

# Morphology

# Morphology

- The study of meaningful units in language and how they combine to form words.

Words can be decomposed into smaller units:

*fisherman*

*bookmark*

*autograph*

*inconceivable*

*unattractive*

*realistically*

*John's*

*danced*

*bakes*

# Definition of “Morpheme”

- A minimal linguistic unit which has a meaning or a grammatical function.
- “minimal linguistic unit”: can’t be further broken down
- “has a meaning”: has specific semantic content  
*rug, fat, slow, throw, give, ly, ness, re*

# Morphemes with Grammatical Function

Morphemes with grammatical function either signal relationships between words in a sentence or convey meanings so vital and basic to communication that they get used repeatedly.

# Signaling Relationships between Words

## Relations between words

*The box is on the table.*

*John is taller than you.*

*Patricia 's book*

# Signaling Vital or Basic Meanings

## Vital, basic meanings

*dog ~ dogs*

*danced, dancing*

*I run, he runs*

- Note lack of specific semantic content;  
abstract

# Free and Bound Morphemes

- A free morpheme may occur as an independent word. *Fred, book, yesterday*
- A bound morpheme must be attached to a word.

*scared, houses, badly, unsure*

- Compare: *I laughed yesterday*

*Yesterday I laughed*

But not: *\*ed I laugh yesterday*

Bound morphemes are *affixes*.

Four types of affixes:

1. prefix – attaches to beginning of word

un-like

2. suffix – attaches to the end of word

danc-ing

3. infix – inserted into the middle of a word

Bontoc (Philippines)

*fikas* ‘strong’

*fumikas* ‘he is becoming strong’

4. circumfix – part of the morpheme on each side of a word.

French negative ne *suis* pas

# Morpheme Exercise

In the following groups of words, two words have the same suffix, one word has a different suffix, and one word has no suffix. Which ones go in which category?

## Group 1

rider

colder

silver

actor

## Group 2

running

foundling

handling

fling

## Group 3

tables

lens

witches

calculates

Derivational Morphemes  
versus  
Inflectional Morphemes

# Derivational Morphemes

- Morphemes which change the meaning or the part of speech of a word.
- Morphemes which change the meaning:
  - un-* in *unaffected*
  - re-* in *reactivate*
  - pro-* in *pro-choice*
- Morphemes which change the part of speech:
  - ment* in *judgment, argument*
  - ly* in *quickly, easily*
  - ful* in *hateful*

# Inflectional Morphemes

- Serve a purely grammatical function
- Never create a new word
- Create a different *form* of a word

*bushes, eaten, faster, John's*

Tests to determine whether a  
morpheme is inflectional or  
derivational

# Does it change the part of speech?

Derivational morphemes **MAY** change the part of speech:

*slow* adjective      *slow-ly* adverb

*write* verb      *writ-er* noun

Inflectional morphemes **DO NOT** change the part of speech:

*dog*      *dog-s*      both nouns

*jump*      *jump-ed*      both verbs

# Is the focus within a word or between words?

Derivational morphemes give semantic content to a word, do not indicate relationships between words.

*un-like*      *flamm-able*      *pre-history*

Inflectional morphemes express syntactic or semantic relations between words. They are generally required by the syntax.

*two dog-s*      *John jump-s*

# How productive is it?

Derivational morphemes are usually limited in what they apply to (i.e., less productive).

*flame + -able = flammable*

*tooth + -able = toothable??*

*un-interesting = uninteresting*

*un-slow = \*unslow*

Inflectional morphemes apply to every word in a given lexical class (part of speech).

*book-s    cat-s    wuk-s    gloof-s*

# How is it ordered?

Derivational morphemes occur closer to the root than inflectional morphemes.

*writ-er-s*      *govern-ment-s*

# Practice on English

Take 2 minutes to break the following words in to morphemes. For each morpheme, decide if it is free or bound. For each bound morpheme, decided if it is derivational or inflectional.

*baker's*

*rejoined*

*sillier*

*thickeners*

*unspeakably*

# Allomorphs

- Just as an allophone is a phonetic realization of a phoneme, an allomorph is a phonetic realization of a morpheme.

# Many morphemes have multiple allomorphs

English plural inflection:

*dogs* [z]    *cats* [s]    *bushes* [əz]

*tabs* [z]    *booth* [s]    *roses* [əz]

*toe* [z]    *racks* [s]    *matches* [əz]

*lamb* [z]    *cuff* [s]    *judge* [əz]

What is the rule for the distribution of the allomorphs?

/əz/ after strident (=noisy) fricatives, including affricates

Stridents include [s, z, ʃ, ʒ, tʃ, dʒ]

/s/ after voiceless non-stridents

/z/ after voiced non-stridents (including vowels)

# Word Formation Processes

How are new words formed?

# Affixation

Addition of an affix is very common.

# Reduplication

The repetition of all or part of a word.

Yidij (Australia)

[mad<sup>j</sup>indan] ‘walk up’

[mad<sup>j</sup>inmad<sup>j</sup>indan] ‘keep walking up’

[d<sup>j</sup>ad<sup>j</sup>aman] ‘jump’

[d<sup>j</sup>ad<sup>j</sup>ad<sup>j</sup>aman] ‘jump a lot’

# Compounding

Juxtaposition of two words to form a new word or a complex concept.

*blackberry*

*bear hunting*

*White House*

*Christmas shopping*

*wisdom tooth*

*ring finger*

*fireplace*

*potato chip*

# Functional Shift or Conversion

A change from one lexical class to another without any explicit morphological marking.

*elbow* N → V      *thumb*      N → V

*delay* V → N      *model*      V → N

# Semantic Shift

A shift from one meaning to an associated meaning.

*skirt an issue*

*he's green; he's yellow*

Many times semantic shift is based on metaphor:  
conceptualizing one thing in terms of another.

TIME IS MONEY

*spend time, waste time, save time, etc.*

# Blending

Create a new word by combining pieces of two words:

*smoke + fog = smog*

*modulator + demodulator = modem*

*breakfast + lunch = \_\_\_\_\_*

*motor + hotel = \_\_\_\_\_*

*university + center = \_\_\_\_\_*

*information + commercial = \_\_\_\_\_*

# Clipping

Create a new word by using a portion of another word:

*examination --> exam*

*gymnasium --> gym*

*laboratory -->*

*dormitory -->*

*advertisement -->*

*professor -->*

*information ->*

# Acronyms

Create a new word by putting together the initial letters of a phrase:

*radar (radio detection and ranging)*

*laser (light amplification through stimulated  
emission of radiation)*

*GOLD (Gaucha On-Line Data)*

*NASA*

*AIDS*

# Back Formation

Impose a structural analysis on a word by analogy with another word.

*hamburger -> chicken burger, veggie burger*

*sandwich -> fishwich, bagelwich*

*Watergate -> Irangate, Monicagate, Enrongate*

# Invention

*quark, nerd, gremlin*

# Proper Names

*Kleenex, Xerox, Hoover, Scotch Tape*

# Borrowing

Incorporating words from another language. Languages differ in how susceptible they are to this. English is and has been very susceptible.

<i>pajama</i>	Hindi	<i>spaghetti</i>	Italian
<i>robot</i>	Czech	<i>genre</i>	French
<i>yak</i>	Tibetan	<i>kindergarten</i>	German

# Morpheme-Internal Changes

Sometimes morphological distinctions are made within a morpheme, as opposed to adding something to the outside of a morpheme.

*man ~ men*      *ox ~ oxen*      *goose~geese*

*sing~sang~sung*      *break~broke*

Examples of morpheme-internal changes being used derivationally are *strife ~ strive*, *teeth ~ teethe*.

# Suppletion

Most languages have a small set of words that have totally irregular morphological alternates; there is no way to predict any part of the structure of one from the other.

*am ~ was*

*go ~ went*

German

*ich bin*

‘I am’

*wir sind* ‘we are’

# Morphological Analysis

How to determine morpheme boundaries, morpheme ordering, and conditions for allomorphy.

## Ganda

omukazi ‘woman’      abakazi ‘women’

omussawo ‘doctor’      abassawo ‘doctors’

omusika ‘heir’      abasika ‘heirs’

omuwala ‘girl’      abawala ‘girls’

# Japanese

*ake-* ‘open’

*aketa*

‘opened’

*yom-* ‘read’

*yonda*

‘read’

*tabe-* ‘eat’

*tabeta*

‘ate’

*sin-* ‘die’

*sinda*

‘died’

*nom-* ‘drink’

*nonda*

‘drank’

# Swahili

1	atanipenda	‘he will like me’
2	atakupenda	‘he will like you’
3	atampenda	‘he will like him’
4	atatupenda	‘he will like us’
5	atawapenda	‘he will like them’
6	nitakupenda	‘I will like you’
7	nitampenda	‘I will like him’
8	utanipenda	‘you will like me’
9	utampenda	‘you will like him’

Minimal pairs in morphology:  
Words which differ in terms of a  
single morpheme

1. at**an**ipenda ‘He will like me’
2. at**ak**upenda ‘He will like you’  
    ni ‘me-object’  
    ku ‘you-object’
  
2. at**ak**upenda ‘He will like you’
6. **ni**takupenda ‘I will like you’  
    a ‘he-subject’  
    ni ‘I-subject’

10	atanipiga	‘he will beat me’
11	atakupiga	‘he will beat you’
12	atampiga	‘he will beat him’
13	ananipiga	‘he is beating me’
14	anakupiga	‘he is beating you’
15	anampiga	‘he is beating him’
16	amenipiga	‘he has beaten me’
17	amekupiga	‘he has beaten you’
18	amempiga	‘he has beaten him’

# Another minimal morphological pair

11. **atakupiga** ‘He will beat you’

14. **anakupiga** ‘He is beating you’

17. **amekupiga** ‘he has beaten you’

ta ‘future’

na ‘present’

me ‘past’