

Review for midterm 1

LING 200: Introduction to the Study of Language

Hadas Kotek



February 2016

Outline

- 1 A Reminder!
- 2 A brief review
 - Phonetics
 - Phonology
 - Morphology

A reminder

Midterm 1!

- The first midterm will be **Wednesday, February 10th** (that is, in two days!).
- The midterm will be held in this room.
- The midterm will involve written answers (not scantrons)
- ➡ So, make sure to bring some pens!
 - We will not consider regrades of exams that were written in pencil or corrected with white-out.

A reminder

Materials for the midterm

- The midterm will cover material from Weeks 2-4 (remember, I was out of town in Week 1).
- You are not responsible for terms, topics or issues discussed in the readings that were not also covered in class.
- The converse is *not* true. You are responsible for all topics stressed in class lectures, even if they were not stressed in the readings.
- So if you missed a class here and there, check the lecture notes on MyCourses and get class notes from classmates.

A reminder

Materials for the midterm

- Expect problems and questions of the same general type as those you tackled in conferences and in your problem sets.
- So, if there is any type of problem from one of the problem sets that you do not feel comfortable with, be sure to ask us for help.
- ➡ **My office hours:** Monday 15:00-16:30.
Extra office hours: Wednesday 11:00-12:00.
Linguistics, room 101 (see details in syllabus).
- (The rest of the slides today give an overview—but it's NOT enough to study just what's in them!)

Outline

- 1 A Reminder!
- 2 A brief review
 - Phonetics
 - Phonology
 - Morphology

Consonants

Review: Three key features capture consonants

- **Voicing** (voiced vs. voiceless)
- **Place of articulation** (bilabial, labio-dental, inter-dental, alveolar, post-alveolar, palatal, velar, glottal)
Where is the air flow obstructed?
- **Manner of articulation** (stop, fricative, affricate, nasal, liquid, glide)
How is the air flow obstructed?
- Be able to identify and describe **natural classes**.
 - [g, k, ŋ] **velar phones**
 - [v, f, m] **not a natural class!**

Phonetics

Best advice

- Be able to identify parts of the **vocal tract**.
- Identify and be able to write the **IPA symbols** for all the **consonants** of English and for **the schwa** (this includes the flap [ɾ] and aspiration!).
- You will be given a list of IPA symbols for the English vowels, that includes a word of English illustrating the sound.
- Note: There will be no transcription into IPA, but there may be transcription out of IPA into standard English spelling.
That is, we won't expect you to write "deforestation" in IPA, but wi majt æsk ju tu rirajt sɑmθɪŋ lajk θɪs in normal English spelling.

Phones, phonemes, and allophones

Key concepts in phonology

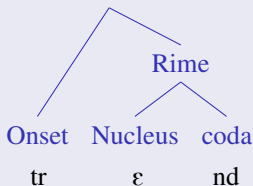
- **Phone**: the basic unit of speech sound.
 - Phones are concrete: they are what we hear.
- **Phoneme**: phonological units that contrast in a language.
 - Phonemes are abstract, underlying forms.
 - Replacing one phoneme with another creates a different word (e.g., the **minimal pair** “**t**ip”, “**d**ip”)
 - Written between slashes: /t/, /d/.
- **Allophone**: a phone that is one possible realization of a phoneme.
 - Even if we replace one allophone with another, it’s still the same word.
 - “cre**a**te”, “cre**a**red”
 - Written in square brackets: [t], [r]
- **Contrastive vs. complementary** distribution

Phonotactics

The syllable

- **Phonotactics:** rules for how phonemes can be sequenced.
- The **syllable:** a prosodic unit that forms the basis of many phonotactic rules.

σ (syllable)



The sonority hierarchy

- vowels > glides > liquids > nasals > fricatives > affricates > stops.
 - More sonorous phones tend to be closer to the syllable nucleus.
 - ✓ trend, *rtend

Phonology

Phonological rules

- **Aspiration:** voiceless stops (p, t, k) become aspirated at the beginning of a stressed syllable.
 - p^hot, spot, stop.
- **Flapping:** /t/ and /d/ are pronounced as [ɾ] when they occur between vowels, and the vowel *before* them is stressed.
 - mátt^{er}, mádd^{er}, maté^{ri}al.
- **Assimilation:** /n/ in the prefix in- assimilates in place to the following consonant.
 - in^{te}tolerable, im^{po}ssible, in^{co}mplete.
- **Dissimilation:** When two postvocalic /r/'s occur in consecutive syllables, it is common to delete the first one.
 - Feb(^r)uary, qua(^r)ter, adve(^r)sary, Southe(^r)ner

Phonology

Phonological rules

- **Insertion:** Voiceless stops often added between a nasal and voiceless fricative.
 - hamster → [hæmpstər], Chomsky → [tʃampski].
- **Deletion:** /h/ is deleted in unstressed syllables.
 - He handed her his hat → [hi həndəd ər ɪz hæt]
- **Metathesis:** /r/ gets pushed to the end of the syllable, switching places with what came after it.
 - comfortable → [kʌmfɹəbəl], prescription → [pɹɪskɹɪpʃən]

Phonology

Best advice

- Be able to identify and name the different phonological processes we discussed.
- Be able to identify if two phones are in complementary distribution (they are *allophones* of the same phoneme) or in contrastive distribution (they are *phonemes*). Know what a minimal pair is, how to decide which allophone is the default.
- Be able to formulate rules to explain the distribution of allophones.
- Rules may refer to the syllable, the sonority hierarchy, or to any phonetic feature we've learned.
- Phonology problems, as in problem sets

Morphology

Key points: morphemes

- **Morphology** is the study of words and their structure.
- More specifically, the study of **morphemes**.
- The **morpheme** is the smallest meaningful unit in a language.
- Morphemes can be bound or free.
 - **Bound morphemes** cannot stand alone as independent words.
 - **Free morphemes** can stand alone as independent words, or appear with additional affixes.

Morphology

Key points: morphemes

- Most bound morphemes in English are **affixes**.
- **Affix types:** prefix, suffix, infix, circumfix.
 - reapply, climb**ing**, Alaf**reaking**bama, *gespielt*.
- **Productive vs. unproductive** affixes.
 - sister**hood**, retweet**able**.
- **Inflectional vs. derivational** affixes.
 - retweets**s**, rational**al**.
- **Category-maintaining vs. category-changing** affixes.
 - retweet, rational**ize**.

Parts of speech

Parts of speech / word class

Words can be categorized into **parts of speech**:

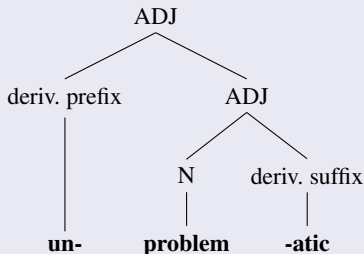
- **Noun (N)**: cat, happiness, realization, ...
 - **Pronoun**: I, she, mine, himself, ...
 - **Proper name**: Hadas, Colin, Don, Francesco, ...
- **Verb (V)**: laugh, realize, climb, ...
 - **Auxiliary Verb (Aux)**: helping verbs that come before the main verb in English (I **have** gone, I **will** go)
- **Adjective (ADJ)**: tall, unfortunate, furry, ...
- **Adverb (ADV)**: quickly, very, happily, ...
- **Preposition (P)**: on, under, between, ...
- **Determiner (Det)**: a, the, this, every, two, ...
- **Conjunction (Conj)**: and, but, or, ...

Morphemes and word structure

Key features of morphological structure trees

Multi-morphemic words can be represented using tree structures.

- Binary-branching.
- Each node has a label (affixes are derivational or inflectional).
- Each stage must be a well-formed word.



Words

Processes of word formation

- **Affixation:** Driv**er**, deriv**ation**, indust**ializ**ing, re**union**, ...
- **Compounding:** Chinat**own**, bath**room**, mail**man**, fire**place**, ...
- **Conversion** often, turning nouns into verbs: to google, to email, to strike, to switch, ...
- **Backformation:** to edit, to air-condition, enthuse
- **Clipping:** flu, bot, fax, bra, cab
- **Blending:** sm**og**, br**unch**, han**gry**, sp**ork**, mot**el**, car**jacking**
- **Acronyms:** radar (RADio Detection And Ranging), Scuba (Self-Contained Underwater Breathing Apparatus),
- **Initialisms:** UN, USA, UK, LOL, FYI, BRB
- **Sound imitation** (onomatopoeia): babble, buzz, meow, clink

Morphology

Best advice

- Identify types of affixes:
 - Type, bound/free, productive/unproductive, inflectional/derivational, category-changing/maintaining
 - Including a few examples of each type of affix we looked at
- Identify parts of speech, be able to give examples of each type.
- Draw morphological tree structures.
- Processes of word-formation, including examples.
- Morphology problems, as in problem sets.

For next time...

- **My office hours:** Today 15:00-16:30.
Extra office hours: Wednesday (Feb 10) 11:00-12:00.
Linguistics, room 101.
- We'll start at 12:35, so don't be late.
- ➡ Don't forget to bring a pen!
- ➡ **No conference this Friday! (Feb 12)**
- **For next week:** read Fromkin et al., chapter 3.