Semantics: Meaning relationships between words. How are words stored in the brain?
Dictionaries and meanings: Are definitions a good representation of the meaning of a word?
If not, is this important, given how one normally uses a dictionary?

What about storage?

First, ask about the number of words that an individual knows. Then discuss how words might be stored in the head.

Number of words:

- How are words stored in the speakers’ heads?
- How many words do you know?
  - Webster's Third International Dictionary has 460,000 entries
  - the higher guesses are 250,000 for college students
  - more conservative guesses are roughly 50,000

Retrieval speed:

- Is fleen a word in English?
- What about zimp?

Structure:

Let’s start off with a question that has a rather obvious answer: Is our mental dictionary structured the same way a desk dictionary is? Is it alphabetized? To find out the structure of their mental dictionary, ask them to do a simple word association test:

Sample:

<table>
<thead>
<tr>
<th>Word presented</th>
<th>Responses (among others)</th>
<th>My analyses: (not put on board at first)</th>
</tr>
</thead>
<tbody>
<tr>
<td>black</td>
<td>white, red</td>
<td>antonym; member of same class of objects</td>
</tr>
<tr>
<td>above</td>
<td>below</td>
<td>antonym-relational</td>
</tr>
<tr>
<td>kitten</td>
<td>cat, yarn</td>
<td>hyponym, superordinate; association</td>
</tr>
<tr>
<td>fruit</td>
<td>apple, grapes</td>
<td>hyponym, superordinate</td>
</tr>
<tr>
<td>warm</td>
<td>milk, cozy, cold</td>
<td>association; synonym: antonym-gradable</td>
</tr>
<tr>
<td>alive</td>
<td>dead</td>
<td>antonym-binary (dichotomy)</td>
</tr>
<tr>
<td>sofa</td>
<td>couch, comfortable</td>
<td>synonym</td>
</tr>
<tr>
<td>man</td>
<td>woman</td>
<td>antonym-binary (dichotomy)</td>
</tr>
</tbody>
</table>

Note that the items are not similar in structure, not what one would find next to these entries in the dictionary, and thus are stored in terms of associations, rather than in terms of structure. As the lecture continues, the examples the students have used in this word association task will be used to illustrate the topics that I will bring up later.

**Synonymy.**

- Define it.
- Illustrate it.

True synonymy is relatively rare, if not nonexistent. Sometimes words have the same sense but have different social values (registers), e.g. *spit* and *expectorate.*
The words *sofa* and *couch* might be as close as possible to synonyms, although I suspect for many speakers a regional difference exists.

**Antonymy.**

- Work off list generated by the word association task.
- *warm* and *cold*, *black* and *white*, and *above* and *below*.
- Antonyms are relatively similar, with the opposition typically limited to a specific difference in one or perhaps two characteristics.

Among the types of antonymy are (1) **binary antonymy.** E.g. *dead* and *alive* are binary in the sense that the truth value of one excludes the truth value of the other. (2) Another category is gradable antonyms such as the *cold* versus *hot* continuum. It is obvious that temperatures are gradable. (3) A third kind is relational antonyms, which compare the same relationship but from different points of view: *above* and *below*.

Categories and members: the **superordinate** and the **subordinate**.

The pair fruit and grapes represents a category and an example of a category. This is referred to as **hyponymy.** That is, the meaning of one word is included in the meaning of another. That is, to give one example, *fruit* is a hyponym of *food*; for another example, *grapes* is the hyponym, while *fruit* is the superordinate term.

Note that the relationships include hierarchies within hierarchies, including multiple levels of associations. The level of generalization at which we function depends upon what we are doing. Certainly, in language acquisition, the more basic terms tend to be introduced before the more specific. On the other hand, there is a level of generality that is appropriate for the occasion. It is striking for someone to use a term that is inappropriately specific or inappropriately general; for example, "I am starving. I only had a little food for lunch" borders on the too general, while "I am starving. I only had a small Macintosh apple and some imported French brie for lunch" is too specific. Texts are particularly interesting with respect to level shifting.

**Polysemy** and **homophony.**

**Polysemy**, of course, refers to entries in the dictionary that are stored as variants of the same word, implying that we are talking about the same word with interrelated meanings. **Homophony** refers to different words with coincidentally identical pronunciations.

[distinguish fortuitous homophony from lexicologically interesting polysemy]

Use Fred Gwynne’s *The King Who Rained*

plant *n.* [ < L. *planta*, a sprout] 1. a living thing that cannot move voluntarily, has no sense organs, and synthesizes food from carbon dioxide. 2. a soft-stemmed organism of this kind, as distinguished from a tree or shrub. 3. the machinery, buildings, etc. of a factory, etc. — *vt.* 1. to put into the ground to grow 2. to set firmly into position. 3. to settle; establish. 4. [Slang] to place (a person or thing) in such a way as to trick, trap, etc.

**Dictionary definitions:** The nature of dictionary definitions: sense (denotation), connotation, register (social), collocational status
Webster’s New World Dictionary of the American Language. Warner Books

lurk - extremely hard to define
“1. to stay hidden, ready to attack, etc. 2. to move furtively”
furtively: “done or acting in a stealthy manner, sneaky”

assassinate - specific characteristics
“to murder as assassins do”

bird - proto-typical nature of the definition
[n < OE. bridd, young bird] any of a class of warm-blooded
vertebrates with feathers and wings

Summary.

The structure of the mental lexicon. Words and their meanings.
Synonymy.
Categories and members: the Superordinate and the subordinate.
Polysemy, homophony.
The nature of dictionary definitions.
sense (denotation), connotation, register (social)
Possible assignment: True synonyms (again)?

Think of three synonyms for the word **jerk**; i.e. three other words that could be substituted for **jerk**, as in *He's being a real jerk about this assignment*.

(A) Think about the meaning that you assign these words, and define each in terms of **sense**, **connotation** and **register**. In what parts does your definition for one match the others? How are they different? Can they be substituted or each other in all contexts? (One quick check: can you use them all if the person you’re talking about is female, i.e. *She’s being a real jerk about this assignment*.)

(B) Ask one male, one female, and one older person for other synonyms. On what parts do you agree, and on what parts do you disagree? Do these disagreements fall along any particular social lines, such as gender, age group, etc.?

(C) Are these words true synonyms? Explain why or why not.
This assignment is a bit different from the others. You’ll have to collect responses, do an analysis of those responses and write it up like a lab report. The report must be four to five double-spaced typewritten pages.

Do only ONE (1) of the following:

1. **Sense Relations**

   Recreate the word association that we did in class with three native speakers of English, using the following list of words:

   - BOAT
   - OVER
   - APPLE
   - PINK
   - UGLY
   - PLANT

   Read the list of words aloud to the people you are gathering responses from (don't let them see the list) and have them write out their answers. Be sure that the respondents understand what they are supposed to do ("I’m going to read a list of words. After each word, I want you to write down the first word that comes into your head.") If you are doing all three at once, avoid having anyone say their responses out loud. (To avoid this, it helps to include in the instructions, a phrase like, "...so if I say _black_ you might say ...".) If you do each subject separately, be sure anyone else who will be doing the task doesn’t hear the list.

   After you’ve gathered the responses, do the following:

   (A) Classify as many of the responses as you can according to the meaning relations we went over in class; i.e. synonyms, gradable antonyms, binary antonyms, relational antonyms, and hyponyms. Provide a general definition of each meaning relation that you feel is exemplified in the responses and an explanation of why you think the responses fit into that category.

   (B) Pay particular attention to the responses you get for the last word in the list (_plant_). Look up _plant_ in a dictionary and copy out definitions that illustrate homophony and polysemy. Examine the responses that you got for this word and try to note which of the senses your subjects have in mind, given their responses.

   (C) You will probably have some responses that don’t fit into any of these meaning relations. Try to figure out why those pairs are associated with each other. What does that tell you about the organization of the mental lexicon?

   (D) Comment on the overall set of data, i.e. does everybody give the same responses to each of the words? does one meaning relation seem to be more prominently reflected than any other? do the individuals seem to differ in how they do the word association?