common; this is a factor of their antonymy.

(19) For all adjectives  $A, A'$  and for all  $x$  in the domain of  $A, A'$ ,  
 $A$  and  $A'$  are antonyms iff:  $\text{MAX}[A(x)] = \text{MAX}[A'(x)]$   
 $\wedge A(x) \cap A'(x) = \{\text{MAX}(A(x))\}$

Where  $\text{MAX}$  is defined relative to the direction of the scale (Rullman, 1995, pg. 55):

(20) Let  $D$  be a set of degrees ordered by the relation  $<_{\mathcal{R}}$ , then  
 $\text{MAX}(D) = \text{id}[d \in D \wedge \forall d' \in D [d' <_{\mathcal{R}} d ] ]$

- A negative-polarity antonym is marked with respect to a positive-polarity antonym.

- “We tend to say that small things lack size, that what is required is less height, and so on, rather than that large things lack smallness and that what is required is more lowness” (Lyons, 1977, 275). (see also Sapir, 1944, 1949)
- The conclusion that follows is that e.g. “*long* is unmarked with respect to *short* because it occurs in a variety of expressions from which *short* is excluded” (Cruse, 1986, 173):

(21) a. This one is 10ft long.  
 b. \*This one is 10ft short.

(22) a. What is its length?  
 b. \*What is its shortness?

- See also Rullman (1995); Heim (2007).

### 3.2 Polar Invariance.

- A polar-variant construction, like the equative, is one for which the negative-antonym form is [+ E] and its positive-antonym form is [– E]. As a consequence,

(23) a. Amy is as short as Betty.  $\rightarrow$  Amy is as tall as Betty.  
 b. How short is Amy?  $\rightarrow$  How tall is Amy?<sup>6</sup>

- If we know that Amy is as short as Betty, we know two things: they are the same height, and they are both short.
- If we know that Amy is as tall as Betty, we only know that they are the same height.

- This entailment pattern does *not* hold for polar-invariant forms.

(24) a. Amy is shorter than Betty.  $\rightarrow$  Amy is taller than Betty.  
 b. Amy is too short for her pants.  $\rightarrow$  Amy is too tall for her pants.

- If we know that Amy is shorter than Betty, we know that Amy's height is higher on the 'short' scale than Betty's height: Betty is taller than Amy.

<sup>6</sup>I'm assuming a semantics of questions from Groenendijk and Stokhof (1984) in which a question  $Q_1$  entails a question  $Q_2$  iff the denotation of  $Q_1$  is a subset of the denotation of  $Q_2$ .

- If we know that Amy is taller than Betty, we know the opposite (that Amy’s height exceeds Betty’s height on the ‘tall’ scale).
- This shows the difference between polar-variant and -invariant forms:
  - Polar-variant constructions are those for which a negative-antonym form is just a positive-antonym form plus evaluativity. (The TCs of the negative form are a subset of the TCs of the positive form.)
  - Polar-invariant constructions are those for which the TCs of the negative-antonym and positive-antonym forms are contradictory.
- We can hash out this difference in terms of the truth conditions of the constructions.<sup>7</sup>

(25) Amy is as tall as Betty.

- a. NON-EVALUATIVE:  $\{d_1:\text{tall}'(a,d_1)\} = \{d_2:\text{tall}'(b,d_2)\}$
- b. EVALUATIVE:  $\{d_1:\text{tall}'(a,d_1) \wedge d_1 > s_{\text{tall}}\} = \{d_2:\text{tall}'(b,d_2) \wedge d_2 > s_{\text{tall}}\}$

(26) Amy is as short as Betty.

- a. NON-EVALUATIVE:  $\{d_1:\text{short}'(a,d_1)\} = \{d_2:\text{short}'(b,d_2)\}$
- b. EVALUATIVE:  $\{d_1:\text{short}'(a,d_1) \wedge d_1 > s_{\text{short}}\} = \{d_2:\text{short}'(b,d_2) \wedge d_2 > s_{\text{short}}\}$

(27) I.  $\llbracket(25a)\rrbracket \leftrightarrow \llbracket(26a)\rrbracket$

II.  $\text{tall} <_{\text{markedness}} \text{short}$

$\therefore$  (25a) blocks (26a)

- For polar-variant constructions, the non-evaluative positive-antonym form (25a) and the non-evaluative negative-antonym form (26a) have the same truth conditions.
- As a result, the non-evaluative negative-antonym form is blocked as marked.

(28) Amy is as tall as Betty.  $\rightarrow$  NON-EVALUATIVE  
 $\searrow$  EVALUATIVE

(29) Amy is as short as Betty.  $\rightarrow$  NON-EVALUATIVE  
 $\searrow$  EVALUATIVE

- In this account, a construction is [+ E] if it is unambiguously evaluative. A construction is [– E] if it is ambiguous between an evaluative and a non-evaluative reading.
- For polar-invariant constructions, the non-evaluative positive-antonym form (30a) and the non-evaluative negative-antonym form (31a) do *not* have the same truth conditions.

(30) Amy is taller than Betty.

- a. NON-EVALUATIVE:  $\{d_1:\text{tall}'(a,d_1)\} \supset \{d_2:\text{tall}'(b,d_2)\}$
- b. EVALUATIVE:  $\{d_1:\text{tall}'(a,d_1) \wedge d_1 > s_{\text{tall}}\} \supset \{d_2:\text{tall}'(b,d_2) \wedge d_2 > s_{\text{tall}}\}$

(31) Amy is shorter than Betty.

- a. NON-EVALUATIVE:  $\{d_1:\text{short}'(a,d_1)\} \supset \{d_2:\text{short}'(b,d_2)\}$
- b. EVALUATIVE:  $\{d_1:\text{short}'(a,d_1) \wedge d_1 > s_{\text{short}}\} \supset \{d_2:\text{short}'(b,d_2) \wedge d_2 > s_{\text{short}}\}$

- The two non-evaluative interpretations have distinct truth conditions: Imagine Amy’s height is 5ft and Betty’s is 4ft.

<sup>7</sup>Here I crucially take the bare equative to have an ‘exactly’ interpretation, rather than an ‘at least’ interpretation.

(32) Amy is taller than Betty<sub>Non-E</sub>:  
 $\rightsquigarrow \{1\text{ft}, 2\text{ft}, 3\text{ft}, 4\text{ft}, 5\text{ft}\}_{tall} \supset \{1\text{ft}, 2\text{ft}, 3\text{ft}, 4\text{ft}\}_{tall}$  (TRUE)

(33) Amy is shorter than Betty<sub>Non-E</sub>:  
 $\rightsquigarrow \{5\text{ft}, 6\text{ft}, 7\text{ft}, 8\text{ft}, 9\text{ft}, \dots\}_{short} \supset \{4\text{ft}, 5\text{ft}, 6\text{ft}, 7\text{ft}, 8\text{ft}, \dots\}_{short}$  (FALSE)

- This means that the non-evaluative negative-antonym form is not blocked, and both constructions are ambiguous.

(34) Amy is taller than Betty.  $\longrightarrow$  NON-EVALUATIVE  
 $\searrow$  EVALUATIVE

(35) Amy is shorter than Betty.  $\longrightarrow$  NON-EVALUATIVE  
 $\searrow$  EVALUATIVE

- This analysis crucially assumes that a [– E] construction *can* – but need not – have an evaluative interpretation. This is a harmless assumption.

- The hearer knows whether the degree in question exceeds the relevant standard;
- The hearer does not know whether the degree exceeds the relevant standard

- (36) a. I don't know how tall or short Amy is.  
 b. I don't know whether Amy is tall or short (or the extent to which she is).

## 4 Extending the Account.

### 4.1 Localizing the Competition.

- In the analysis above, a construction is rendered unambiguously evaluative ([+ E]) if there exists a competing construction that has the same meaning and is less marked than it.

- (37) a. Amy is shorter than Betty.  
 b. Amy is taller than Betty.

- This is not restrictive enough.

(38) Betty is taller than Amy.

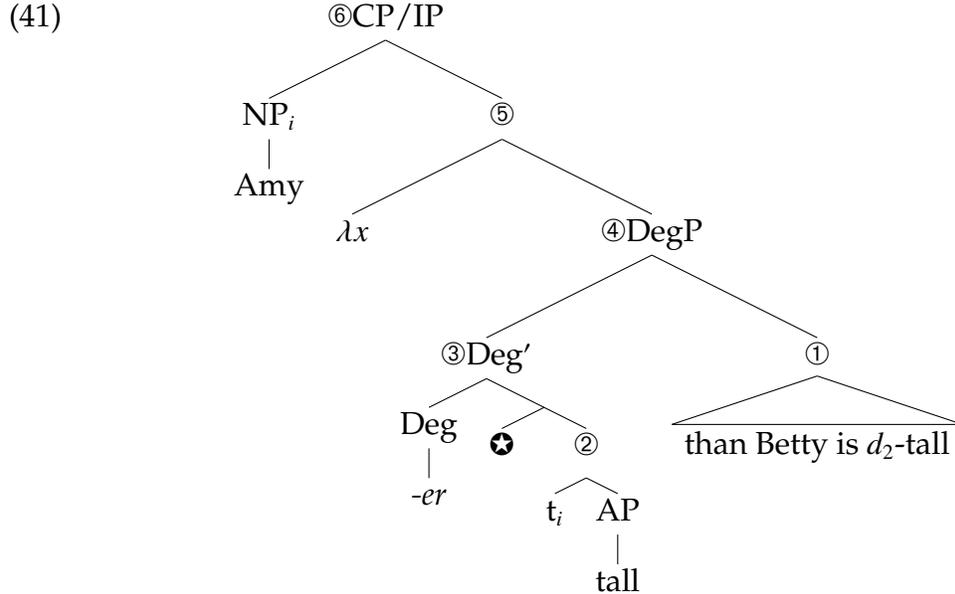
Assuming Amy is 4ft and Betty is 5ft:

(39) Amy is shorter than Betty<sub>Non-E</sub>:  
 $\rightsquigarrow \{4\text{ft}, 5\text{ft}, 6\text{ft}, 7\text{ft}, 8\text{ft}, \dots\}_{short} \supset \{5\text{ft}, 6\text{ft}, 7\text{ft}, 8\text{ft}, 9\text{ft}, \dots\}_{short}$  (TRUE)

(40) Betty is taller than Amy<sub>Non-E</sub>:  
 $\rightsquigarrow \{1\text{ft}, 2\text{ft}, 3\text{ft}, 4\text{ft}, 5\text{ft}\}_{tall} \supset \{1\text{ft}, 2\text{ft}, 3\text{ft}, 4\text{ft}\}_{tall}$  (TRUE)

- Yet (38) does not serve to block the non-evaluative interpretation of (37a) (which would result in it being [+ E]).
- The two factors that determine evaluativity are the polarity of the predicate and the polarity-(in)variance of the quantifier. The comparative in (38) is not viable competition for (37a) because it differs from (37a) in other ways.

- Assuming a structure in which the degree quantifier and gradable predicate form a constituent (Abney, 1987; Larson, 1988; Corver, 1990, 1993; Kennedy, 1999, 2002; Grosu and Horvath, 2006), we can assign the compositional semantics below.<sup>8</sup>



- ①:  $\{d_2: \text{tall}'(b, d_2)\}$   
 ②:  $\{d_1 : \text{tall}'(x, d_1)\}$   
 ③:  $\lambda D_2[\{d_1. \text{tall}'(x, d_1)\} \supset D_2]$   
 ④:  $\{d_1. \text{tall}'(x, d_1)\} \supset \{d_2: \text{tall}'(b, d_2)\}$   
 ⑤:  $\lambda x[\{d_1. \text{tall}'(x, d_1)\} \supset \{d_2: \text{tall}'(b, d_2)\}]$   
 ⑥:  $\{d_1. \text{tall}'(a, d_1)\} \supset \{d_2: \text{tall}'(b, d_2)\}$

- This configuration allows us a way of isolating the effects of the degree quantifier and the predicate from the rest of the construction, and thus a more intuitive way of testing the evaluativity of a given construction.

(42) GENERALIZED ENTAILMENT:  
 $\forall f, g \in D_{\langle \sigma, t \rangle}: f \Rightarrow g \text{ iff } \forall x \in D_{\sigma}, f(x) \rightarrow g(x)$

- (43) a. Competition between equative constructions:  
 $\lambda D_2[\{d_1 : \text{short}'(x, d_1)\} = D_2] \Leftrightarrow \lambda D_2[\{d_1 : \text{short}'(x, d_1)\} = D_2]$   
 b. Competition between comparative constructions:  
 $\lambda D_2[\{d_1 : \text{tall}'(x, d_1)\} \supset D_2] \Leftrightarrow \lambda D_2[\{d_1 : \text{tall}'(x, d_1)\} \supset D_2]$

- Assuming ellipsis is only possible under identity (and that cross-polar comparison is anomalous, Kennedy (1999)), we can infer that  $D_2$  has the same dimension and ordering as  $D_1$ .

- (44) Competition between equative constructions:  
 a.  $[\{d_1 : \text{short}'(x, d_1)\} = \{d_2: \text{short}'(y, d_2)\}] \Leftrightarrow [\{d_1: \text{tall}'(x, d_1)\} = \{d_2: \text{tall}'(y, d_2)\}]$   
 b.  $[\{5\text{ft}, 6\text{ft}, 7\text{ft}, 8\text{ft}, \dots\}_{\text{short}} = \{d_2: \text{short}'(y, d_2)\}]$   
 $\Leftrightarrow [\{1\text{ft}, 2\text{ft}, 3\text{ft}, 4\text{ft}, 5\text{ft}\}_{\text{tall}} = \{d_2: \text{tall}'(y, d_2)\}]$

<sup>8</sup>This is not an evaluative construction, but if it were, ★ marks where EVAL would be located in the tree.

$$\begin{aligned} \text{c. } & [\{5\text{ft}, 6\text{ft}, 7\text{ft}, 8\text{ft}, \dots\}_{\text{short}} = \{5\text{ft}, 6\text{ft}, 7\text{ft}, 8\text{ft}, \dots\}_{\text{short}}] \\ & \Leftrightarrow [\{1\text{ft}, 2\text{ft}, 3\text{ft}, 4\text{ft}, 5\text{ft}\}_{\text{tall}} = \{1\text{ft}, 2\text{ft}, 3\text{ft}, 4\text{ft}, 5\text{ft}\}_{\text{tall}}] \end{aligned}$$

(45) Competition between comparative constructions:

$$\begin{aligned} \text{a. } & [\{d_1 : \text{short}'(x, d_1)\} \supset \{d_2 : \text{short}'(y, d_2)\}] \Leftrightarrow [\{d_1 : \text{tall}'(x, d_1)\} \supset \{d_2 : \text{tall}'(y, d_2)\}] \\ \text{b. } & [\{5\text{ft}, 6\text{ft}, 7\text{ft}, 8\text{ft}, \dots\}_{\text{short}} \supset \{d_2 : \text{short}'(y, d_2)\}] \\ & \Leftrightarrow [\{1\text{ft}, 2\text{ft}, 3\text{ft}, 4\text{ft}, 5\text{ft}\}_{\text{tall}} \supset \{d_2 : \text{tall}'(y, d_2)\}] \\ \text{c. } & [\{5\text{ft}, 6\text{ft}, 7\text{ft}, 8\text{ft}, \dots\}_{\text{short}} \supset \{4\text{ft}, 5\text{ft}, 6\text{ft}, 7\text{ft}, \dots\}_{\text{short}}] \\ & \Leftrightarrow [\{1\text{ft}, 2\text{ft}, 3\text{ft}, 4\text{ft}, 5\text{ft}\}_{\text{tall}} \supset \{1\text{ft}, 2\text{ft}, 3\text{ft}, 4\text{ft}\}_{\text{tall}}] \end{aligned}$$

- Restricting the competition to the Deg' allows us to hold constant aspects of the construction not relevant to the competition.
- Generalized entailment allows us to determine similarity in meaning at this localized level; we can establish the level of competition here by making independently-motivated assumptions about the relationship between the arguments of a degree quantifier.

## 4.2 A Typology of Gradable Adjectives.

- Although the distribution of EVAL presumably remains the same across constructions, we see different evaluativity patterns for different types of adjectives.

- (46) a. Amy is taller than Betty.  $\rightarrow$  Amy is tall.  
 b. Amy is shorter than Betty.  $\rightarrow$  Amy is short.

- (47) a. This glass is cleaner than that glass.  $\rightarrow$  This glass is clean.  
 b. This glass is dirtier than that glass.  $\rightarrow$  This glass is dirty.

- (48) a. This glass is more opaque than that glass.  $\rightarrow$  This glass is opaque.  
 b. This glass is more transparent than that glass.  $\rightarrow$  This glass is transparent.

- Rotstein and Winter (2004); Kennedy and McNally (2005) observe that the scales associated with different gradable adjectives differ in scale structure: they can have only a lower bound, only an upper bound, be completely open or completely closed.

- (49) *Open scales*  
 a. ??perfectly/??slightly tall  
 b. ??perfectly/??slightly short

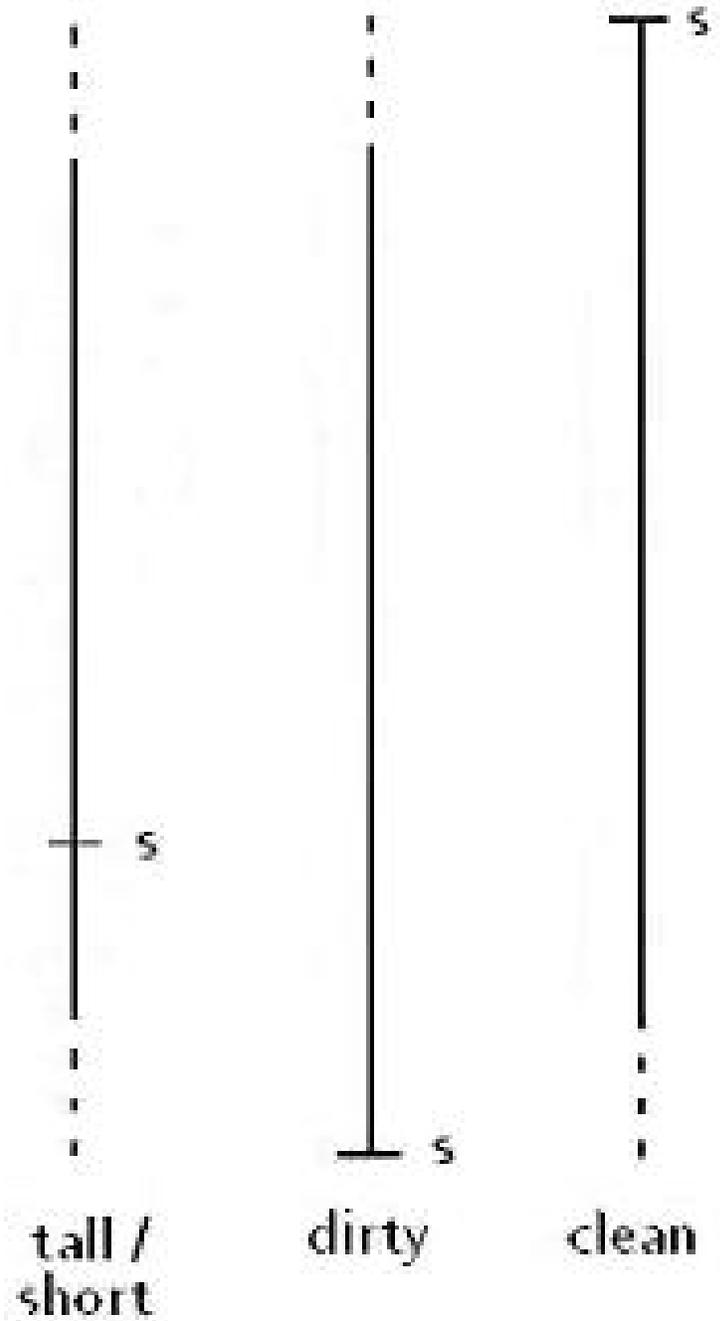
- (50) *Lower/upper closed scales*  
 a. ??perfectly/slightly dirty  
 b. perfectly/??slightly clean

- (51) *Closed scales*  
 a. perfectly/slightly opaque  
 b. perfectly/slightly transparent

- Kennedy's (*to appear*) economy principle: "Maximize the contribution of the conventional meanings of the elements of a sentence to the computation of its truth conditions."  
 – Because the scales associated with e.g. *tall* and *short* lack bounds, their standards must be contextually determined.

- Adjectives associated with bounded scales have natural standards in their endpoints, and these become the value of the standard.

(52) Scale structures and standard placement



- Assume that EVAL has the same optional distribution.

- Constructions with closed scale adjectives (51) and lower-bound adjectives (50a) are always evaluative because their standard always corresponds with their lower bound; to be on the scale is to be above the standard on the scale (EVAL or no EVAL).
- Constructions with upper-bound adjectives (50b) are never evaluative because their standards are set at their upper bound.

## 5 Conclusion.

- The distribution of evaluativity is too wide to be accounted for with POS.
- The distribution of evaluativity is too narrow to be accounted for with EVAL... without further assumptions.
- The above discussion restricts evaluativity in constructions with overt degree morphology based on independent characteristics: the polarity of the predicate and the nature of the degree quantifier.
- Although the distribution of EVAL remains the same across degree constructions, evaluativity patterns in degree constructions vary based on the standard placement on the predicate scales.

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