

Adjectives and semantic composition

Chris Potts, Ling 130a/230a: Introduction to semantics and pragmatics, Winter 2022

Jan 11

1 Reminders

Lewis's advice “In order to say what a meaning is, we may first ask what a meaning does, and then find something that does that.”

Compositionality The meaning of a whole is a function of the meanings of the parts and of the way they are syntactically combined.

Interpretation function The interpretation function is $\llbracket \cdot \rrbracket$. It is our bridge from language to the world. We hope it captures the *conventional* aspects of meaning.

2 The adjective typology

Intersective An adjective ADJ is intersective iff (‘if and only if’), for all N, $\llbracket \text{ADJ N} \rrbracket = \llbracket \text{ADJ} \rrbracket \cap \llbracket \text{N} \rrbracket$

Subsective An adjective ADJ is subsective iff, for all N, $\llbracket \text{ADJ N} \rrbracket \subseteq \llbracket \text{N} \rrbracket$

Nonsubsective An adjective ADJ is nonsubsective iff ADJ is not subsective, i.e., there is at least one N such that $\llbracket \text{ADJ N} \rrbracket \not\subseteq \llbracket \text{N} \rrbracket$

Privative An adjective ADJ is privative iff, for all N, $\llbracket \text{ADJ N} \rrbracket \cap \llbracket \text{N} \rrbracket = \emptyset$

Examples

- (1)
- a. future
 - b. so-called
 - c. virtual
 - d. foreign
 - e. boring
 - f. current
 - g. actual
 - h. non-
 - i. simulated

Question What problems do we face if we try to define $\llbracket \textit{former} \rrbracket$ and $\llbracket \textit{skillful} \rrbracket$ as sets?

3 Compositional interpretation

- (2) If ADJ is intersective:

$$\begin{array}{c} \llbracket \text{ADJ} \rrbracket \cap \llbracket \text{N} \rrbracket \\ \swarrow \quad \searrow \\ \llbracket \text{ADJ} \rrbracket \quad \llbracket \text{N} \rrbracket \end{array}$$

- (3) If ADJ is not intersective:

$$\begin{array}{c} \llbracket \text{ADJ} \rrbracket (\llbracket \text{N} \rrbracket) \\ \swarrow \quad \searrow \\ \llbracket \text{ADJ} \rrbracket \quad \llbracket \text{N} \rrbracket \end{array}$$

(The other nonintersective subtypes tell us something about what function $\llbracket \text{ADJ} \rrbracket$ is, but there is still an incredible amount of room for variation in meaning.)

$$\left[\begin{array}{l} \left\{ \begin{array}{c} \text{🇩🇪 🇨🇦 🇧🇪 🇫🇷 🇯🇵 🇮🇹} \end{array} \right\} \mapsto \left\{ \begin{array}{c} \text{🇩🇪 🇨🇦 🇧🇪 🇫🇷 🇯🇵 🇮🇹} \end{array} \right\} \\ \left\{ \begin{array}{c} \text{🇩🇪 🇨🇦 🇧🇪 🇫🇷} \end{array} \right\} \mapsto \left\{ \begin{array}{c} \text{🇩🇪 🇨🇦 🇧🇪 🇫🇷} \end{array} \right\} \\ \left\{ \begin{array}{c} \text{🇩🇪 🇨🇦 🇧🇪 🇫🇷 🇯🇵} \end{array} \right\} \mapsto \left\{ \begin{array}{c} \text{🇩🇪 🇨🇦 🇧🇪 🇫🇷} \end{array} \right\} \\ \left\{ \begin{array}{c} \text{🇩🇪 🇨🇦 🇧🇪 🇫🇷} \end{array} \right\} \mapsto \left\{ \begin{array}{c} \text{🇩🇪 🇨🇦 🇧🇪} \end{array} \right\} \\ \left\{ \begin{array}{c} \text{🇩🇪 🇨🇦} \end{array} \right\} \mapsto \left\{ \begin{array}{c} \text{🇩🇪} \end{array} \right\} \end{array} \right] \quad \left[\begin{array}{l} \left\{ \begin{array}{c} \text{🇩🇪 🇨🇦 🇧🇪 🇫🇷 🇯🇵 🇮🇹} \end{array} \right\} \mapsto \left\{ \begin{array}{c} \text{🇩🇪 🇨🇦 🇧🇪 🇫🇷 🇯🇵 🇮🇹} \end{array} \right\} \\ \left\{ \begin{array}{c} \text{🇩🇪 🇨🇦 🇧🇪 🇫🇷} \end{array} \right\} \mapsto \left\{ \begin{array}{c} \text{🇩🇪 🇨🇦 🇧🇪 🇫🇷} \end{array} \right\} \\ \left\{ \begin{array}{c} \text{🇩🇪 🇨🇦} \end{array} \right\} \mapsto \left\{ \begin{array}{c} \text{🇩🇪 🇨🇦} \end{array} \right\} \\ \left\{ \begin{array}{c} \text{🇩🇪 🇨🇦 🇧🇪 🇫🇷} \end{array} \right\} \mapsto \left\{ \begin{array}{c} \text{🇩🇪 🇨🇦 🇧🇪 🇫🇷} \end{array} \right\} \\ \left\{ \begin{array}{c} \text{🇩🇪 🇨🇦 🇧🇪 🇫🇷 🇯🇵} \end{array} \right\} \mapsto \left\{ \begin{array}{c} \text{🇩🇪 🇨🇦 🇧🇪 🇫🇷} \end{array} \right\} \\ \left\{ \begin{array}{c} \text{🇩🇪 🇨🇦 🇧🇪 🇫🇷 🇮🇹} \end{array} \right\} \mapsto \left\{ \begin{array}{c} \text{🇩🇪 🇨🇦 🇧🇪 🇫🇷} \end{array} \right\} \end{array} \right]$$