

Morphology

Tuesday, 20 August 2019

Review

What kind of affix is this?



Root

Review

What kind of affix is this?



Review

What kind of affix is this?



Ro



ot

Review

What kind of affix is this?

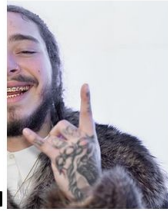




PostMalone



PreMalone



CircumMalone



InMalone

Some new function words!

"Of course I saw The Lion King **because** Beyoncé" (new preposition)

"I spent last night in the library doing homework **slash** looking at pictures of cats" (new conjunction)

How many morphemes per word?

1. Á ta na wa ɔmù (Engenni)
one go to seek house
“Let’s go look for the house”

Fewer morphemes per
word = **isolating**

2. Teninonhsihśákha (Mohawk)
te-ni-nonhs-ihsak-ha
you.and.I-two-house-seeK-go.and
“Let’s go look for a house”

More morphemes
per word = **synthetic**

How many morphemes per word?

1. Á ta na wa ɔmù (Engenni)
one go to seek house
“Let’s go look for the house”
2. He is writing it to me. (English)
3. Esta escribiéndomelo (Spanish)
“S/he is writing it to me.”
4. Teninonhsíhsákha (Mohawk)
te-ni-nonhs-ihsak-ha
you.and.I-two-house-see-go.and

Fewer morphemes per word = **isolating**



Continuum

More morphemes per word = **synthetic**

Learning Outcomes

By the end of today's lesson, you will be able to:

1. Recognize and identify the terms: stem, derivational morpheme, inflectional morpheme, compound, reduplication
2. Differentiate between stems and roots and between derivational and inflectional morphemes
3. Analyze word-internal hierarchical structure using morphological trees
4. Account for the ambiguity of some complex words in English
5. Discuss the relationship between irregularity and morphological learning

<-ity> in English

What kind of word does <-ity> attach to?

- scarce + ity scarcity
- fragile + ity fragility
- civil + ity civility

<-ity> in English

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Why can <-ity> attach to the following words whose roots are not adjectives?

- personal + ity personality
- theatrical + ity theatricality

Roots & Stems

When an affix attaches to a root it creates a **stem**.

This stem can, in turn, take other affixes.

- interpret + able interpretable
 - (interpret is root)
- un + interpretable uninterpretable
 - (interpretable is stem)
- uninterpretable + ity uninterpretability
 - (uninterpretable is stem)

<-ity> and stems

<ity> can attach to <personal> to make <personality>, but not to <person>, *<personity>

<personal> is an adjective even though its root, <person> is not.

Why? Because <-al> attaches to nouns and makes them adjectives (e.g. seasonal, triumphal, comical).

Derivational Morphemes

Derivational morphemes, like <-ity>, have a clear meaning.

They can change the **syntactic class/grammatical category** of the root/stem they attach to.

- <-er>, work (V) + er worker (N)
- <ify>, pure (Adj) + ify purify (V)
- <-ic>, angel (N) + ic angelic (Adj)

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But they don't always change the category of the root/stem they attach to.

- <un->, un + do (V) undo (V)
- <-ship>, friend (N) + ship friendship (N)
- <in->, in + adequate (Adj) inadequate (Adj)

Inflectional morphemes

Inflectional morphemes do not contribute semantic content (distinct meaning). They contribute grammatical information like:

- **number** (plural, singular, dual, etc)
- **tense** (present, past, future, etc)
- **mood** (indicative, subjunctive, imperative, etc)
- **gender** (feminine, masculine, inanimate, etc)
- **case** (nominative, accusative, dative, etc)



Inflectional morphemes in English

Morpheme	Gloss	Example
-s	Third person singular present	She wait- s at home.
-ed	Past tense	She wait- ed at home.
-ing	Progressive	She is eat- ing a donut.
-en	Past participle	She has eat- en the donuts.
-s	Plural	She ate the donut- s .
-’s	Possessive	Chaipat- ’s hair is short.
-er	Comparative	Chaipat has short- er hair than Reina.
-est	Superlative	Chaipat has the short- est hair.

American English varieties

One way that dialects of American English differ is inflectional morphology.

In some varieties of African American Vernacular English (AAVE) and Southern American White English, [a-prefixing](#) is common.

Examples: <I'm a-gonna get you.> and <They're a-talkin' too loud>

In these same dialects, the past tense of <be> is typically <was> regardless of person and number ([was-leveling](#))

So you'd find, <I was hot> as well as <You was hot> and <We was hot.>

Inflection vs. Derivation

Sometimes distinguishing inflection from derivation can be tricky.

There are 4 criteria that we can apply to figure out what type of inflection we are dealing with.

1. category change
2. internal order of affixes
3. productivity
4. semantic transparency

Category Change

Inflection NEVER changes the category or type of meaning from the root/stem.

- heart + -s → hearts
 - same meaning and word category (Noun), just different quantity
- work + -ing → working
 - same word category (Verb), same meaning, different Aspect
- car + less → carless
 - different word category (Noun to Adj), different type of meaning (a thing to a property) = Derivation

Internal Order of Affixes

Derivational affixes appear closer to the root.

So the order of affixes in English suffixes is:

Root-Derivation-Inflection

Or more generally:

Inflection-Derivation-**Root**-Derivation-Inflection

Examples:

- hospital-ize-d
- work-er-s

Productivity

How much freedom do I have to apply the affix?

If it can apply to any word of the appropriate category, then it's likely to be inflectional.

- Present tense –s can apply to any verb

If the words the affix can attach to is quite limited, then it's likely to be derivational

- -ant to make nouns from verbs only applies to nouns of Latin origin

Semantic Transparency

The meaning of a word after attaching an inflectional affix is usually completely straightforward.

With derivational affixes, things are not always so clear.

- Actor is someone who acts, professor is not someone who professes.

Inflectional vs. Derivational Morphemes

Inflectional

- Grammatical function
- No word class change
- Small or no meaning change
- Often required by rules of grammar
- Further from the root than derivational morphemes
- Productive

Derivational

- Lexical function
- May cause word class change
- Some meaning change
- Never required by rules of grammar
- Closer to the root than inflectional morphemes
- Some are productive, many are not

Case

Case is morphological marking to indicate the role a word plays in a sentence (inflectional).

English doesn't have much case left; We only see it on pronouns.

- **He** saw **him**. **She** saw **her**. **They** saw **them**.

I, s/he, we, they are all marking the **subject** of the verb.

me, him, her, us, them all mark the **object** of the verb.

you is ambiguous.

Case

But even when there is no case-marking in English, we still know who the subject and object of the verb are. How?

- Reina saw Linda. Linda saw Reina.

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Word order

Practice

1. Which affix in <disentanglements> is an inflectional morpheme?
2. Name two differences between inflectional and derivational morphemes.
3. What concept from today are you most unclear on?

Break

Hierarchical structure

Words are not just strings of morphemes, like beads on a string.

Instead, words are characterized by hierarchically organized morphological structure.

How do we generate the word, <uncharacteristic>?

- We cannot add <un-> to the root, <character>, as *<uncharacter> isn't a word.
- We first have to add <-istic> to the root, and then add the prefix, <un->.

Why?

- <un-> does not attach to nouns, but may attach to an adjective.

Hierarchical structure

How to draw morphological trees:

1. Find all the morphemes in the word.
2. Find the root and draw a line up from it. Label it according to its syntactic category/grammatical class (e.g. noun, verb, adjective).
3. Determine which morpheme attaches directly to the root.
4. Draw a line from that morpheme and from the root's category up to a higher point. Label it according to the new grammatical class of the word.
5. Determine which morpheme attaches next to the stem and repeat Step 4.

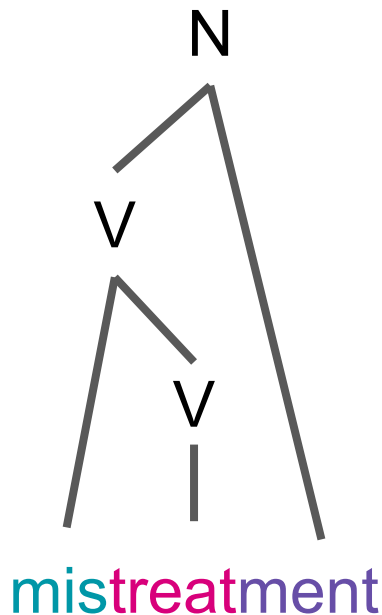
Hierarchical structure

A morphological tree tells you:

- which morpheme is the root
- the order that affixes attach to the root
- the internal structure of the word

How to check your trees:

- Going up from the root, is everything dominated by each category label a possible word?
 - treat? yes; mistreat? yes; mistreatment? yes
- Can each affix attach to the category of the label it immediately dominates?
 - does <mis-> attach to verbs? yes



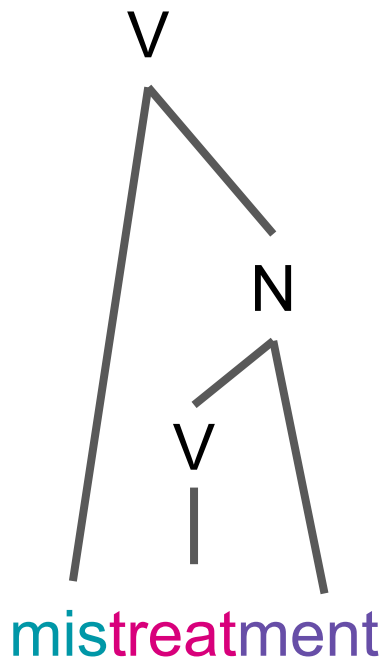
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 - does <mis-> attach to nouns? no



Hierarchical structure

As a group, let's generate structure for the following words:

- immobilization
- disenfranchisement
- residential
- antitransformational

Hierarchical structure

On your own, see if you can draw trees for these words:

- pontification (root = pontiff, which means “bishop/pope”)
- supplemental
- mariner
- unlockable

Ambiguity

What does <unlockable> mean?

There are two possible definitions:

1. Unable to be locked
2. Able to be unlocked

Imagine this situation, you work at a bank and your boss is frustrated about the new lock for the vault.

“Gimme a break! This new thing is unlockable. We might as well give away all the money!”

Ambiguity

What does <unlockable> mean?

There are two possible definitions:

1. Unable to be locked
2. Able to be unlocked

Now imagine that you're in an escape house trying to get out with your friends.

“Hey, come here! This one is unlockable. Let's get outta here.”

Ambiguity

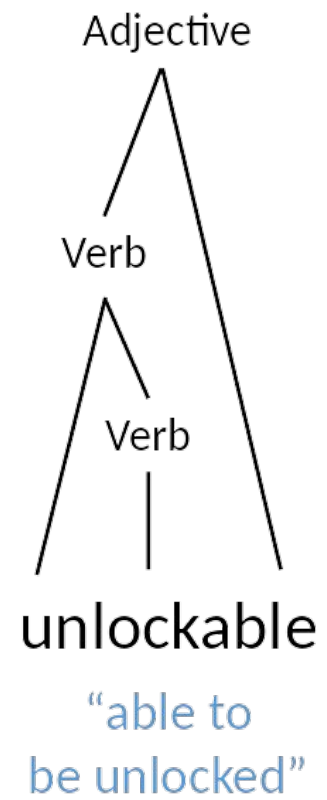
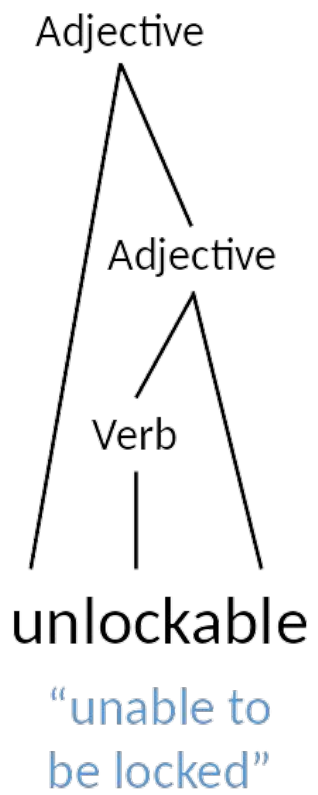
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The beautiful thing is each meaning has its own unique hierarchical structure.

If words were just linear strings of morphemes, like beads on a string, then we wouldn't be able to explain this.



Other types of complex word formation

Compounding: a compound is a word composed of two or more words.

English loves compounds.

- greenhouse, poorhouse, pourhouse, whitewash, spoonfeed, sleepwalk, truck-driver, etc

Like other complex words, compounds have internal structure, too.

In English, the rightmost member of the compound is the **head**.

The **head** determines the grammatical category/syntactic class of the compound.

- green (Adj) + house (Noun) greenhouse (Noun)
- spoon (Noun) + feed (Verb) spoonfeed (Verb)

Compounds

It can be tough to tell if something is a compound or not sometimes.

One way to tell is a compound is stressed different than a non-compound.

Compare: **greenhouse** vs. green **house**

- “There are four greenhouses on this street.”
- “There are four green houses on this street.”

Compare: **Redcoat** (older military term for a British soldier) vs. red **coat**

- American soldier in Revolutionary War: “The Redcoats are here!”
- A shop manager at TJ Maxx: “The red coats are here!”

Blends

These are recently very productive in English.

A **blend** is formed when parts of two pre-existing words are spliced together to create a new word.

Examples:

staycation: a vacation at home (from stay + vacation)

frenemy: someone who is both a friend and an enemy (from friend + enemy)

mansplain: to explain something condescendingly (from man + explain)

Clipping

Clipping: forming a new word from a portion of a pre-existing word

Examples:

- cray (from 'crazy')
- fam (from 'family')
- totes (from 'totally')

Initialisms

Initialisms are created from the beginning letter(s) of two or more words and are pronounced as a series of letters.

Examples:

- UCSD (University of California, San Diego)
- FBI (Federal Bureau of Investigation)
- IPA (International Phonetic Alphabet or India Pale Ale, I guess)

Acronyms

Acronyms are initialisms that are **not** pronounced as a string of letters.

Examples:

- WiFi: Wireless Fidelity
- AWOL: Absent without official leave
- NASA: National Aeronautics and Space Administration
- Thot: That hoe over there

Neologism

Neologism is the general term for a “newly coined word or expression”

We'll use this word if we want to describe a new word that was not formed using one of the more specific processes we described.

Examples:

- doggo
- hodl
- dongle

Other types of complex word formation

Reduplication: repeating or copying all or part of a word to produce a new word.

There are two kinds: **partial** and **total**.

Indonesian uses **total** reduplication to form the plural.

Singular	Plural
rumah 'house'	rumahrumah 'houses'
ibu 'mother'	ibuibu 'mothers'
lalat 'fly'	lalatlalat 'flies'

Other types of complex word formation

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There are two kinds: **partial** and **total**.

Tagalog uses **partial** reduplication to mark the future tense.

Verb Stem	Future Tense
bili 'buy'	bibili 'will buy'
kain 'eat'	kakain 'will eat'
pasok 'enter'	papasok 'will enter'

What about irregulars?

Irregular morphology is often called **suppletion**.

- The plural of <child> is not *<childs>, but <children>, the plural of <sheep> is not *<sheeps>, but <sheep>.

These are learned in a different way than regular inflectional morphology.

- In general, morphemes from the lexicon are subjected to rules, like:
 - N (sg) + <s> N (pl)
 - V + <ed> V (past)
- Irregular forms are learned by memorization, and these forms are stored in the lexicon itself.
- So, the lexical entry for <sheep> notes that the plural is <sheep>. This information is not present in the lexical entries for regular forms.

Quiz Practice

1. Draw the tree structure for the compound <truck drivers>.
2. If Language X uses total reduplication to form plurals, what would the plural of /taki/ “dolphin” be?
3. Were there any things that you didn't fully understand from the lesson?

Coming Up...

- Discussion 3 is due Thursday before class
- Please fill out the Early Student Feedback Survey!
- Midterm will be posted on Thursday after class