• L1 acquisition of morphology

Background reading:
• CL Ch 9, sec 4
1. Review — L1 acquisition key ideas

• Why do linguists use the term *acquisition* rather than *learning* for children’s language development?
1. Review — L1 acquisition key ideas

• Why do linguists use the term *acquisition* rather than *learning* for children’s language development?
  → L1 (first-language) acquisition is different from learning a skill (more on this next Monday)

• Why is child language acquisition much more connected to *descriptive grammar / mental grammar* than it is to prescriptive grammar?
1. Review — L1 acquisition key ideas

• Why do linguists use the term *acquisition* rather than *learning* for children’s language development?
  → L1 (first-language) acquisition is different from learning a skill (more on this next Monday)

• Why is child language acquisition much more connected to *descriptive grammar / mental grammar* than it is to prescriptive grammar?
  → L1 acquisition is about how a child’s mental grammar uses the language data in the environment to develop a language system
1. Review — L1 acquisition key ideas

- A child who is in the process of acquiring his/her target (adult) language goes through different stages of development.
  - These stages reflect intermediate mental grammars on the way to the adult grammar.

- A child often shows variable behavior.
  - A rule may be applied only some of the time.
  - Multiple versions of a rule may be in use.

- But we can still find a great deal of systematicity in children’s language behavior.
2. Morphological development: Overview

- Two strong sources of evidence that children are constructing a mental grammar as they acquire their language come from morphology:
  - overgeneralization
    (also known as overregularization)
  - productive use of morphology (wug-tests)
3. Overgeneralization

- Here is a common pattern in children at three different stages of development (younger → older):

<table>
<thead>
<tr>
<th></th>
<th>Stage 1</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>show</td>
<td>showed</td>
<td>go</td>
<td>went</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Stage 2</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>show</td>
<td>showed</td>
<td>go</td>
<td>goed</td>
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<table>
<thead>
<tr>
<th></th>
<th>Stage 3</th>
<th></th>
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<tbody>
<tr>
<td>show</td>
<td>showed</td>
<td>go</td>
<td>went</td>
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</tr>
</tbody>
</table>

- What happened? Why did the child’s language ability seem to “go backward”?
3. Overgeneralization

• Does a child hear forms like *goed* (or *mans*, or *brought*) in the adult speech community? No!
  - Why does the child produce such forms, often *after* a stage with the correct forms?
3. Overgeneralization

• Why does the child produce such forms, often after a stage with the correct forms?

• This is evidence for morphological rules
  - At first, the child stores each form (present/past, singular/plural) separately in the lexicon
  - Then, the child learns a morphological rule,
  - We know this because the child sometimes applies it even to forms that are irregular (and are lexically listed as exceptions to that rule in the adult grammar) | this is called overgeneralization
3. Overgeneralization

- How we analyze what the child is doing

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<tr>
<th>Stage 1</th>
<th>Stage 2</th>
<th>Stage 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>show</em></td>
<td><em>showed</em></td>
<td><em>go</em></td>
</tr>
<tr>
<td>lexically listed</td>
<td>lexically listed</td>
<td>lexically listed</td>
</tr>
<tr>
<td><em>show</em></td>
<td><em>showed</em></td>
<td><em>go</em></td>
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<td>lexically listed</td>
<td>formed by rule</td>
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</tbody>
</table>

- The past-tense word-formation rule is (temporarily) **overgeneralized** to the root /gow/
4. Productive use of morphology

- Children perform quite well at tasks like these:
  - This is a wug. Now there is another one. There are two of them! There are two ___.
  - What would we call someone who crushes things? Someone who crushes things is a ___.

- Children can create morphological forms they have never heard before, using familiar or “new” words
  - What does this show us about a child’s developing mental grammar?
4. Productive use of morphology

• Children perform quite well at tasks like these:
  - This is a wug. Now there is another one.
    There are two of them! There are two ___.
  - What would we call someone who crushes things?
    Someone who crushes things is a ___.

• Children who can complete these tasks have the relevant inflectional and derivational morphological rules in their mental grammar.

• See the original wug-test article (very accessible):
A useful distinction in morphology (and syntax):

• **Content** morphemes (also called *lexical* morphemes) have **real-world meaning**
  - N, V, A
  - Derivational affixes

• **Function** morphemes (also called *nonlexical* or *grammatical* morphemes) have **grammar**-related meaning
  - Det, P, auxiliary verbs, ...
  - Inflectional affixes
5. Content and function morphemes

• The first morphemes acquired are typically **content** morphemes

• **Function** morphemes often have a typical developmental sequence in a given language
  - Why?
  - Where does this sequence come from?
5. Content and function morphemes

• Function morphemes: Typical developmental sequence
  1. -ing  
  2. plural -s  
  3. possessive ‘s  
  4. the, a  
  5. past tense -ed  
  6. 3rd person singular -s  
  7. auxiliary be

(CL, Table 9.12, p 365)

• Compare: Typical relative frequency in parent speech
  1. the, a  
  2. -ing  
  3. plural -s  
  4. auxiliary be  
  5. possessive ‘s  
  6. 3rd person singular -s  
  7. past tense -ed

(CL, Table 9.13, p 366)

• Does frequency in parent speech predict acquisition order?
5. Content and function morphemes

• Frequency of function morphemes in adult speech does not predict how early they will be acquired!
  → It’s not just learning what you hear the most...

• What factors do seem to predict early acquisition?
  - Occurs frequently at the end of the utterance
  - Forms a syllable on its own
  - Not a homophone
  - Behavior is regular — it has few exceptions
  - Allomorph invariance (one sound shape)
  - Has a clearly discernable semantic function