

September 9, 2005

CLASS 2: MORPHOLOGICAL ANALYSIS

WHAT'S MORPHOLOGY AGAIN?

In its most general sense, morphology is the **study of words**. *But hey, what's a word?*
Over the next few classes, we will learn how to do with the following and more:

Words:

units of meaning vs. units of sentence structure, pronounceable vs. abstract entities

Word classes:

lexical vs. functional categories, verbal morphology, inflectional classes

Building words:

morphemes, morphological processes, compounds, clitics, allomorphy

Morphology across languages:

agglutinative, morphological operations, and other funky stuff

SOME TERMINOLOGY: MORPH & Co.

A **morpheme** is “the smallest linguistic piece with grammatical function” (A&F: 2)
— or: *the smallest string of sounds carrying information about meaning/function*.

- **free morphemes** can stand on their own, i.e. be words (on that, see next class)
- **bound morphemes** need to attach to something (on that, more today)

- (1) a. house
b. house-s

- morphemes that are not words (i.e. those that are bound) are called **affixes**
- depending on their position, we're dealing with a *prefix, suffix, infix, circumfix* (?)
- affixes can be **category-sensitive** (again, next class will also deal with categories)

- (2) a. polite (adjective) – politeness (noun)
b. drive (verb) – driver (noun)

Stems, roots, and affix freedom:

Affixes attach to **stems** and the most embedded stem in a complex word is the **root** (i.e. it is a **simple stem**). Note that while **all affixes are bound** (bound morphemes), **not all roots are free** morphemes, some can be bound as well (more in next class).

- (3) 'reconsideration'
- re-**consider**-ation
 - re-con-**sider**-at(e)-ion
 - re-**consider**-at(e)-ion
- (4)
- 'disagreement': dis+agree+ment
 - dis-**agree** → dis-agree-ment
 - agree**-ment → dis-agree-ment
- (5)
- leg**-ible, **aud**-ience, **magn**-ify (associated with **Romance roots**)
 - cran**-berry, **huckle**-berry, **gorm**-less (**cranberry morphemes**)

What is a word? As a preview for next class, take a word to be the **smallest free form** found in language. (And yes, we can still distinguish **simple** from **complex** words.)

• **roots belong to lexical categories** (i.e. nouns, verbs, adjectives, prepositions)

- (6)
- care (verb, root) – careful (adjective)
 - careful (adjective, stem) – carefulness (noun)

MORE TERMINOLOGY: THE ALLOMORPH

Morphemes may come in **more than one form**:

- (7)
- hand-s, dog-s, nun-s [z]
 - cat-s, dock-s, trap-s [s]

The **plural morpheme** –s is pronounced differently in (7a) and (7b).

Question: Are we dealing with the **same or two different morphemes**?

Answer: It is **one morpheme with two different realizations** depending on the **phonological environment**.

It is [-s] after [t], [k], [p] and [z] after [d], [g], [n] — what is it that makes these two sets different? The phonological environment: **one is [-voice], the other [+voice]**.

- (8)
- [Z] → [s] / [-voice] ____
 - [Z] → [z] / [+voice] ____

Vowels can be said to be inherently voiced, so they take the [z]-realization as well:

(9) day-s

One further possibility of realizing the plural morpheme is **after sounds like [s], [z]**:

(10) bus-es, box-es, maze-s [ɪz] (or [ɛz])

(8) c. [Z] → [ɪz] / [coronal, fricative] ____

The rule in (8c) should actually **apply before** those in (8a,b). Why? Because if in the case of *bus* for example, where *-s* is [-voice], we apply the rule in (8a) that would give us the plural morpheme *-s* only, so we have no way of accounting for the presence of [ɪz]. In other words, we'll get the wrong result. (**Some sibilants are a subset of all voiceless consonants.**)

(11) *Allomorphic English plural rule*

[Z] → [ɪz] / [coronal, fricative] ____
 [s] / [-voice] ____
 [z] / [+voice] ____

The three different realizations of the plural morpheme [Z] are called **allomorphs**.

In cases **allomorphs are predicted by the phonological environment** (this is relevant for the relation between morphology and phonology, see Class 6 for more).

Something very similar can be said for the **past tense morpheme -ed**: [ɪd / ɛd], [d], [t].

But not only phonology determines allomorphy: **lexicon** and **grammar** do as well.

(12) a. laugh, cliff — laughs, cliffs [s]
 b. wife, loaf — *wives, *loafs *[s]
 c. — wives, loaves [z]

(13) *my wife's job* ↷ 's: [s]

It looks like the “word” *wife* comes in two allomorphs: **free wife** and **bound wive**.

Lastly, it must be pointed out that although intuitive, **correlating morphemes with meaning** is not (always) accurate. (Compare the above definition “Morphemes are the smallest unit pairing sound and meaning.”) Recall that we defined morphemes in terms of meaning **or** function — for a good reason.

- (14) a. return, restore... [rɪ], [rɛ]
 b. re-turn, re-store... [rɪ], *[rɛ]
- (15) a. involve, revolve
 b. #involution / involvement, revolution / *revolvement

MORE ON AFFIXES AND WORDS

We now have a pretty good ideas about general allomorphy: what a **morph** is (morpheme, allomorph), what morphemes **combine** with (stems, roots), and what **affixes** are (prefix, suffix) — *but what about the other two affix guys (infix, circumfix)?*

Arguably, these don't play a role in **English morphology**. So, just to illustrate:

(16)	ROOT	ADD INFIX	MEANING	
	a. /sulat/	/s-um-ulat/	'one who wrote'	<i>Tagalog</i>
	b. /gradwet/	/gr-um-adwet/	'one who graduated'	
(17)	ROOT	ADD CIRCUMFIX	MEANING	
	a. /besar/	/ke-besar-an/	'bigness, greatness'	<i>Indonesian</i>
	b. /spiel/	/ge-spiel-t/	'played' (past participle)	<i>German</i>

A more interesting property of English (as of any language) is the ability to form **novel words**.

- | | |
|--|--------------------------------------|
| (18) a. rebop | (19) shusher — shushee — unshushable |
| b. bebop | (20) smorgsaphobia, quirkologist |
| c. bop | (21) deinstitutionalization |
| (22) <i>Unbreak my heart, uncry these tears.</i> | (23) hobbit |

Interesting: We notice novel **words** very easily — but not new or novel **sentences**!

SOME LARGER ISSUES

- 'language' vs. 'Language'
- components of linguistic systems: syntax — phonology — morphology
- "morphologies are systems" — "skeptical realism" — "anything goes"

Types of morphological analysis:

- morphological analysis: analytic principles vs. synthesis (Principles 1-4)
- type vs. token (Principle 1) — non-segmental morpheme: ablaut (Principle 3)