Meanings and readings

LING-053 Semantics 1
UCSC
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**Synonymy:** Two lexical items are synonymous if they have the same meaning.
Sentential ambiguity

• There are two types of sentential ambiguities: **syntactic ambiguity** and **semantic ambiguity**.

• **Syntactic ambiguity**: the syntactic structure of the sentence may be ambiguous. That is to say, there may be two or more structures associated with the same string of words.

(1) Flying planes can be dangerous. (Chomsky)

(2) a. \([\text{NounPhrase} \text{ Flying planes}]\) can be dangerous.
   b. \([\text{Sentence} \text{ Flying planes}]\) can be dangerous.
(3) John looked at the man with the binocular.
   a. John [looked] at the man [with the binocular].
   b. John looked at [the man with the binocular].

- Usually, syntactic ambiguity results in semantic ambiguity.

- **Semantic Ambiguity**: when it is not generated by a syntactic ambiguity, it is generated by a lexical ambiguity.

(4) Jimmy went to the bank and sat down.
   a. Bank$_1$ = the slope immediately bordering a stream course along which the water normally runs.
b. \textbf{Bank} = an institution for receiving, lending, and safeguarding money and transacting other financial business.

- It is possible to disambiguate the sentence in (22).

(5) a. Jimmy went to the bank to deposit money.
   
b. Jimmy went to the bank to look at the level of the water.
Principle of Consistent Interpretation:

A complex expression is always interpreted in such a way that its parts fit together and the whole fits the context.
• More structural ambiguities:

(6) Every student read a book.

(7) A student read every book.

(8) John wasn’t fired because he said the truth.
Where is the ambiguity?

- Consider the following example (from Larson (1998)):

(9) Olga is a beautiful dancer.

Reading 1: “Olga is a dancer and Olga is beautiful”

Reading 2: “Olga is beautiful as a dancer”, “Olga dances beautifully”

- This ambiguity arises with other adjectives as well (also from Larson (1998)):

(10) George is a skillful manager.

(11) Yo-yo is a good cellist.

(12) Bill is a diligent president.

(13) Peter is an old friend.
• The problematic reading is reading 2.

A few notions of set theory:

1. Set $A = \{\text{John, Mary, Sue}\}$, or
   Set $A = \{x : x \text{ is a person in the room}\}$

2. Set membership: $x \in A$.
   E.g., Mary $\in \{x : x \text{ is a person in this room}\}$

3. Subset relation: $A \subseteq B$
   (every member of $A$ is a member of $B$)
   E.g. $\{x : x \text{ is a tall man}\} \subseteq \{x : x \text{ is a man}\}$

4. Intersection: $A \cap B$
   (the set containing all those elements of $A$
    that are also members of $B$)
   E.g. $\{\text{John, Mary, Sue}\} \cap \{\text{Sue, Bill, Sam}\} = \{\text{Sue}\}$
5. **Union**: \( A \cup B \)

(the set containing all the members of \( A \) and all the members of \( B \))

E.g. \( \{\text{John, Mary, Sue}\} \cup \{\text{Sue, Bill, Sam}\} = \{\text{Sue, John, Mary, Bill, Sam}\} \)
• We can go back to our case study. Reconsider our example and its two readings:

(14) Olga is a beautiful dancer.

Reading 1: “Olga is a dancer and Olga is beautiful”
Reading 2: “Olga is beautiful as a dancer”, “Olga dances beautifully”

• Reading 1 (the intersective reading) is not problematic:

(15) Olga ∈ \{x : x is a dancer\} and Olga ∈ \{x : x is beautiful\}
• Reading 2 (the non-intersective reading) is problematic:

Suppose: \( \{x : x \text{ is a dancer}\} = \{x : x \text{ is a singer}\} \)
Then: If Olga is a dancer, then Olga is a singer.
But: It does not follow that if Olga is a beautiful dancer, then she is a beautiful singer.

• Intuitive solution: the meaning of a noun like dancer has two components:

1. There is a individual who is the agent;
2. There is an event of dancing of which the individual is the agent of.

We can represent the argument structure of the noun like this:

\[ \text{dancer} \langle x, e \rangle \]
Non-intersective reading of *A beautiful dancer*:
There is a dancer and **the dancing is beautiful**.

Reading 1

```
DP
 D
  a
 AP
   A
   N
beautiful dancer \langle x, e \rangle
```

Reading 2

```
DP
 D
  a
 AP
   A
   N
beautiful dancer \langle x, e \rangle
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Consider the following contrasts:

(16) The visible stars (include Capella, Betelguese, and Sirius).

(17) The stars visible (include Capella, Betelguese, and Sirius).

So:

(18) The visible stars visible include Capella.

(19) The visible visible stars include Capella.

Now:

(20) The invisible visible stars include Capella.

(21) The visible invisible stars include Capella.