# LING001 Introduction to Linguistics

Lecture 14

**Morphology II** 

03/25/2020

Katie Schuler

## Weekly Live Schedule

Monday	Tuesday	Wednesday	Thursday	Friday
				6:30am Problem Solving with Katie on Zoom
		10am-12pm Office Hours with Nari on Zoom	9:30am & 10:30am Recitations with Ollie, Milena & Yiran	
12pm Lecture on Panopto		12pm Lecture on Panopto		11am & 12pm Recitations with Nari
3-5pm Office Hours with Milena on Zoom	2-3pm Office Hours with Yiran on Zoom		2-3pm Office Hours with Yiran on Zoom	3-5pm Office Hours with Ollie on Zoom

https://everytimezone.com

#### How to do well this week

#### Goal: learn to do morphological analysis

- 2 hours: practice problems and recitation
- 4 hours: lectures, practice problems, and recitation
- **5+ hours:** *read*, lectures, practice problems, recitation

No matter what, if you get to the end of the week and haven't figured it out, meet with us!

#### Last time

- Morphemes
- Types of morphemes
- Morphological processes

#### This time

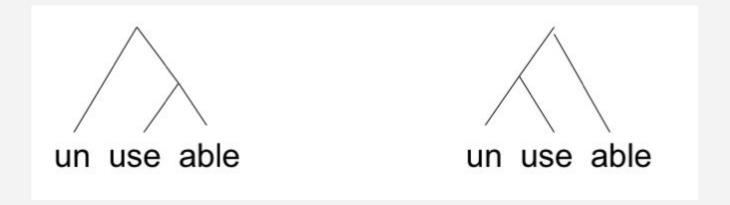
- Internal structure of words
- Two kinds of morphology: inflection and derivation
- How languages differ in terms of the distinctions we've introduced
- Questions about morphology and syntax

#### Internal structure of words

- Morphemes are not simply lined up like beads on a string
- Words have an internal structure that requires analysis into constituents (much like syntactic structure does)
- Example: unusable has three pieces: un, use-, -able.
- What order should we assemble them in? Does it matter?

#### Unuseable

- Two possibilities:
  - (1) Derive use-able, then attach the -un
  - (2) Derive un-use, then attach the -able



## Unuseable, cont.

• -able verb  $\rightarrow$  adjective break  $\rightarrow$  breakable kick  $\rightarrow$  kickable

There is no verb 'unuse', so structure 1 is likely correct:
 [un [use able]]

 This analysis fits well with what unuseable means, too: not capable of being used.

#### Unlockable

 un-: affix applies to adjectives to give a contrary meaning OR to verbs to give a kind of "undoing"

do, undo | zip, unzip

- Remember from the very first class, unlockable has two meanings (ambiguous):
  - (1) Not capable of being locked
  - (2) Capable of being unlocked

## Unlockable, cont.

- Two two meanings correspond to distinct structures
  - (1) attach -able to lock, then un- to lockable
  - (2) attach -un to lock, then -able to unlock

### Created, not stored

- Complex words and their meanings are not simply stored; rather, the parts are assembled to create complex messages
- Another example of the same principle: compounding

## Compounding

- A compound is a complex word that is formed out of a combination of stems (as opposed to stem + affix)
- These function in a certain sense as 'one word', and have distinct phonological patterns
- Examples:
  - olive oil
  - shop talk
  - shoe polish
  - truck driver

## Compounding, revisited

- Like with other complex words, the internal structure of compounds is crucial
- There are ambiguous cases, like *unlockable*
- Example: **Obscure document shredder** 
  - [[obscure document] shredder] person who shreds obscure docs
  - [obscure [document shredder]] obscure person who shreds docs

## Compounding is unbounded

- Although compounds are 'words', they form a productive system, without limits (grammar-wise, not memory)
- Note also that compounds have special stress properties:
  - Judge
  - Trial judge
  - Murder trial judge
  - Murder trial judge reporter
  - Murder trial judge reporter killer

# Questions

## Two kinds of morphology

• **Inflection:** creates new forms of the same word in a way that introduces or expresses grammatical properties

Derivation: takes a word and creates a new one

#### Inflection

- Creates new forms of the same word in a way that introduces or expresses different grammatical properties
- Retains some core notions of meaning (and category)
- Example:
  - -ed: play and played describe the same action, but situate it differently in time

## Inflectional categories

- Languages differ with respect to which categories are expressed inflectionally
- Example: expressing *Person* (1st, 2nd, 3rd) and *Tense* (e.g. present, past) is more limited in English than Latin

## Person and Tense in English v. Latin

	ENGLISH   praise			LATIN   lauda:re		
	Present	Past		Present	Past	
1s	praise	prais-ed	1s	laud-o:	lauda:-ba-m	
2s	praise	prais-ed	2s	lauda:-s	lauda:-ba:-s	
3s	praise-s	prais-ed	3s	lauda-t	lauda:-ba-t	
1p	praise	prais-ed	1p	lauda:-mus	lauda:-ba:-mus	
2p	praise	prais-ed	2p	lauda:-tis	lauda:-ba:-tis	
3p	praise	prais-ed	3р	lauda-nt	lauda:-ba-nt	

## Inflection across languages

- Languages differ in terms of
  - What type of information is expressed in different categories of words; and
  - How many distinct means of marking such differences their are
- Languages also differ in how much can fit into a single word, and even how we define word in the first place
  - More on this later

#### Generalizations about Inflection

- Inflection does not change syntactic category (kick-s is still a verb, even with its inflectional suffix)
- Inflection expresses grammatically required features or relations (e.g. agreement, tense, etc)
- Inflectional morphemes occur outside of derivational morphemes (coming up!)

#### Derivation

- Creates a 'different' but related word
- Change of category (noun, verb, adjective) is possible
  - pay (V) and pay-ment (N)
- New meaning is added
  - o re-do means 'do again'

## Derivation: English Examples

Morpheme	Function	Example
-(a)tion	verb → noun	$deviate \rightarrow devia\text{-tion}$
-al	$noun \to adjective$	$institution \rightarrow institution\text{-}al$
-ize	$noun \rightarrow verb$	$color \rightarrow color-ize$
-like	$noun \to adjective$	dog → dog-like

#### But, not necessarily category changing:

-dom	noun → noun	king → king-dom		
	verb → noun	free → free-dom		

## Same derivation, different form

 In many cases, the same kind of derivational pattern shows differences in form

Derivation	Morpheme	Example		
$verb \rightarrow noun$	-(a)tion	$confirm \rightarrow confirm\text{-ation}$		
	-al	refuse $\rightarrow$ refus-al		
	-ment	$confine \rightarrow confine-ment$		

• **Allomorphy** in a sense: form of the nominalizing affix depends on what host the affix is attached to

#### Generalizations about Derivation

- Derivation does not have syntactic connections outside of the word like inflection does (e.g. agreement)
  - o kind → unkind : change not related to anything external
- Derivation can be unproductive (sometimes doesn't attach to some words) or have unpredictable meanings
  - o destroy → destruction. employ → \*empluction (employment)
  - transmit 'send' → transmis-sion 'sending'; 'car part'

#### Distinction not absolute

- The distinction between **derivation** and **inflection** is used as a helpful tool, not an absolute
- Some cases meet some of the criteria for both inflection (e.g. regularity and productivity) and derivation (e.g. category change)

## Gerunds in English

Gerunds | verb → noun (category change) with -ing

- (1) John destroyed the house
- (2) John's destroying the house (upset me)

 But we can take whatever verbs we think of and form such nominals (productive) and it shows no allomorphy: all such nominals use -ing (regular)

# Questions

#### Words

- How do we define 'word'? Let's start with some counting exercises; How many words in:
  - John ate the apple
  - o I will eat the apples later
  - I'll eat the apples later

## Depends on your purpose

- Phonological word: An object that forms a single unit for the purpose of phonology
- **(Syntactic) word**: An object that forms a single unit for the purpose of the syntax

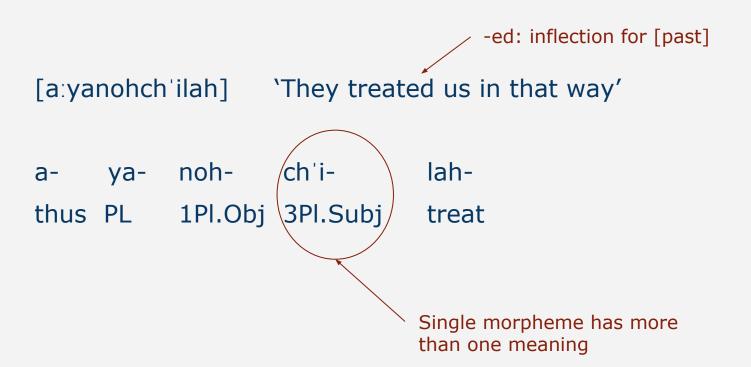
#### I'll eat the apples later

• I'll: single phonological word, but has the same syntax as I will; one phonological word, two syntactic words

#### What's in a word?

- Languages differ greatly in what they package into their words (relatedly, what is expressed as **bound** or **free**)
- Some languages pack a great deal into a single phonological word (bound morphemes), while others express the same thing with many free morphemes
  - Analytic languages: sequences of free morphemes
  - Synthetic languages: many bound morphemes

## Hupa (California, Athabascan)



## 'How much' morphology

- Languages are often described in terms of whether they have little (English, Mandarin) or rich (Hupa, Latin) morphological systems
- And whether meanings are "combined" in morphemes or separated into different morphemes

## Among synthetic languages

**English** from our islands (1)

(2) Latin insul-i:s nostr-i:s

island-ABL.PL our-ABL.PL

Turkish ada-lar-ımız-dan (3)island-PL-OUR-ABL

fusional

agglutinating

## The Moral of the Story

- The moral of the story is: languages express the same meanings in different ways
  - With some "more syntactic" (e.g. English) and others "more morphological" (e.g. Turkish)
- This suggests there is no sharp dividing line between a "word system" (morphology) and a system for assembling words into phrases (syntax)

## Morphology and Syntax

- Morphology: refers to the study of words and their structure
  - The blackboard
- **Syntax:** refers to the structure of larger objects (phrases, clauses)
  - The black board
- In some cases, the distinction between these two domains of study is blurred

## Interactions between morphology and syntax

- **Comparative:** tall, tall-er
  - Comparative seems to be a kind of (inflectional?) morpheme,
     creating a comparative adjective from an adjective
- But: smart, smart-er; intelligent, \*intelligt-er
  - The comparative of intelligent requires a phrase: more intelligent

## Another example: do-support

- Consider the past tense sentence:
  - John played football yesterday.
- And the negative equivalent:
  - John did not play football yesterday.
- [past] appears as part of play in the first example, but occurs on a different word in the second

Consider the following data from Isleta, a dialect of Southern Tiwa, a Native American language spoken in New Mexico

```
[temiban]'I went'[mimiaj]'he was going'[amiban]'you went'[tewanban]'I came'[temiwe]'I am going'[tewanhi]'I will come'
```

(1) What are the morphemes for:

I	you	he	go	come	

Consider the following data from Isleta, a dialect of Southern Tiwa, a Native American language spoken in New Mexico

```
[temiban]'I went'[mimiaj]'he was going'[amiban]'you went'[tewanban]'I came'[temiwe]'I am going'[tewanhi]'I will come'
```

(2) What are the morphemes for:

```
[past] [past progressive] [present progressive] [future]
```

Consider the following data from Isleta, a dialect of Southern Tiwa, a Native American language spoken in New Mexico

[temiban] 'I went' [mimiaj] 'he was going'

[amiban] 'you went' [tewanban] 'I came'

[temiwe] 'I am going' [tewanhi] 'I will come'

(3) What sort of affixes are:

Subject morphemes? Tense morphemes?

Consider the following data from Isleta, a dialect of Southern Tiwa, a Native American language spoken in New Mexico

```
[temiban]'I went'[mimiaj]'he was going'[amiban]'you went'[tewanban]'I came'[temiwe]'I am going'[tewanhi]'I will come'
```

(4) How would you say the following in Isleta?

He went I will go You were coming