

Wrapping up Phonology & First Steps toward Morphology

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Practice: Allophonic Rules

- (1) In the following Korean (Koreanic; Korea) data, you will find the sounds [s] and [ʃ]. Determine whether the sounds [s] and [ʃ] are allophones of the same phoneme or separate phonemes. If the sounds are allophones of the same phoneme, say: (i) what the phoneme is, (ii) what the derived allophones are, and (iii) what the rule that determines the distribution of the allophones is.

[ʃi]	‘poem’	[sal]	‘flesh’
[miʃin]	‘superstition’	[kasu]	‘singer’
[ʃinmun]	‘newspaper’	[sanmun]	‘prose’
[tʰaksanʃige]	‘table clock’	[kasəl]	‘hypothesis’
[ʃilsu]	‘mistake’	[miso]	‘smile’
[oʃip]	‘fifty’	[susek]	‘search’
[paŋʃik]	‘method’	[tapsa]	‘exploration’
[kanʃik]	‘snack’	[so]	‘cow’
[kaʃi]	‘thorn’		

- (2) In the following Georgian (Caucasian; Georgia) data, you will find the sounds [l] and [ɭ]. Do the same as you did in (1). (Treat [a] as a non-front vowel.)

[xeli]	‘hand’	[kaɭa]	‘tin’
[kleba]	‘reduce’	[pepeɭa]	‘butterfly’
[cʰoli]	‘wife’	[ɭxena]	‘joy’
[zarali]	‘loss’	[ertʰxeɭ]	‘once’
[cʰecʰxli]	‘fire’	[kbiɭs]	‘tooth’
[leɭo]	‘goal’	[saxɭʃi]	‘at home’
[ɭamaza]	‘prettily’	[xoɭo]	‘however’

Parts of Speech (‘POS’)¹

- In the next couple of weeks, in order to talk about (parts of) words, phrases, and sentences, we’re going to use a few notions from traditional grammar, those are the **Parts of Speech**:

- **Nouns (N)**: pizza, furniture, sincerity
- **Verbs (V)**: trade, eat, arrive, bother
- **Prepositions (P)**: in, beside, up, toward
- **Adjectives (A) or (Adj)**: green, happy, intelligent
- **Determiners (D) or (Det)**: the, a, this, several, each, my
- **Adverbs (Adv)**: quickly, happily, fast

Traditionally, those are classified as *open / lexical* vs. *closed / functional* categories.

- The open class ones have a *large number of members* and allow new words to be added.
 - (i) Nouns, verbs, adjectives, adverbs
- The closed ones have a *limited number of members*, and addition of new members is extremely rare.
 - (i) Prepositions, determiners, complementizers, auxiliaries, modals, coordinators.
- **However**, the traditional ways of identifying POS rely on *semantic* criteria or intuitions, but we require more than that. Why?
 - Nouns like *destruction* (as in *the destruction of the city bothered the Mongols*) or *Sincerity* (as in *Sincerity is an important quality*) don’t fit well to naïve semantic definitions. The first word is an action, which, by semantic criteria, would make it a verb. The second word is an attribute, which is normally associated with adjectives.
 - Consider the following possible sentence:
 - (i) The **bloresnick** is grey (from Kyle Johnson)

The position that *bloresnick* has in this sentence is enough for you to know a lot about which positions it can, and cannot have, in English.

- It bloresnick ran.
- He removed the long bloresnicks.
- She finds Sammy bloresnick.

¹ I thank Faruk Akkuş for the materials to this part.

d. He let his face bloresnicks.

Going back to meaningful words, they can change their POS depending upon where they appear in a sentence:

- a. Gabrielle's mother is a nice person. (N)
- b. Anteaters mother attractive offspring. (V)
- c. Wendy's mother country is Iceland. (Adj)

How to Determine Categories: Distributional Evidence

(I) Syntactic frame

- For example, nouns are the only (one-word) option that can occupy the empty slot in the following **frame**:

They have no _____

They have no *pizza/furniture/sincerity*

but not, They have no *devour/sincere/over/quickly/the*

- For example, verbs are the only (one-word) option that can occupy the empty slot in the following **frame**:

When will Amal _____?

When will Amal *arrive*?

but not, When will Amal *pizza/in/quickly/the/green*?

- For example, Adjectives are the only (one-word) option that can occupy the empty slot in the following **frame**:

This is the *most* _____ / _____ *est* house I've ever seen.

This is the most interesting house I've ever seen

This is the smallest house I've ever seen

but not, This is the most *sincerity/arrive/by/quickly/the* house I've ever seen

(II) Morphology

- For example, Verbs take certain **inflectional suffixes**.

Past tense *Present tense* *Progressive*

play-**ed** play-**s** play-**ing**

arriv-**ed** arrive-**s** arriv-**ing**

but not, pizza-**ed** sincere-**s** over-**ing**

- For example, it is possible to derive adverbs from adjectives:
- *heavy, heavily; mere, merely; rough, roughly; sweet, sweetly, ...*



Beware of:

- a. Subclasses in categories: Count vs. Mass nouns (for example)
 - (i) Count nouns ('CN'; *dogs, chairs*) pluralize differently than the mass nouns ('MN'; *sands, waters*).
 - (ii) CN can be modified by cardinal quantifiers (*one dog/chair*), while MN can't (*one water/sand* is bad)
 - (iii) CN allow modification by *many* (*many dogs*), while MN allow modification by *much* (*much water*).
- b. Irregularities in morphology:
 - play play-**ed** play-**s** play-**ing**
 - go go-**ed** *is bad* go-**es** go-**ing**
- c. frames that allow more than one category:
 - John is _____.
 - nice (Adj)
 - running (V)
 - but not** carefully (Adv)

Practice: POS

- (3) Use distributional evidence to determine the parts of speech of the nonce-words in the following sentence:

The yinkish dripner blorked quastofically into the nindin with the pidibs.

- a. **yinkish:**
 - a. between *the* and a noun
 - b. takes -*ish* adjective ending
- b. **dripner:**
 - a. after an adjective (and *the*)
 - b. takes -*er* noun ending
 - c. subject of the sentence
- c. **blorked:**
 - a. after subject noun
 - b. takes -*ed* verb ending
- d. **quastofically:**
 - a. after a verb
 - b. takes -*ly* adverb ending
- e. **nindin:**
 - a. after *the* (and a preposition)
- f. **pidibs:**
 - a. after *the* and after a preposition
 - b. takes -*s* noun plural ending