

Where am I ?

- **HUL242: Fundamentals of Language Sciences**
- **Morphology (Lecture-1)**
- Thursday, Feb 6th

Review

- Linguistics: scientific study of human/natural language.
- Linguists are interested in:
 - *What* do native speakers of a language X know about X .
 - *How* they come to know it.
- Five core areas:
 - Phonetics: the study of sounds
 - Phonology: the study of sound *patterns*
 - Morphology: the study of word formation
 - Syntax: the study of sentence structure
 - Semantics: the study of meaning

Morphology: Words and their structure

Morphology?

- A subfield of linguistics in which we study **words** and **their internal structures**, i.e., how smaller meaningful units combine to form words.

Word?

- Are ‘cat’ and ‘dog’ the same or different words? **Why?**
 - Different words. They have **different forms and meanings.**
- Are ‘cat’ and ‘catty’ the same or different words? **Why?**
 - Different words. They have almost the same form and meaning but they belong to **different lexical categories/parts of speech.**
 - ‘Cat’ is a noun and ‘Catty’ is an adjective
- Are ‘cat’ and ‘cats’ the same or different words? **Why?**
 - Same words. They have almost the same form, same meaning and they belong to the same lexical category i.e., Noun.

What you learn?

- Consider three things before answering whether two lexical items are the same or different words.
 - Whether they have the same **form** or different forms.
 - Whether they have the same **meaning** or different meanings.
 - Whether they have the same **lexical category/part of speech** or a different lexical category/part of speech.

From the school : Parts of Speech

1. Noun
2. Pronoun
3. Adjective
4. Adverb
5. Verb
6. Preposition
7. Conjunction
8. Interjection

Morphology: Giving a thought

- Every English speaker knows that
- Wind
 - Unwind, rewind, winding, windable, winder
- Woman
 - *Unwoman, *rewoman, *womaning, *womanable, *womaner
- How?

Morphology: Getting started

- How do English speakers/children know about the word ‘*cat*’?
- How do English speakers/children know about the word ‘*teach*’?
 - Experience: they learn by hearing, other speakers using it?
- How do English speakers learn the related form ‘*cats*’?
- How do English speakers learn the related word ‘*teacher*’?
 - Experience?
- So, is **morphology just memorization?**

Morphology: Getting started

- Have you heard the word

turkey-painters

- Is it a possible English word?
- How do you know it's a possible English word?
 - Probably **not from experience/memorization**, right?

Morphology: Getting started

- You recognize *turkey-painters* as a word, even without having heard it before?
- **You know the parts:**
 - turkey (noun)
 - paint (verb)
 - -er (verb → noun, ‘one who does X, where X=verb’)
 - -s (plural marker)
- **You know how to put these parts together**
 - *Turkey-paintser

Morpheme

- Words are made up of smaller parts.
- Those smaller parts are called **morphemes**.
 - A morpheme is the smallest unit of sound that has a meaning.
- All words are made up of morphemes.

Morpheme

- *Turkey-painters* has four morphemes
 - turkey (noun)
 - paint (verb)
 - -er (verb → noun)
 - -s (plural marker)
- That is, four smallest units of sound with meanings.

Morpheme

- In *Turkey-painters*, the part *key* cannot be considered a morpheme.
 - After removing *key*, *tur* would be meaningless.

Types of morpheme

- **Free morphemes:**
 - Can stand alone as words, for example, *cat, turkey, paint*
- **Bound morphemes:**
 - Cannot stand alone, they always need a host, for example, *-er, -s*
 - Different types- **prefixes** (un- kind), **suffixes** (kind-ness) (umbrella term for both, is called **affixes**).
 - There are other types of affixes, **infixes** and **circumfixes** (We will see these shortly)

Types of morpheme

- **Root:**
 - A morpheme that contributes the primary meaning of a word.
 - 2 root morphemes in ‘turkey-painters’ (turkey, paint).
 - 1 root morpheme in ‘cats’ (cat).
- **Stem:**
 - A root or a more complex unit to which a bound morpheme attaches.
 - 1 stem in cats (cat).
 - 2 in ‘turkey-painters’ (turkey-paint, turkey-painter).
 - No stem in ‘cat’.

Morphemes: Revision

- How many morpheme(s) in *cat*?
 - 1 morpheme-> cat
(free morpheme)
- How many morpheme(s) in *cats*?
 - 2 morphemes -> cat, -s
(one free morpheme and one bound morpheme)
- How many morpheme(s) in *turkey-painters*?
 - 4 morphemes -> turkey, paint, -er, -s
(two free and two bound morphemes)

Coming back to turkey-painters

- You not only know the parts, but you also know the principle of putting them together.
 - *Paints-Turkeyer (i.e., paint-s turkey-er)
 - *Turkey-paintser (i.e., turkey pain-s-er)
- Ungrammatical! Even though it has the same parts!
- This is morphology. Not vocabulary drills.

Simple vs. Complex words

- Based on internal structure, words can be categorized into two types:
 - **Simple** words: consist of just one morpheme
 - Cat
 - Dog
 - **Complex** words: consist of two or more morphemes
 - Cats
 - Turkey-painters

Complex Word Structure in English: Some examples

- How many bound morphemes do you identify?

humorless

stupidly

carefulness

senseless

blamelessly

dogs

hopeless

hopelessly

carelessly

assignment

fearlessness

cats

harmlessly

encourage

hopefully

dumbness

joyful

wants

discernment

hopelessness

enrage

fearfully

kindness

looks

- -less, -ment, en-, -ly, -ful, -ness, -s(plural), -s(Present tense,3PS)
- Question: why is -nessless not considered a morpheme?
- Question: why not divide up *hopeless* into *hope-l-ess*?

Complex word formation and types of morpheme

- In all these cases, we create a new word by adding a prefix or a suffix to an existing word.
- **Morphemes based on function**
 - **Derivational** morphemes change the meaning, creating *new words*. Often (though not always) change part of speech
 - **Inflectional** morphemes allow our ‘old’ words to ‘agree with’ their grammatical contexts: Tense, number, person, morphological gender (in languages that have it), etc. Do not change part of speech.

Types of morpheme: Derivational vs. inflectional

- Question: Could you name the derivational and inflectional morphemes from the last exercise?

-less, -ment, en-, -ly, -ful, -ness, -s(plural), -s(Present tense,3PS)

- Derivational:
 - -less, -ment, en-, -ly, -ful, -ness
- Inflectional:
 - -s(plural), -s(Present tense,3PS)

More on derivational morphemes in English

- In addition to sound and meaning, it is useful to track the part of speech that an affix attaches to, and, if it is a **derivational** affix, the part of speech of the result

➤ -less	<u>N</u>	→ <u>Adj</u>	Humor -> humorless
➤ -ness	<u>Adj</u>	→ <u>N</u>	careful -> carefulness
➤ -ful	<u>N</u>	→ <u>Adj</u>	Joy -> joyful
➤ -ment	<u>V</u>	→ <u>N</u>	Assign -> assignment
➤ -ly	<u>Adj</u>	→ <u>Adv</u>	Fearful -> fearfully
➤ en-	<u>N</u>	→ <u>V</u>	courage -> encourage

Question: Why *joyment is bad?

- -ment attaches to verbs and makes them nouns - joy is a noun, not a verb

Morphological process is an iterative process

- The acceptable output of (4) morphemes-hope,-less,-ness and –es is (1) not (2) or (3)
 1. *hope-less-ness-es*
 2. **hope-ness-less-es*
 3. **hope-ness-es-less*
- Descriptive generalization:
 - One morphological process's **output** serves as the **input** to another!!
- **Iterativity** is a hallmark feature of human languages. We will see how we might think about it more *formally* in the next class!

Types of morpheme: coming back to bound morphemes

- **Bound morphemes:** cannot stand alone, they always need a host.
 - Different types: **Prefixes, Suffixes**
- There are other type, not common in English
 - **Infixes**
 - **Circumfixes**
- Umbrella term for all: ***affixes***.

Types of morpheme: Infix

- Bound morphemes that are inserted inside another morpheme

Tagalog: **-um-** morpheme for forming past tense

lipad ‘fly’ -> **lumipad** ‘flew’

punta ‘go’ -> **pumunta** ‘went’

kanta ‘sing’ -> **kumanta** ‘sung’

Types of Morpheme: Circumfix

- Bound morphemes that wrap around another morpheme.
- German: [ge ... t] morpheme for forming past participle
spielen ‘play’ ⇒ **gespielt** ‘played’
- Tuwali Ifugao (Philippines):
[ka...an] morpheme for forming past participle
baddang ‘help’ -> **kabaddangan** ‘helped’

Summing up: Important terms and concepts

- **Morpheme:** smallest unit of sound with a meaning.
- **Division of morphemes**
 - Free vs. Bound morpheme
 - Root vs. Stem
 - Derivational vs. inflectional morpheme
 - Prefix, suffix, infix, circumfix (i.e., Affixes)

Summing up: Morphemes

- **Morpheme:** smallest unit of sound with a meaning.
- **Free morpheme:** Can stand alone/can be used as a word
cat in ‘cats’, turkey and paint in ‘turkey-painter’
- **Bound morpheme:** Cannot stand alone/cannot be used as a word
-s in ‘cats’, -er in ‘turkey painter’

Summing up Cont..

- **Root:** contribute to the primary meaning
cat in ‘cats’, work in ‘worker’
 - a complex word may have more than one root morphemes
turkey and *paint* in ‘turkey-painter’
- **Stem:** any morphological unit in which a bound morpheme is attached.
 - cat in ‘cats’,
 - *Turkey-painter* in ‘turkey painters’
 - *Turkey-paint* in ‘turkey painter’

Summing up Cont..

- **Derivational morpheme:** create a new word, changes meaning, often changes lexical category/part of speech
 - -less, -ness, -ly, en-, un- etc.
- **Inflectional morpheme :** never changes lexical category and meaning, shows grammatical relations (tense, number, person, gender etc.)
 - Very few in languages (see p-152, table-3 for the list of English inflectional morphemes)

Summing up: Morphological processes

- Affixation
 - Prefixation
 - Suffixation
 - Infixation
 - Circumfixation

Next class

- More on morphemes
- Morphological types of languages.
- Allomorphs: Different phonological realizations of the same morpheme
- Morphological analysis (i.e., identifying morphemes) in different languages
- Readings: Sections 4.3 and 4.5 of Language-files_Ch-4_Morphology