LING001
Introduction to Linguistics

Lecture 14

Morphology II

03/25/2020

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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 → adjective break → breakable
  kick → 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	
	Present	***Past***
1s	praise	prais-ed
2s	praise	prais-ed
3s	praise-s	prais-ed
1p	praise	prais-ed
2p	praise	prais-ed
3p	praise	prais-ed

	LATIN | lauda꞉re	
	Present	***Past***
1s	laud-o꞉	lauda꞉-ba-m
2s	lauda꞉-s	lauda꞉-ba꞉-s
3s	lauda-t	lauda꞉-ba-t
1p	lauda꞉-mus	lauda꞉-ba꞉-mus
2p	lauda꞉-tis	lauda꞉-ba꞉-tis
3p	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
  - re-do means ‘do again’

Derivation: English Examples

Morpheme	***Function***	***Example***
-(a)tion	verb → noun	deviate → devia-tion
-al	noun → adjective	institution → institution-al
-ize	noun → verb	color → color-ize
-like	noun → 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 → noun	-(a)tion	confirm → confirm-ation
	-al	refuse → refus-al
	-ment	confine → 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)
  - kind → unkind : change not related to anything external
- Derivation can be unproductive (sometimes doesn't attach to some words) or have unpredictable meanings
  - 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
  - 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)

-ed: inflection for [past]

[aːyanohchʼilah] ‘They treated us in that way’

a-	ya-	noh-	chʼi-	lah-
thus	PL	1Pl.Obj	3Pl.Subj	treat

Single morpheme has more than one meaning

‘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

(1) **English** from our islands

(2) **Latin** insul-i:s nostr-i:s
island-ABL.PL our-ABL.PL
fusional

(3) **Turkish** ada-lar-ımız-dan
island-PL-OUR-ABL
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 play**ed** football yesterday.
- And the negative equivalent:
  - John di**d** not play football yesterday.
- [past] appears as part of play in the first example, but occurs on a different word in the second

Problem solving

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

Problem solving

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'
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(2) What are the morphemes for:

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

Problem solving

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?

Problem solving

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