Announcements

• Assignment 1 was returned to you over the weekend.
  - Average score: 24/25
  - Median: 24.5/25
• Things to pay attention to in future assignments:
  - Answering all questions and sub-questions. Name of the file. Typos. Paragraph organization.
• Assignment #2 was posted last Friday. Any ‘quick’ questions?

Transition from last class

• Each one of us has a mental lexicon of words.
• Words are formed via one of three operations that we talked about so far: inflection, derivation, and compounding.
• We are creative with words: Not only do we create new words, but, with a good degree of success, we can understand novel forms when presented to us.

Today's agenda

• What do we know when we know a word?
• How can we study our ‘mental knowledge’ of words?
• Decomposing words: What are the building blocks of words?

Group exercise 4:
Exploring your mental lexicon

• What are examples of English terms that you consider words that may not be listed in a dictionary?
• What are examples of non-words that may be listed in a dictionary?
• Why do you think this discrepancy exists between your ‘intuitive knowledge’ of English and the ‘dictionary knowledge’ of English?
Group exercise 5: Exploring your mental lexicon
- What are words that you know the meaning of but you’re not sure of their pronunciation?
- What are words that you know the pronunciation of but you’re not sure about their meaning?
- What are words that you know but you’re not sure what they mean precisely?

Group exercise 6: Creating words
- Invent a name in your group to market a new product. Why do you think the invented name will succeed? Can you think of bad names for products—names that would turn you off enough not to buy the product? Explain why.

Aspects of word knowledge
- What do you know when you know the word ‘book’? ‘indignant’? ‘individuate’? ‘on fleek’—is that the correct spelling?
- How is that knowledge accessed?

Words in the brain
- Do you think you have a list of every word in your language stored in your head? Every plural noun? Every past tense form? Every adverb? If not, why not?
- Function words vs. content words.
- How can we investigate this question?

Words in the brain
- Since we cannot operate on the brain directly, we look for opportunities when this becomes possible.
  - Cases of language impairment due to head injury or genetic causes.
  - Making use of technology that allows us access to how the brain functions when it comes to language (measuring blood flow, or electric and magnetic fields associated with certain linguistic tasks).

Language impairment: Aphasia
- Aphasia is a language impairment that results from damage to certain areas in the brain, due to a stroke, trauma to the head, brain infection, etc.
- There are multiple types of aphasia, depending on where the affected area is.
Language impairment: Aphasia

- **Broca’s aphasia**: function words affected
  [https://www.youtube.com/watch?v=12dO78c6-q8](https://www.youtube.com/watch?v=12dO78c6-q8)

- **Jargon aphasia**: content words affected
  [https://www.youtube.com/watch?v=B-LD5jZpLE](https://www.youtube.com/watch?v=B-LD5jZpLE)

- Another case of Broca’s aphasia:
  [https://www.youtube.com/watch?v=NUTpel04Nkc](https://www.youtube.com/watch?v=NUTpel04Nkc)

Other cases of language impairment

- **Turner’s Syndrome and Williams Syndrome**: Regular verbs are fine; irregulars are not.

- **Specific language impairments (SLIs)**: The case of the KE family (first studied by Myrna Gopnik and associates): Typical problems are with function words, but not with content words. Also, irregular verbs seem to be ok, but regulars are not.

### The KE family

<table>
<thead>
<tr>
<th>Grandparents</th>
<th>F(76) — M (deceased)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents</td>
<td>F(48) — M(47) — F(45) — M(42) — F(40) — M(38)</td>
</tr>
<tr>
<td>Children</td>
<td>F(19) — M(18) — F(16) — M(14) — F(12) — M(10) — F(8)</td>
</tr>
</tbody>
</table>

### The KE family

- With regard to English inflections, the performance of members of the KE family who had the SLI was characterized by absence of inflections like plural and tense.
  - The boy **eat** three **cookie**.
  - Every day he walks **8** miles. Yesterday he ... Response: **Walk**.

- PET scanning:
  - **Reading words**
  - **Speaking words**
  - **Generating words**

Figure 14.4: PET scans show how blood flow in the brain differs to different locations depending on which task is being performed.

From O’Grady et al., 2005.
PET

- Watch a PET experiment for word processing here:
  - https://www.youtube.com/watch?v=5KXlDUn18aA

Child language

- Children overgeneralize regular inflections to irregular forms: mans; foots; goed; comed.
- Children also typically go through a period when they drop function words. This is commonly known as the telegraphic speech stage.
  - *Cat stand up table.*

Speech errors

- Take the freezes out of the steaker.

Words ... morphemes

- Speakers of a language seem to know what a word is in their language, even if it is hard for them to give a precise definition.
- For morphologists, a word can be defined as a string of one or more morphemes that can stand alone in a language.
- But what is exactly a morpheme?

The morpheme

- The morpheme is the main unit of word structure. It is defined as the smallest unit of meaning or grammatical function in a language.
- readers enabled misinterpretations

Taxonomy of morphemes

- There are multiple ways to classify morphemes.
- Morphemes can be free or bound.
- Bound morphemes can be either prefixes, suffixes, infixes, or circumfixes.
- Morphemes can be either inflectional or derivational.
- Content vs. function morphemes.
- Some bases (or roots) can be bound.
Simple vs. complex words

- Some words are mono-morphemic: They consist of only one morpheme. These are simple words, e.g., book, man, above.
- Other words are multi-morphemic: They contain two or more morphemes. These are complex words, e.g., books, vigorous, unbelievable.

Next class agenda

- More on morphological structure.
- Drawing morphological trees.
- Other word formation processes. Lieber Chapter 3 (pp. 43-53) and Chapter 5.