

# The Predicativity Principle

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# Non-predicative adjectives

- ▶ *a mere child; \*The child is mere*
- ▶ *an alleged criminal; \*The criminal is alleged*
- ▶ *an erstwhile friend; \*My friend is erstwhile*

# Why?

- ▶ “Clearly we must learn the distributional properties of these words and constructions individually. Their distribution does not follow from general facts about adjectives” (Goldberg 2006:50).
- ▶ My claim: The behavior of non-syntactically predicative adjectives follows from the Predicativity Principle.

# The Predicativity Principle

An adjective is syntactically predicative  
if and only if  
it is semantically predicative.

## Syntactic predicativity (definition)

An adjective is *syntactically predicative* when it appears alone as the complement of a copular verb such as *be*.

# Semantic predicativity (definition)

An adjective is *semantically predicative* if and only if:

- ▶ It is of type  $\langle e, t \rangle$   
(modulo contextually-specified information)
- ▶ It combines with any nominal it modifies prenominally via Predicate Modification

# Predicate Modification

Suppose:

- ▶  $\llbracket \text{red} \rrbracket = \lambda x . \mathbf{red}(x)$
- ▶  $\llbracket \text{barn} \rrbracket = \lambda x . \mathbf{barn}(x)$

Then:

- ▶  $\llbracket \text{red barn} \rrbracket = \lambda x . [ \mathbf{red}(x) \wedge \mathbf{barn}(x) ]$

(cf. Heim and Kratzer 1998:65)

# The Predicativity Principle

▶ **Sem. Pred.  $\Rightarrow$  Syn. Pred.**

An adjective is syntactically predicative *if* it is semantically predicative. Alternatively:  $\neg$  **Syn. Pred.**  $\Rightarrow \neg$  **Sem. Pred.**

▶ **Syn. Pred.  $\Rightarrow$  Sem Pred.**

An adjective is syntactically predicative *only if* it is semantically predicative.



# Outline

Syn. Pred.  $\Rightarrow$  Sem. Pred.

$\neg$  Syn. Pred.  $\Rightarrow$   $\neg$  Sem Pred.

# Prediction: Intersectivity

Adjectives that combine via Predicate Modification should be intersective; i.e.:

1. Adj N  $\Rightarrow$  Adj
  2. Adj N  $\Rightarrow$  N
- ▶ **intersective** adj.s satisfy both #1 and #2 (*red*)
  - ▶ **subjective** adj.s satisfy only #2 (*skillful*)
  - ▶ **non-subjective** adj.s satisfy neither (*alleged*)
    - ▶ **privative** adj.s: Adj N  $\Rightarrow$   $\neg$  N (*fake*)

# Predicative non-intersectives

Non-intersective, syntactically predicative adjectives:

- ▶ Subjectives:
  - ▶ Degree adjectives (e.g. *tall, short, big*)
  - ▶ Evaluative adjectives (e.g. *good, skillful, remarkable*)
- ▶ Privatives (e.g. *fake, mythical, imaginary*)

## Degree adjectives

- ▶ Montague (1974): *big flea* not big, so simpler to analyze all adjectives as functions from properties to properties.
- ▶ Siegel (1976, 1979): For degree adjectives, the comparison class comes from context rather than the common noun.  
Some evidence:
  - (1) Billy is a tall little red-headed basketball player.
- ▶ Beesley (1982) adds:
  - (2) Q: Which of the men over there is Quang?  
A: Quang is the short Vietnamese.

# Evaluative adjectives

- ▶ Aristotle: a good thief is not generally a good man
- ▶ Siegel (1976, 1979): With evaluative adjectives, the comparison class comes from the noun in prenominal constructions. Evidence:
  - (3) a. That is a good lutist.
  - b. That lutist is good.

## Evaluative adjectives as predicative

- ▶ Beesley (1982): Comparison class is always contextually determined. Imagine the context of a chess school specializing in teaching musicians:
  - (4) We get some good lutists and some bad lutists.
- ▶ Kamp (1975:152–153) makes a similar point in passing; imagine this “in comment on his after-dinner performance with the hostess at the piano”:
  - (5) Smith is a remarkable violinist.

## Predicativity test: sentence-level adverbs

- (6) The obviously red barn collapsed.
- (7) The obviously tall ballerina was rejected.
- (8) John is an obviously bad monk.
- (9) \*The obviously mere barn collapsed.

## The *one* test

Beesley (1982:223, exx. 91–94):

(10) That's a red box, and that's a blue one.

(11) That's a tall man, and that's a short one.

(12) That's a good boxer, and that's a bad one.

(13) \*That's an utter fool, and that's a fat one.



# Privative adjectives

- ▶ *fake gun*  $\nrightarrow$  *gun*?
- ▶ What to say about: *This gun is fake*?
  - ▶ Perhaps: A fake gun is just not a gun gun.
- ▶ By Beesley's sentence-adverbial test, *fake* is predicative:  
(14) an obviously fake gun

## Evidence from Polish

Split NPs in Polish (Partee 2003):

- ▶ OK with 'large', 'poor', 'skillful', 'healthy', '**imaginary**', '**counterfeit**'...
- ▶ NOT OK with 'pitiful', 'alleged', 'potential', 'predicted', 'disputed'

Partee concludes: *fake* and *imaginary* aren't actually privative, but subsective, and that no adjectives are actually privative.

# Interim Conclusion I

*All syntactically predicative adjectives are semantically predicative.*

# Outline

Syn. Pred.  $\Rightarrow$  Sem. Pred.

$\neg$  Syn. Pred.  $\Rightarrow$   $\neg$  Sem Pred.

# Non-syntactically predicative adjectives

- ▶ modal adjectives (*former senator, alleged criminal*)
- ▶ nominal adjectives (*criminal lawyer*)
- ▶ event-manner adjectives (*hard worker, beautiful dancer*)
- ▶ degree-modifying adjectives (*total stranger, pure nitwit*)
- ▶ adjectives of psychological experience (as in *sorry sight*)
- ▶ predicate-evaluating adjectives (*mere child, common soldier*)
- ▶ adjectives of selection (*the very man, the same reason*)

## *former*: a modal adjective

$$\begin{aligned} & \llbracket \checkmark(\text{former}(\hat{\text{senator}}))(\text{John}) \rrbracket^{M,g,t,w} = 1 \\ & \iff \\ & \text{for some } t' < t, \llbracket \text{senator}(\text{John}) \rrbracket^{M,g,t',w} = 1 \end{aligned}$$

(based on Dowty et al. 1981:147–148)

## Other modal adjectives

Examples from Bolinger (1967):

- ▶ my old school; \*The school is old
- ▶ our late President; \*The president is late
- ▶ my erstwhile/quondam/former/budding friend; \*My friend is erstwhile/quondam/former/coming/budding
- ▶ a putative/possible/probable/likely example; \*The example is putative/possible/probable/likely
- ▶ the future king; \*The king is future

# Nominal adjectives

- ▶ a criminal lawyer; ?The lawyer is criminal
- ▶ a rural policeman; ?The policeman is rural
- ▶ a medical man; \*The man is medical
- ▶ a subterranean explorer; \*The explorer is subterranean
- ▶ an electrical worker; \*The worker is electrical
- ▶ nervous system; \*The system is nervous
- ▶ alimentary canal; \*The canal is alimentary
- ▶ adhesive tape; \*The tape is adhesive
- ▶ industrial machinery; \*The machinery is industrial
- ▶ maritime law; \*The law is maritime



# Nominal adjectives: analysis

Levi (1973, 1978): these function semantically in the same way as nominal modifiers in noun-noun compounds.

- ▶ *criminal lawyer*
- ▶ *tax lawyer*

## Event-manner adjectives

(15) Sue is a beautiful dancer, but she is not beautiful.

(16) That dancer is beautiful. [\*non-intersective reading]

Larson (1998): non-intersective *beautiful* arises from the application of *beautiful* to the event of dancing as opposed to the referent of *dancer*.

Then *beautiful* is of type  $\langle e, t \rangle$ , but (16) still follows from the Predicativity Principle.

## Degree-modifying adjectives

- ▶ a perfect ass; \*The ass is perfect
- ▶ a pure nitwit; \*The nitwit is pure
- ▶ an unadulterated jackass; \*The jackass is unadulterated
- ▶ an unmitigated liar; \*The liar is unmitigated
- ▶ a total stranger; \*The stranger is total
- ▶ a sheer fraud; \*The fraud is sheer
- ▶ a regular champion; \*The champion is regular
- ▶ a plain fool; \*The fool is plain
- ▶ an utter incompetent; \*The incompetent is utter

## Degree-modifying adjectives: Analysis

*John is an utter fool*: “John is a fool to a great extent”

Adjectives like *utter* characterize the degree to which the nominal property holds.

Larson (1998): “just as we must posit a hidden event parameter in *dancer* to accommodate *beautiful dancer*, we may ultimately be forced to posit a hidden degree parameter in *fool* to accommodate *utter fool*.”

# Psychological experience adjectives

Examples from Bolinger (1967):

- ▶ a sorry sight; ?The sight is sorry
- ▶ a happy coincidence; ?The coincidence is happy
- ▶ a brave sight; ?The sight was brave
- ▶ a proud moment; ?The moment was proud

It is not the sight itself that is sorry, but some experiencer of the sight.

## Predicate-evaluating adjectives

(17) a mere kid; \*The kid is mere

(18) a common soldier; \*The soldier is common

*mere*: presupposes that the nominal property is low on a scale of status or importance

This involves a *second-order* predicate, and requires access to the meaning of the modified noun.

## Adjectives of selection

- ▶ the very man; \*The man is very
- ▶ the particular spot; \*The spot is particular
- ▶ the precise reason; \*The reason is precise
- ▶ the same/selfsame/identical/exact/specific reason; \*The reason is same/selfsame/identical/exact/specific
- ▶ their main faults; \*Their faults are main
- ▶ our prime suspect; \*The suspect is prime
- ▶ the first citizen; \*The citizen was first
- ▶ the principal/chief/topmost cause; \*The cause was principal/chief/topmost
- ▶ the right (wrong) book; \*The book is right (wrong)

## Adjectives of selection: analysis

Modifiers like *first* require access at least to the extension of the predicate they modify, because they ascribe a property to the nominal referent that is *relative* to other members of the group.



## Interim Conclusion II

*If an adjective is not syntactically predicative, then it is not semantically predicative.*

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