24.900
Introduction to Linguistics
Class requirements:

- Problem sets: 20% of grade (typically given on Tuesday, due the next Tues.)
- 2 quizzes: 20% of grade
- Final exam: 30% of grade
- Squib: 20% of grade (due May 7)
- Participation: 10% of grade

**Homework** for next Tuesday: find a friend
**Phonology:** study of speech sounds and how they interact

**American English**
- bar
- leader
- carton
- corner
- carry
- hairy
- Britain
- ride
**Phonology:** study of speech sounds and how they interact

<table>
<thead>
<tr>
<th>American English</th>
<th>British English</th>
</tr>
</thead>
<tbody>
<tr>
<td>bar</td>
<td>bar</td>
</tr>
<tr>
<td>leader</td>
<td>leader</td>
</tr>
<tr>
<td>cartoon</td>
<td>cartoon</td>
</tr>
<tr>
<td>corner</td>
<td>corner</td>
</tr>
<tr>
<td>carry</td>
<td>carry</td>
</tr>
<tr>
<td>hairy</td>
<td>hairy</td>
</tr>
<tr>
<td>Britain</td>
<td>Britain</td>
</tr>
<tr>
<td>ride</td>
<td>ride</td>
</tr>
</tbody>
</table>

- British English has a rule: r drops at the end of a syllable.
<table>
<thead>
<tr>
<th>Standard Tibetan</th>
<th>Lhasa Tibetan</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>gabār</td>
<td>gabān</td>
<td>'where?'</td>
</tr>
<tr>
<td>phósār</td>
<td>phósār</td>
<td>'young man'</td>
</tr>
<tr>
<td>márpó</td>
<td>márpó</td>
<td>'red'</td>
</tr>
<tr>
<td>sérná</td>
<td>sérná</td>
<td>'greedy'</td>
</tr>
<tr>
<td>gārē</td>
<td>gārē</td>
<td>'what?'</td>
</tr>
<tr>
<td>chörā</td>
<td>chörā</td>
<td>'debating hall in a monastery'</td>
</tr>
<tr>
<td>rinpóché</td>
<td>rinpóché</td>
<td>'precious jewel, monk'</td>
</tr>
<tr>
<td>ràngwáng</td>
<td>ràngwáng</td>
<td>'freedom'</td>
</tr>
</tbody>
</table>

- Lhasa Tibetan has the same rule as British English!
  > This is what we find when we look at language closely: languages differ, of course, but the differences are variations on a theme; it's not just random. There is something about the rule "r drops at the end of a syllable" that makes it a natural kind of rule for a language to have (as opposed to a rule like "r drops at the beginning of a syllable", say).
Language is:

- **untaught**
  People do occasionally try to teach you things about language (e.g., "don't split an infinitive"), but they mostly fail, and the really interesting things that you know (e.g., "drop r at the end of a syllable, if you're British") are things nobody taught you.

- **tacit**
  We can (and will) try to figure out how the rules of language work, but we don't think about them when we're using language; it's just instinctive.

- **uniform**
  All developmentally normal children acquire language, and speakers of the same language agree with each other about remarkably arcane and complicated phenomena (we'll see lots of examples). Moreover, human languages, though they differ from each other, seem to differ in highly constrained ways, so that we keep seeing the same patterns over and over again (the Tibetan/English r-loss rule is just one example).

- **infinite**
  We're not just memorizing sentences that we've heard. For one thing, sentences can be, in principle, infinite in length ("This is the cat that chased the rat that ate the cheese that..."). For another, we can create and interpret sentences we've never heard ("My pet anteater wants to dye his tail purple").

- **species-specific**
  Only humans naturally acquire language (we'll talk about animals, eventually...)

- **separate** from general cognitive capacity
  - Williams syndrome: low IQ, but good language skills
  - aphasia: there are various kinds of aphasia, but for some of them only language is affected.

**Universal Grammar** (Noam Chomsky): we are all born knowing (tacitly) certain things about how human language is put together. This is how we manage to acquire this very complex system, without relevant instruction; we have a head start. Linguistics is the study of the aspects of the human mind that allow us to acquire and use language.
**Morphology**: study of how words are made up out of their parts
industry
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industry
industri-al ‘having to do with industry’
**Morphology**: study of how words are made up out of their parts

industry

industri-al  ‘having to do with industry’

industri-al-ize  ‘cause to have to do with industry’
Morphology: study of how words are made up out of their parts

industry
industri-al ‘having to do with industry’
industri-al-ize ‘cause to have to do with industry’
industri-al-iz-ation ‘the process of causing things to have to do with industry’
**Morphology**: study of how words are made up out of their parts

industry

industri-al 'having to do with industry'

industri-al-ize 'cause to have to do with industry'

industri-al-iz-ation 'the process of causing things to have to do with industry'

industri-al-iz-ation-al 'related to the process…'

industri-al-iz-ation-al-ize 'cause to be related to the process…'

industri-al-iz-ation-al-iz-ation (.....etc.)

.....
Morphology: study of how words are made up out of their parts

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.....
*industry-ize
*industri-al-ation
**Morphology**: study of how words are made up out of their parts

- cats
- kids
- horses
**Morphology**: study of how words are made up out of their parts

cats
kids
horses

wug-?
**Syntax:** study of how sentences are made up out of words
The woman will *sit on* the chair. The general will *urge on* the troops.
**Syntax**: study of how sentences are made up out of words

The woman will *sit on* the chair. The general will *urge on* the troops.

Which chair will the woman *sit on*? Which troops will the general *urge on*?
**Syntax:** study of how sentences are made up out of words

The woman will *sit on* the chair.  
The general will *urge on* the troops.

Which chair will the woman *sit on*?  
Which troops will the general *urge on*?

On which chair will the woman *sit*?  
*On which troops will the general *urge*?
**Syntax**: study of how sentences are made up out of words

The woman will *sit on* the chair.  
Which chair will the woman *sit on*?  
*On* which chair will the woman *sit*?  
*The woman will *sit* the chair *on*.  

The general will *urge on* the troops.  
Which troops will the general *urge on*?  
*On* which troops will the general *urge*?  
The general will *urge* the troops *on*.  


**Syntax**: study of how sentences are made up out of words

**Why** did she say that George should resign?
Syntax: study of how sentences are made up out of words

Why did she say that George should resign?
Why did she not say that George should resign?
**Syntax:** study of how sentences are made up out of words  
John thinks that George is a genius
Syntax: study of how sentences are made up out of words
John thinks that George is a genius
Mary said that John thinks that George is a genius
**Syntax:** study of how sentences are made up out of words
John thinks that George is a genius
Mary said that John thinks that George is a genius
Susan can’t believe that Mary said that John thinks that George is a genius
....
Semantics: study of meaning
I didn’t tell her that Mary was very smart.
I didn’t tell her mother that Mary was very smart.
**Semantics**: study of meaning

I didn’t tell *her* that *Mary* was very smart. \( (her \neq Mary) \)

I didn’t tell *her* mother that *Mary* was very smart. \( (her \text{ can be } Mary) \)
**Semantics**: study of meaning

I didn’t tell her that Mary was very smart.  
I didn’t tell her mother that Mary was very smart.  

She didn’t say that Mary left.  
She didn’t regret that Mary left.
**Semantics**: study of meaning

I didn’t tell her that Mary was very smart.  
(I \(\neq\) Mary)

I didn’t tell her mother that Mary was very smart.  
(her can be Mary)

She didn’t say that Mary left.  
(Mary may have left, or not)

She didn’t regret that Mary left.  
(Mary has to have left)
**Pragmatics**: study of how we get beyond the literal meanings of sentences
Can you close the window? (really means "Close the window!")
Did you know that there’s a bear behind you? (really means "Look out!")
**Language acquisition**: study of what children know, and when, and how

child: Want other one spoon, Daddy.
father: You mean, you want the other spoon.
child: Yes, I want other one spoon, please, Daddy.
father: Can you say “the other spoon”?
child: other…one…spoon.
father: Say “other”.
child: Other.
father: Say “spoon”.
child: Spoon.
father: Other…spoon.
child: Other…spoon. Now give me other one spoon?
**Historical Linguistics**

- How do languages change over time?
  (hint: the answer isn’t ‘they deteriorate’)
  - **semantics**: housewife > hussy, Nahuatl *ahuacatl ‘testicle’ > *avocado
  - **syntax**: Speaks he English? > Does he speak English?

- How far back can we trace linguistic history? Is there a “proto-World”, and can we know anything about it?
**Language Contact**

- How do languages in contact influence each other?

**Language and the Brain**

- How is knowledge of language represented in the brain?
Morphology

Maybe in order to understand mankind, we have to look at the word itself. *Mankind.* Basically, it’s made up of two separate words--“mank” and “ind.” What do these words mean? It’s a mystery, and that’s why so is mankind.

--Jack Handey, *Deeper Thoughts*