Introduction to morphology

LING 481
Winter 2011
Let’s break the ice

1. Find 2 people who have not taken phonology I (451)
2. Find 3 people who have not taken syntax 1 (461 or 507)
3. Find 2 people who have taken phonology 1 at different times or with different teachers
4. Find 2 people who have studied or done research on a Native American language
5. Find someone who has studied an African language
6. Find someone who speaks a language other than English natively
This lecture

- Morphology, morphemes
- Goals of morphology and linguistics
- Morphological typology
“Morphology”

• First applied to linguistics by Schleicher (1859)
• Haspelmath and Sims definition
  – “study of systematic covariation in form and meaning of words” (p. 2)
• Google “morphology”
Morphological analysis

• Typically, identification of meaningful constituents of words
• e.g. Hungarian ‘house’ ‘river’
  sg nominative ház folyó
  sg accusative házat folyót
  pl nominative házak folyók
• Analysis of Hungarian
  – -(a)t acc, -(a)k pl
• The morpheme, a convenient starting point
  – “smallest meaningful constituents of words” (p. 3)
  – “a pairing between sound and meaning”
    • largest phonological sequence associated with a given meaning
<table>
<thead>
<tr>
<th></th>
<th>number of morphemes</th>
<th>number of syllables</th>
</tr>
</thead>
<tbody>
<tr>
<td>cat</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>cats (cat, -s)</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>carton</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>smarten (smart, -en)</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>sycamore</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>hamamelidanthemum</td>
<td>1</td>
<td>7</td>
</tr>
</tbody>
</table>

syllable edge ≠ morpheme edge
3. Identify the morphological constituents and their meanings in the following Tzutujil verbs (Dayley 1985: 87) (A note on Tzutujil spelling: $x$ is pronounced [ʃ], and 7 is pronounced [ʔ].)

<table>
<thead>
<tr>
<th>Tzutujil</th>
<th>Meaning</th>
<th>Tzutujil</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>xinwari</td>
<td>'I slept'</td>
<td>xoqeeli</td>
<td>'we left'</td>
</tr>
<tr>
<td>neeli</td>
<td>'he or she leaves'</td>
<td>ninwari</td>
<td>'I sleep'</td>
</tr>
<tr>
<td>ne7eeli</td>
<td>'they leave'</td>
<td>xixwari</td>
<td>'you(PL) slept'</td>
</tr>
<tr>
<td>nixwari</td>
<td>'you(PL) sleep'</td>
<td>xe7eeli</td>
<td>'they left'</td>
</tr>
<tr>
<td>xateeli</td>
<td>'you(sg) left'</td>
<td>xwari</td>
<td>'he or she slept'</td>
</tr>
<tr>
<td>natwari</td>
<td>'you(sg) sleep'</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

How would you say 'I left', 'he or she sleeps', 'we sleep'?
Inadequacy of morphemes

• A major focus of Haspelmath and Sims
• Hence less adequate definition of morphology as “study of combination of morphemes to yield words”
Goals of morphology

• Large-scale goals
  – Describe, explain morphological patterns of human languages
  – Language-particular description
    • what are the morphemes of the language?
    • what are the categories of morphemes?
      – which morphemes are bound/free?
      – which are roots/affixes?
    • what are parts of speech/lexical category (verb, noun, etc.)
    • how are specific kinds of morphemes put together to form words?
Goals of morphology

• Smaller scale goals
  – Elegantly describe languages
  – Describe languages in cognitively realistic way
  – Explain patterns in morphology-external terms
  – Devise restricted architecture for description
Elegant description

• “elegant and intuitively satisfactory way” of describing linguistic structure
  – “the main criterion for elegance is generality”
  – goal: a general solution
• leads to generalities, or “rules”
  – e.g. rule for plural formation in English: add -/z/
• but “linguists differ in their judgements” re elegance
Cognitively realistic description

• Getting at morphological competence
  – Elegant and general description not good enough

• Descriptions “should express the same generalizations about grammatical systems that the speaker’s cognitive apparatus has unconsciously arrived at”

• E.g. the *wug* test
  – speakers can create plural forms of words that they hear for first time

• Description rejected if cognitively implausible
System-external explanation

• Why are the patterns the way they are?
• Explanations for language-particular patterns
  – “most facts about linguistic patterns are historical accidents”
    • “and as such cannot be explained”
  – E.g. why is English pl formation –z?
• Explanations for universal facts about morphology
  – E.g. why are “nouns denoting people...quite generally more likely to have plurals than nouns denoting things?”
“Restricted architecture for description”

• A.k.a. development of linguistic “theory”

• Goal: formulate general design principles of the grammatical system to constrain descriptions

• Explanations are system-internal

• Theme of most (400-level and higher) linguistics classes at UW (generative, formalist orientation)
The place of morphology in linguistics

• Is there a morphological component?
  – Some syntacticians consider inflectional morphology a component of syntax
  – Some morphology as unproductive phonology?

Figure 1.1 A possible descriptive architecture for grammar
Morphological typology

• Think of a language you know that has lots of affixes.
  – Mandarin has almost NONE!
  – English doesn’t have as much as ...
  – Japanese & Korean have a lot – *verbs*
  – German and Latin have lots
Morphological typology

- Classifies languages according to the degree to which meaningful elements are expressed as separate words
  - “What one language expresses morphologically may be expressed by a separate word or left implicit in another language.” p. 4
Some points on the Analytic...Synthetic continuum

- **analytic/isolating lgs:** “language has almost no morphology” (p. 5)
  - standard examples: Vietnamese, Yoruba, Mandarin
- **synthetic lgs:** “where morphology plays a more important role”
  - agglutinative: “almost all words are formed by concatenation of morphemes” (p. 319) (e.g. Hungarian)
  - polysynthetic: “when a language has an extraordinary amount of morphology” (e.g. W. Greenlandic Eskimo)
Hungarian

- Hungarian as an “agglutinating” lg
  - ‘house’
    - sg nominative ház
    - accusative házat
  - ‘river’
    - sg nominative folyó
    - accusative folyót
- Analysis of Hungarian
  - -(a)t acc, -(a)k pl
  - acc pl is 2 suffixes: -(a)k_{pl}-at_{acc}
Morphological typology

• These are Haspelmath and Sims’ terms! Beware variation among linguists...
  – Others: Isolating Polysynthetic
  Fusional Agglutinative
Degree of synthesis

- Quantifiable as # morphemes/word in random text

<table>
<thead>
<tr>
<th>Language</th>
<th>Ratio of morphemes per word</th>
</tr>
</thead>
<tbody>
<tr>
<td>West Greenlandic</td>
<td>3.72</td>
</tr>
<tr>
<td>Sanskrit</td>
<td>2.59</td>
</tr>
<tr>
<td>Swahili</td>
<td>2.55</td>
</tr>
<tr>
<td>Old English</td>
<td>2.12</td>
</tr>
<tr>
<td>Lezgian</td>
<td>1.93</td>
</tr>
<tr>
<td>German</td>
<td>1.92</td>
</tr>
<tr>
<td>Modern English</td>
<td>1.68</td>
</tr>
<tr>
<td>Vietnamese</td>
<td>1.06</td>
</tr>
</tbody>
</table>

Table 1.1 The degree of synthesis of some languages

Source: based on Greenberg (1959), except for Lezgian
Summary

• Languages differ in morphological resources
• Morphemes a convenient starting point for study of morphology
• Linguists differ in how morphology is viewed, goals of linguistics (including morphology)