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.
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:

\[ [\text{red}] = \lambda x . \text{red}(x) \]
\[ [\text{barn}] = \lambda x . \text{barn}(x) \]

Then:

\[ [\text{red barn}] = \lambda x . [ \text{red}(x) \land \text{barn}(x) ] \]

(cf. Heim and Kratzer 1998:65)
The Predicativity Principle

- **Sem. Pred. ⇒ Syn. Pred.**
  An adjective is syntactically predicative *if* it is semantically predicative. Alternatively: \( \neg \text{Syn. Pred.} \Rightarrow \neg \text{Sem. Pred.} \)

- **Syn. Pred. ⇒ Sem Pred.**
  An adjective is syntactically predicative *only if* it is semantically predicative.
Outline


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*)
- **subsective** adj.s satisfy only #2 (*skillful*)
- **non-subsective** adj.s satisfy neither (*alleged*)
  - **privative** adj.s: Adj N $\Rightarrow$ $\neg$ N (*fake*)
Predicative non-intersectives

Non-intersective, syntactically predicative adjectives:

- **Subsectives:**
  - 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 $\not\Rightarrow$ 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):


Partee concludes: *fake* and *imaginary* aren’t actually privative, but subsective, and that no adjectives are actually privative.
All syntactically predicative adjectives are semantically predicative.
Outline


$\neg$ 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

\[ \ulcorner \text{former}(\text{senator})(\text{John}) \urcorner^{M,g,t,w} = 1 \]

\[ \iff \]

for some \( t' < t \), \[ \ulcorner \text{senator}(\text{John}) \urcorner^{M,g,t',w} = 1 \]

(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.
The Predicativity Principle

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


