

# THE ORIGINS OF NOMINAL GRADABILITY

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# INTRODUCTION

Something we think we understand (Kennedy & McNally 2005, Rotstein & Winter 2001, others):

- (1) a. rather  $\left\{ \begin{array}{l} \text{transparent} \\ \text{straight} \\ \text{long} \end{array} \right\}$
- b. perfectly  $\left\{ \begin{array}{l} \text{transparent} \\ \text{straight} \\ \# \text{long} \end{array} \right\}$
- c. partly  $\left\{ \begin{array}{l} \text{transparent} \\ \# \text{straight} \\ \# \text{long} \end{array} \right\}$

Something we definitely don't understand:

(2) a. real  $\left\{ \begin{array}{l} \text{idiot} \\ \text{smoker} \\ \text{sportscar} \end{array} \right\}$

b. big  $\left\{ \begin{array}{l} \text{idiot} \\ \text{smoker} \\ \# \text{sportscar} \end{array} \right\}$

c. utter  $\left\{ \begin{array}{l} \text{idiot} \\ \# \text{smoker} \\ \# \text{sportscar} \end{array} \right\}$

(# indicates ill-formedness on a degree reading)

Big-picture questions:

- How does nominal gradability come about?
- What makes certain nouns more easily gradable than others?
- How do nouns differ from adjectives with respect to gradability?
- What does this reveal about gradability in general?

## Guiding ideas:

- nouns are only indirectly gradable
- nouns lack a degree argument, but . . .
- . . . some are nevertheless associated with scales
- a major axis of variation among degree-modified nouns:  
how a scale is retrieved from a noun meaning

- **Adnominal degree modifiers**
- Nominal gradability and degree arguments
- Prototypicality modifiers
- Size adjectives and their kin
- The *utter* class
- Broader considerations
- Conclusion

## THEY EXIST

The modifiers in (3) are not actually (ordinary) adjectives (Morzycki 2009, de Vries 2010, Xie 2010; cf. Constantinescu 2011):

- (3)  $\left\{ \begin{array}{l} \text{true} \\ \text{real} \\ \text{slight} \\ \text{total} \\ \text{utter} \\ \text{absolute} \\ \text{outright} \end{array} \right\} \left\{ \begin{array}{l} \text{disaster} \\ \text{idiot} \\ \text{magic} \\ \text{bullshit} \end{array} \right\}$

The size adjectives in (4) **are** adjectives, but doing something special:

(4)  $\left\{ \begin{array}{l} \text{big} \\ \text{huge} \\ \text{colossal} \\ \text{humungous} \\ \# \text{small} \\ \# \text{little} \\ \# \text{diminutive} \end{array} \right\} \text{ idiot}$



## NOT ORDINARY ADJECTIVES

Not the same meaning as homophonous adjectives:

- *true bullshit* would, on the usual meaning of *true*, be contradictory
- Daniel Dennett (in a 2003 TED talk): *real magic* is the kind that isn't real, and *fake magic* is the kind that is
- *total idiot* but not #*partial idiot*
- some don't even have adjectival homophones: *utter*, *downright*, *out-and-out*, *straight-up*, *outright*

No predicative use:

(5) #That  $\left\{ \begin{array}{l} \text{disaster} \\ \text{idiot} \\ \text{magic} \\ \text{bullshit} \end{array} \right\}$  is  $\left\{ \begin{array}{l} \text{true} \\ \text{real} \\ \text{utter} \\ \text{absolute} \\ \text{outright} \end{array} \right\}$ .

Even worse with *seem*, a classic diagnostic of adjective-hood:

(6) #That  $\left\{ \begin{array}{l} \text{disaster} \\ \text{idiot} \\ \text{magic} \\ \text{bullshit} \end{array} \right\}$  seems  $\left\{ \begin{array}{l} \text{true} \\ \text{real} \\ \text{utter} \\ \text{absolute} \\ \text{outright} \end{array} \right\}$ .

Can't support their own degree modification:

(7) #some { absolutely true  
completely real  
very utter  
quite absolute  
fully outright } { disaster  
idiot  
magic  
bullshit }

Broadly similar facts in various other languages (additional examples welcome!).

Japanese:

(8)	$\left. \begin{array}{l} \text{mattaku-no} \\ \textbf{utter} \\ \text{kanzen-na} \\ \textbf{absolute} \\ \text{kanpeki-na} \\ \textbf{outright} \end{array} \right\}$	$\left. \begin{array}{l} \\ \\ \text{baka} \\ \textbf{idiot} \end{array} \right\}$
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Japanese counterparts also lack a predicative use:

- (9) #Ano-baka-wa **that idiot** { **mattaku**  
**utter**  
 kanzen  
**absolute**  
 kanpeki  
**outright** } -da .  
**is**

‘That idiot is utter/absolute/outright.’

Japanese counterparts also can't support their own degree modification:

(10) #	}	totemo	}	mattaku-no	}	baka
		<b>very</b>		<b>utter</b>		
		kanari		kanzen-na		
		<b>pretty</b>		<b>absolute</b>		
		motto		kanpeki-na		<b>idiot</b>
		<b>more</b>		<b>outright</b>		

## INDIRECT EVIDENCE

Adnominal degree words often have ad-adjectival cognates:

- (11) a. true ~ truly
- b. real ~ really
- c. utter ~ utterly
- d. slight ~ slightly
- e. absolute ~ absolutely
- f. outright ~ outright (e.g., *outright dead*)
- g. flat-out ~ flat-out (e.g., *flat-out dead*)
- h. downright ~ downright (e.g., *downright dead*)

## SUMMARY

So, these adnominal modifiers:

- syntactically & semantically distinct from ordinary adjectives
- analogous to degree morphemes in AP such as *more*, *very*, *less*, *really*



- ✓ Adnominal degree modifiers
  - **Nominal gradability and degree arguments**
  - Prototypicality modifiers
  - Size adjectives and their kin
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## GRADING NOUNS

Nouns support more structurally complicated degree constructions too:

- (12) a. Clyde is more phonologist than phonetician.  
b. Clyde is more of an idiot than Floyd.
  
- (13) a. Clyde is a bigger idiot than Floyd.  
b. Clyde is as big an idiot as Floyd.

Reasons to think nouns have a degree argument:

- Nouns have specialized degree words.
- Nouns support comparatives and equatives.
- Gradability is crosscategorical (Sapir 1944, Bolinger 1972, Abney 1987, Doetjes 1997, others).

Slap on a degree argument and go home?

Nagging worry: nouns aren't **as** gradable as adjectives.

## INTERLUDE ABOUT DIMENSIONAL ADJECTIVES

Bierwisch (1988a,b, 1989) suggests adjectives come in two flavors:

- dimensional adjectives: *tall, heavy, hot*
- evaluative adjectives: *stupid, ugly, lazy*

Crucial intuition: evaluative adjectives are 'less clearly delimited and less systematically structured' (Bierwisch 1988a).

Dimensional adjectives come in positive-negative antonym pairs:

- (14) a. tall  $\longleftrightarrow$  short  
b. heavy  $\longleftrightarrow$  light  
c. hot  $\longleftrightarrow$  cold  
d. deep  $\longleftrightarrow$  shallow

Evaluative adjectives lack a single clear antonym:

- (15) a.  $\left\{ \begin{array}{l} \text{brave, bold,} \\ \text{courageous} \end{array} \right\} \longleftrightarrow \left\{ \begin{array}{l} \text{cowardly, timid,} \\ \text{fearful} \end{array} \right\}$
- b.  $\left\{ \begin{array}{l} \text{clever, bright,} \\ \text{shrewd,} \\ \text{intelligent,} \\ \text{brilliant} \end{array} \right\} \longleftrightarrow \left\{ \begin{array}{l} \text{stupid, idiotic,} \\ \text{foolish,} \\ \text{bone-headed} \end{array} \right\}$
- c.  $\left\{ \begin{array}{l} \text{pretty, beautiful,} \\ \text{gorgeous, attractive,} \\ \text{handsome} \end{array} \right\} \longleftrightarrow \left\{ \begin{array}{l} \text{ugly, unattractive,} \\ \text{hideous, repellant,} \\ \text{grotesque} \end{array} \right\}$
- d.  $\left\{ \begin{array}{l} \text{lazy, indolent,} \\ \text{unproductive} \end{array} \right\} \longleftrightarrow \left\{ \begin{array}{l} \text{hard-working,} \\ \text{industrious,} \\ \text{workaholic} \end{array} \right\}$

Evaluative adjectives have minimal standards (in the Kennedy & McNally 2005 sense):

(16) **dimensional:**

- a. Clyde is taller than Floyd.  
**doesn't entail:** Clyde is tall.
- b. This board is longer than that one.  
**doesn't entail:** This board is long.

(17) **evaluative:**

- a. Clyde is stupider than Floyd.  
**entails:** Clyde is stupid.
- b. Clyde is lazier than Floyd.  
**entails:** Clyde is lazy.



Evaluative adjectives are compatible with *slightly* (a diagnostic for minimal standards; Rotstein & Winter 2001):

- (18) a. #Clyde is slightly tall.  
b. #This board is slightly long.
  
- (19) a. Clyde is slightly stupid.  
b. Clyde is slightly lazy.

Bierwisch: Only dimensional adjectives have a degree argument and are directly gradable.

But evaluative adjectives are gradable too!

- (20) a. Clyde is  $\left\{ \begin{array}{l} \text{uglier} \\ \text{stupider} \\ \text{braver} \\ \text{lazier} \end{array} \right\}$  than Floyd.
- b. Clyde is very  $\left\{ \begin{array}{l} \text{ugly} \\ \text{stupid} \\ \text{brave} \\ \text{lazy} \end{array} \right\}$ .

Bierwisch: a type shift makes these gradable indirectly.

## BACK TO NOUNS

Maybe nouns are (mostly) like evaluative adjectives?

Therefore:

- No degree argument.
- Not directly gradable.
- But gradable indirectly.

Most nouns lack a single clear antonym:

- (21) a.  $\left\{ \begin{array}{l} \text{idiot, moron, cretin,} \\ \text{halfwit, imbecile} \end{array} \right\} \longleftrightarrow \left\{ \begin{array}{l} \text{genius, prodigy,} \\ \text{mastermind} \end{array} \right\}$
- b.  $\left\{ \begin{array}{l} \text{disaster, catastrophe,} \\ \text{calamity} \end{array} \right\} \longleftrightarrow \left\{ \begin{array}{l} \text{triumph, stroke} \\ \text{of luck, godsend,} \\ \text{boon} \end{array} \right\}$
- c.  $\left\{ \begin{array}{l} \text{sportscar, race car,} \\ \text{roadster} \end{array} \right\} \longleftrightarrow \left\{ \begin{array}{l} \text{jalopy, clunker,} \\ \text{lemon} \end{array} \right\}$

Straining slightly at the positive end. Not sure why.

Important systematic exception: nominalized dimensional adjectives:

- (22) a. tallness  $\longleftrightarrow$  shortness  
b. possibility  $\longleftrightarrow$  impossibility  
c. heat  $\longleftrightarrow$  cold(ness)  
d. depth  $\longleftrightarrow$  shallowness

Nouns seem to have minimal standards:

(23) Clyde is  $\left\{ \begin{array}{l} \text{a bigger idiot} \\ \text{more of an idiot} \end{array} \right\}$  than Floyd.

**entails:** Clyde is an idiot.

(24) This is a bigger disaster than that is.

**entails:** That is a disaster.

(25) This is (even) bigger bullshit than that is.

**entails:** That is bullshit.

Often compatible with *slight* (which might be like *slightly*):

- (26) a. Clyde is a slight  $\left\{ \begin{array}{l} \text{idiot} \\ \text{jerk} \end{array} \right\}$ .
- b. There was some slight bullshit on page 12, but overall this paper is pretty reasonable.

Possible answer to why adjectives more suited to gradability than nouns:

- some adjectives are dimensional and have degree arguments
- no nouns are, so no nouns do



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## THE ANALYTICAL INTUITION

Project from here on: degree morphemes in the absence of degree arguments.

*Real* and *true* occur relatively freely (see also Constantinescu 2011):

$$(27) \quad \left. \begin{array}{l} \{ \text{real} \} \\ \{ \text{true} \} \end{array} \right\} \left\{ \begin{array}{l} \text{disaster} \\ \text{idiot} \\ \text{smoker} \\ \text{basketball fan} \\ \text{American} \\ \text{sportscar} \end{array} \right\}$$

Similar freedom in Japanese (*hontoo-no* ‘real’).

Analytical intuition: *real* and *true* use scales of prototypicality.  
A *real idiot* is an especially prototypical one.

Importance of prototypicality for nominal gradability not a surprise (Kamp & Partee 1995, Sassoon 2007a, de Vries 2010, Sassoon 2007b).

Prototypicality is a bit slippery. Predictions?

NPs with no prototypes (Kamp & Partee 1995) should be odd with *real*:

(28) Floyd is a  $\left\{ \begin{array}{l} \text{real} \\ \text{true} \end{array} \right\} \left\{ \begin{array}{l} \text{??male nurse} \\ \# \text{non-Methodist} \\ \# \text{resident} \end{array} \right\}.$

## SKETCH OF AN ANALYSIS

*Real sportscar* (roughly): ‘very similar to the prototypical sportscar’.

Ingredients:

- **prototype** maps a noun denotation to its prototype
- **similar<sub>c</sub>** maps an individual and a prototype to the (maximal) degree of their similarity (in *c*)
- **standard<sub>c</sub>(*N*)** = the degree of similarity to a prototype sufficient to count as a member of extension of *N* (in *c*)
- **>><sub>c</sub>** is a vague ‘considerably exceeds’ relation

*Real* requires exceeding the standard considerably  
(like *very*):

- (29) a.  $\llbracket \textit{real} \rrbracket^c = \lambda f \lambda x . \text{similar}_c(x, \text{prototype}(f)) \gg_c \text{standard}_c(f)$
- b.  $\llbracket \textit{real sportscar} \rrbracket^c$   
 $= \lambda x . \text{similar}_c(x, \text{prototype}(\textit{sportscar})) \gg_c \text{standard}_c(\textit{sportscar})$

Unmodified noun:

$$(30) \quad \llbracket \textit{the sportscar} \rrbracket = \iota x[\mathbf{sportscar}(x)]$$

Assuming (31):

$$(31) \quad \mathbf{sportscar}(x) \iff \mathbf{similar}_c(x, \mathbf{prototype}(\mathbf{sportscar})) > \mathbf{standard}_c(\mathbf{sportscar})$$

These are doubly ruled out:

- (32) a. #That sportscar is real.  
b. #a very real sportscar

Wrong category, wrong type.



Contrast with *more of a*, which is also relatively free:

- (33) a. This is more of a  $\left\{ \begin{array}{l} \text{disaster} \\ \text{idiot} \\ \text{smoker} \\ \text{basketball fan} \\ \text{American} \\ \text{sportscar} \end{array} \right\}$ .
- b. Floyd is more of a  $\left\{ \begin{array}{l} \text{male nurse} \\ \text{non-Methodist} \\ \text{?resident} \end{array} \right\}$  than Clyde.

Suggests that *more of a* not about prototypes.

Potential problem?: a *real sportscar* might not be a *typical sportscar*.

Further possibilities:

- Spell out prototypicality intensionally?
- Or maybe this is all about intensionality rather than prototypicality (so, quantify over closest worlds with more stringent standards)?

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## DIMENSIONS

Degree readings of size adjectives (and *major*) more restricted:

$$(34) \quad \left\{ \begin{array}{l} \text{big} \\ \text{huge} \\ \text{major} \end{array} \right\} \left\{ \begin{array}{l} \text{disaster} \\ \text{idiot} \\ \text{smoker} \\ \text{basketball fan} \\ \# \text{American} \\ \# \text{sportscar} \end{array} \right\}.$$

The idea: no degree argument, but certain nouns **are** inherently conceptually associated with scales.

Similar move necessary to reflect polysemy in adjectives:

- (35) a. The US is bigger than Canada. (population)  
 b. Canada is bigger than the US. (area)

*Big*'s lexical entry must make available multiple dimensions:

- (36) **dimensions(big) =**  
 {**size-by-population, size-by-area, ...**}

Another notion of multiple dimensions in adjectives (Sassoon 2007b, 2013):

- (37) a. Clyde is happy in every way.  
b. Clyde is healthy except for the migraines.  
‘healthy in every dimension except migraines’

Sassoon’s one-dimensional adjectives:

- (38) #The table is long in all respects.

To be big, it is sufficient to exceed the standard on just one dimension.

Sassoon: this depends on the adjective (*healthy* requires all dimensions).

Standard assumption about simple adjectives: an unpronounced degree morpheme POS (Cresswell 1976, von Stechow 1984, Kennedy 1997, and many others). Possible implementation:

$$(39) \quad \llbracket \text{POS} \rrbracket^c = \lambda g \lambda x . \exists D \left[ D \in \mathbf{dimensions}(g) \wedge \mu(D)(x) \geq \mathbf{standard}_c(D) \right]$$

... where  $\mu(D)$  is the measure function associated with the dimension  $D$ .

$$(40) \quad \llbracket \text{Canada is POS big} \rrbracket^c = \exists D \left[ D \in \mathbf{dimensions}(\mathbf{big}) \wedge \mu(D)(x) \geq \mathbf{standard}_c(D) \right]$$



## SIZE ADJECTIVES AND THEIR KIN: NOUNS AND DIMENSIONS

Nouns may specify dimensions too:

- (41) a. **dimensions(basketball-fan) =**
- $$\left\{ \begin{array}{l} \text{attention-devoted-to-basketball,} \\ \text{enthusiasm-for-basketball,} \\ \text{knowledge-about-basketball,} \\ \text{frequent-attendance,} \\ \vdots \end{array} \right\}$$
- b. **dimensions(smoker) =**
- $$\left\{ \begin{array}{l} \text{frequency-of-smoking,} \\ \text{enthusiasm-for-smoking} \\ \vdots \end{array} \right\}$$

For *chair*, though, it would be hard to articulate dimensions. No salient gradable quality is sufficient to be a chair.

So, **dimensions(chair)** is undefined.

On its degree reading, *big* requires that the measure of an individual along a lexically-determined dimension be large (treating *big* as a degree head, even though it isn't one):

$$(42) \quad \text{a. } \llbracket \textit{big} \rrbracket^c = \lambda f \lambda x . \exists D \left[ \begin{array}{l} D \in \mathbf{dimensions}(f) \wedge \\ \mathbf{large}_c(\mu(D)(x)) \end{array} \right]$$

$$\text{b. } \llbracket \textit{Clyde is a big smoker} \rrbracket^c = \\ \exists D \left[ \begin{array}{l} D \in \mathbf{dimensions}(\mathbf{smoker}) \wedge \\ \mathbf{large}_c(\mu(D)(\mathbf{Clyde})) \end{array} \right]$$

NB: Still no degree argument for nouns:  $\llbracket \textit{smoker} \rrbracket$  is  $\langle e, st \rangle$ ;  $\llbracket \textit{big} \rrbracket$  is  $\langle \langle e, st \rangle, \langle e, st \rangle \rangle$ .

How does this ensure that (43a) entails (43b)?

- (43) a. Clyde is a big smoker.  
 b. Clyde is an smoker.

It doesn't. Could add requirement of exceeding standard by a large amount:

$$(44) \quad \llbracket \text{Clyde is a big smoker} \rrbracket^c = \\
 \exists D \left[ D \in \mathbf{dimensions(smoker)} \wedge \right. \\
 \left. \mathbf{large}_c(\mu(D)(\mathbf{Clyde}) - \mathbf{standard}_c(D)) \right]$$

...but, a more interesting hypothesis:

- (45) On their degree readings, nouns have minimal standards.

If nouns are evaluative in Bierwisch's sense, expected, but not explained.

As with *chair*, **dimensions(sportscar)** not defined. Rules out *#big sportscar* (on degree reading):

$$(46) \quad \llbracket \# \textit{This is a big sportscar} \rrbracket^c = \\ \exists D \left[ \begin{array}{l} D \in \mathbf{dimensions(sportscar)} \wedge \\ \mathbf{large}_c(\mu(D)(\mathbf{this})) \end{array} \right]$$

(A worry: *#big bullshit*?)

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# A SINGLE DIMENSION

More restricted still:

$$(47) \quad \left\{ \begin{array}{l} \text{utter} \\ \text{complete} \\ \text{total} \\ \text{absolute} \\ \text{outright} \\ \text{flat-out} \end{array} \right\} \left\{ \begin{array}{l} \text{disaster} \\ \text{idiot} \\ \# \text{smoker} \\ \# \text{basketball fan} \\ \# \text{American} \\ \# \text{sportscar} \end{array} \right\}.$$



Japanese:

(48)  $\left\{ \begin{array}{l} \text{mattaku-no} \\ \textbf{utter} \\ \text{kanzen-na} \\ \textbf{absolute} \\ \text{kanpeki-na} \\ \textbf{outright} \end{array} \right\} \left\{ \begin{array}{l} \text{baka} \\ \textbf{idiot} \\ \text{\#sutampu-zuki} \\ \textbf{stamp-lover} \end{array} \right\}$

What's special about *disaster*, *idiot*?

- Being a basketball fan is complicated.
- Being an idiot is simple.

Some nouns specify only one dimension:

- (49) a. **dimensions(idiot) = {idiocy}**  
b. **dimensions(disaster) = {disastrousness}**

## A PRESUPPOSITION

*Utter* presupposes that its noun is unidimensional:

- (50) a.  $\llbracket \textit{utter} \rrbracket^c$   
           =  $\lambda f \lambda x . \mathbf{large}_c(\mu(\iota D[D \in \mathbf{dimensions}(f)])(x))$
- b.  $\llbracket \textit{Clyde is an utter idiot} \rrbracket^c$   
           =  $\mathbf{large}_c(\mu(\iota D[D \in \mathbf{dimensions}(\mathbf{idiot})])(\mathbf{Clyde}))$   
           =  $\mathbf{large}_c(\mu(\mathbf{idiotcy})(\mathbf{Clyde}))$

Requires that the measure of Clyde along the idiocy scale be large.

What goes wrong in *#utter smoker*?

- failure of presupposition
- there are multiple dimensions specified by *smoker*
- so  $\iota D[D \in \mathbf{dimensions(smoker)}]$  is undefined

What goes wrong in *#utter sportscar*?

- same as in *#big sportscar*
- failure of presupposition
- there are no dimensions specified by *sportscar*
- so **dimensions(sportscar)** is undefined

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## IS THIS CHEATING?

Accusation: You're simply equivocating about types!

- nouns don't have a degree argument
- but are 'associated' with a degree-based dimension



We could just stipulate dimensions lexically, as another level of meaning. Lexical entry:

- (51) a. **TRANSLATION**(*idiot*) = **idiot**  
 b. **dimensions**(*idiot*) = {**idiocy**}

Comparable to the e.g. ordinary and focus semantic values ( $[[\cdot]]$ ,  $[[\cdot]]^f$ ).

But this would miss something:

- Dimensionality is a fact about the concept of idiocy, not the word *idiot* (or *basketball fan* etc.).
- Could we have a word just like *idiot*, but with different dimensions?

## WHERE DO DIMENSIONS COME FROM?

But **how** does one go from the concept 'idiot' to the dimension idiocy? One option:

- By exploiting orderings independently present in the model (Fine 1975, Kamp 1975, Klein 1980, 1982; probably what Bierwisch 1988a meant too).
- Doetjes et al. (2011) suggest that nominal gradability in general works this way.
- Does this get us any farther, though?

Standard criticism leveled against degree analyses of adjectives:

- If an adjective always has a degree argument, a null morpheme (POS) will often be needed to saturate it.
- But it seems to be null more often than not. Suspicious!
- More generally: truth conditions of the positive form based on the comparative.

Perhaps, a middle ground:

- Adjectives denote simple properties after all, but may be associated with dimensions.
- Dimensions come into play only when overt degree morphemes are present.
- Reflects what language seems to be telling us: to manipulate a degree argument, you have to **do** something to an adjective.

... but then we'd lose the adjective-noun type difference.

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- **Conclusion**

# CONCLUSION

## Summary:

- nouns support rich and varied array of degree modifiers
- only indirectly gradable
- some adnominal degree modifiers involve prototypicality scales (*real, true*)
- others involve scales provided indirectly by the noun
  - some presuppose a single scale (*utter, complete*)
  - others don't (*big, huge, major*)
- major axis of variation among adnominal degree modifiers: how they extract a scale from noun
- yields a typology of adnominal degree modifiers, and therefore also of nouns

Things I've said nothing about:

- scale structure
- expressive meaning (as in *a fucking goat*)
- extremeness (as in extreme adjectives like *gigantic*)

Big-picture issues:

- Where precisely does this leave adjectives?
- Independent diagnostics for dimensions?



## Thanks!

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## IS THIS REALLY ALL ABOUT SCALE STRUCTURE?

For adjectives, scale structure is crucial. How far would that have gotten us here?

- nothing here to suggest that scale structure isn't important for nouns too
- probably not relevant to presence or absence of a degree argument
- probably not relevant to *real/true*
- what about *big vs utter*?

*Utterly* may require upper-closed scales:

$$(52) \quad \left\{ \begin{array}{l} \text{utterly} \\ \text{completely} \\ \text{absolutely} \end{array} \right\} \left\{ \begin{array}{l} \text{impossible/\#possible} \\ \text{closed/\#open} \\ \text{full/\#empty} \end{array} \right\}$$

Nominalizations:

$$(53) \quad \left\{ \begin{array}{l} \text{utter} \\ \text{complete} \\ \text{absolute} \end{array} \right\} \left\{ \begin{array}{l} \text{impossibility/\#possibility} \\ \text{?closure/\#openness} \\ \text{transparency/opacity} \\ \text{??fullness/emptiness} \end{array} \right\}$$

But:

- (54) a.  $\left\{ \begin{array}{l} \text{utter} \\ \text{complete} \\ \text{absolute} \end{array} \right\} \left\{ \begin{array}{l} \text{idiot} \\ \text{disaster} \end{array} \right\}$
- b.  $\left\{ \begin{array}{l} \text{utterly} \\ \text{completely} \\ \text{absolutely} \end{array} \right\} \left\{ \begin{array}{l} \text{idiotic} \\ \text{disastrous} \end{array} \right\}$

So: scale structure remains important, but probably not an account of the contrast.

A class of cross-categorical degree modifiers that occur with 'extreme' predicates (Morzycki 2012):

$$(55) \quad \left\{ \begin{array}{l} \text{outright} \\ \text{flat-out} \\ \text{straight-up} \\ \text{out-and-out} \\ \text{downright} \end{array} \right\} \left\{ \begin{array}{l} \text{huge/\#big} \\ \text{fantastic/\#OK} \\ \text{excessive/\#appropriate} \end{array} \right\}$$

Are unidimensional degree modifiers actually just extreme?  
Would explain #*utter heap*.

But nominalizations again:

(56) { complete } { impossibility }  
 { absolute } { transparency }  
           { opacity }  
           { fullness }  
           { emptiness }

Are these really extreme (lexically or even wrt a particular context)?

Would this help with # *complete basketball fan*?

## EXPRESSIVE MEANING

- (57) Clyde didn't see a fucking goat.
- (58) Clyde didn't see a(n)  $\left\{ \begin{array}{l} \text{idiot} \\ \text{disaster} \\ \text{genius} \end{array} \right\}$ .

(59) Clyde thinks he saw  $\left\{ \begin{array}{l} \text{a fucking goat} \\ \text{that bastard Floyd} \end{array} \right\}$ .

(60) Clyde thinks he saw a  $\left\{ \begin{array}{l} \text{absolute} \\ \text{utter} \end{array} \right\} \left\{ \begin{array}{l} \text{idiot} \\ \text{disaster} \\ \text{genius} \end{array} \right\}$ .



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