

Final Exam Responses

Please read and complete the following section before you start the exam.

For the final exam, each student should obey the following regulations:

- **The final exam should be completed individually.**
- **The final exam is an open note/book exam.**

Name: Raphael L. Gatchalian

UID: 205426172

Date: 06/09/2020

1. Phonology I

a. Each of the following groups of sounds consists of members of a natural class of sounds, plus one sound that is NOT a member of that class. Do the following for each group.

| | Outlier | Feature(s) that define the class |
|------|---------|--|
| i. | [p] | [-syllabic +delayed release +continuant] |
| ii. | [ϕ] | [-syllabic +approximant] |
| iii. | [æ] | [+syllabic -low] |
| iv. | [j] | [-syllabic +consonantal -approximant] |
| v. | [ɣ] | [+syllabic +front] |
| vi. | [u] | [+syllabic -round] |

b. For each segment, if you change the value of the feature(s) indicated, what new segment will be derived?

| | New segment |
|------|-------------|
| i. | [i] |
| ii. | [dʒ] |
| iii. | [z] |
| iv. | [f] |
| v. | [ɣ] |
| vi. | [ø] |

IPA symbols: <http://westonruter.github.io/ipa-chart/keyboard/>, <https://ipa.typeit.org/full/>

2. Phonology II

IPA Bank:

| Consonants | | | | | | Vowels | | | | | |
|------------|-------|--------|------|------|---------|--------|--------------|---------|---|------|-----|
| Bilab. | Dent. | Alv. | Pal. | Vel. | Glottal | | | front | | back | |
| | | | | | | | | | | -rd | +rd |
| | | d | ç | k | | high | tense lax | i ɪ | | | |
| | θ | s | ʃ | | | mid | tense lax | eɪ ɛ | ʌ | o | ou |
| | | r l | ŋ | ɣ | h | low | | | a | | |
| | | | j | | | | | | | | |

a. Make a list of the environments in which [i], [ɪ], [ɛ], and [eɪ] occur.

| [i] | [ɪ] | [ɛ] | [eɪ] |
|------------|------------|------------|--------|
| l __ n | ŋ __ θ | [word __ ɣ | θ __ n |
| n __ ç | [word __ n | ɣ __ r | ɣ __ ʃ |
| [word __ n | [word __ θ | [word __ θ | |
| [word __ ʃ | θ __ n | | |
| d __ ç | ʃ __ s | | |
| n __ n | j __ h | | |
| [word __ j | | | |

b. What should be the basic version of phonemes?

Basic version for the first pair is /ɪ/ and for the second pair it is /ɛ/.

c. Write a rule that derives non-basic allophones. Formalize your rule in features. Give your rule a name.

RULE TEMPLATE: // → [] / [feature(s)] ___ [feature(s)]

| Rule name | Rule |
|---------------------------|--|
| Front vowel tensification | $\left[\begin{array}{l} +\text{syllabic} \\ -\text{tense} \\ +\text{front} \end{array} \right] \rightarrow \left[\begin{array}{l} +\text{syllabic} \\ +\text{tense} \\ +\text{front} \end{array} \right] / \text{---} \left[\begin{array}{l} -\text{syllabic} \\ +\text{CORONAL} \\ +\text{DORSAL} \end{array} \right]$ |

d. Write down [ʌnlɪŋ] ‘inside’ and [ɪθm] ‘wet’ in phonemic transcription.

| | Phonemic transcription |
|----------|------------------------|
| ‘inside’ | /ʌnlɪŋ/ |

| | |
|-------|--------|
| 'wet' | /iθɪn/ |
|-------|--------|

3. Syntax

English phrase structural rules:

TP → NP T VP

NP → (D) (AP+) N (PP+) (CP)

VP → (AdvP+) V (NP) ({NP/CP}) (AdvP+) (PP+) (AdvP+)

PP → P NP

AdjP → (AdvP) Adj

AdvP → (AdvP) Adv

CP → C TP

NP → NP (Conj NP)*

VP → VP (Conj VP)*

PP → PP (Conj PP)*

TP → TP (Conj TP)*

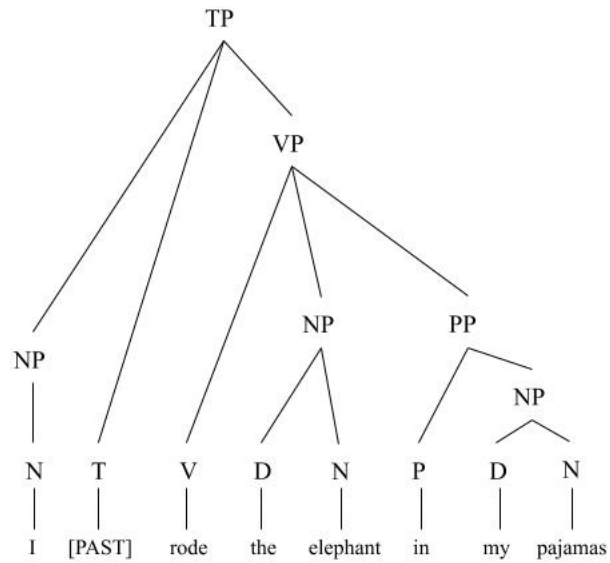
a. The following sentence is semantically ambiguous. Provide two distinct trees that capture the intended meanings.

I rode the elephant in my pajamas.

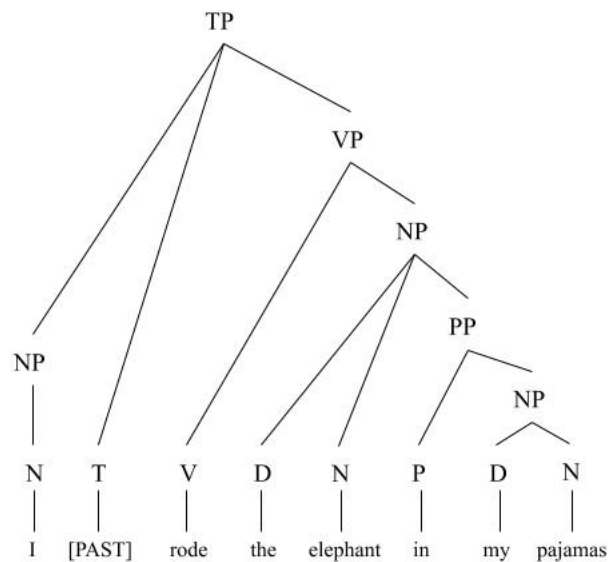
Meaning I in words: I was wearing my pajamas when I rode the elephant.

Meaning II in words: The elephant was wearing my pajamas when I rode it.

Tree I

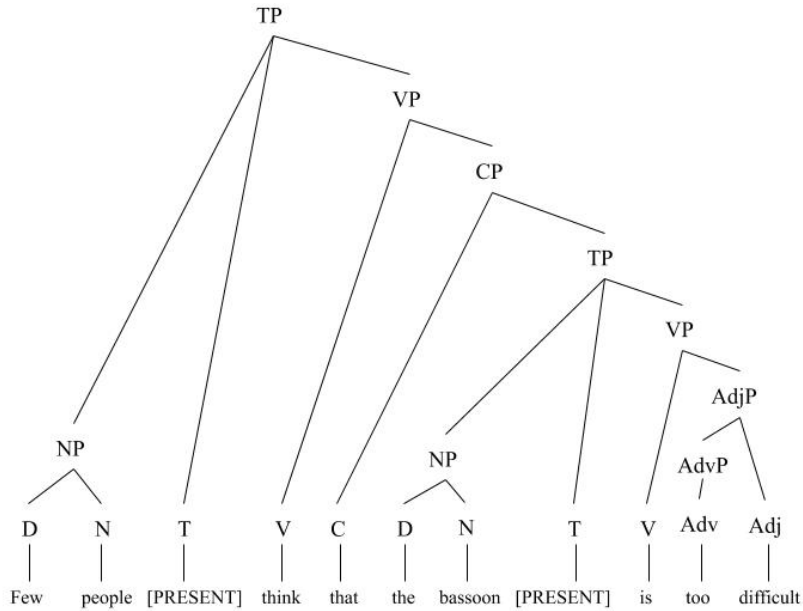


Tree II



b. Draw a syntactic tree for the following sentence.

Few people think that the bassoon is too difficult.



4. Morphology

a. Identify the morphemes which correspond to the following English translations.

Verbs

carry: nes
bring: nes
lead: ved
drive: yed
swim: plav

Pronouns

I: -u
we: -eme
he: -e
you: -esh
you (pl): -ete
they: -ou

Tense, Location

here: pri-
away: od-
will: po-

b. What is the order of these morphemes (in terms of verbs, pronouns, tense, location)?

tense/location, verb, pronoun

The 'will' morpheme 'po-' does not appear when the location morphemes 'pri-' or 'od-' are used.

c. Provide translations for the following English sentences:

| | | |
|------|------------|--------------------|
| i. | [poplave] | 'He will swim.' |
| ii. | [odyedou] | 'They drive away.' |
| iii. | [odvedesh] | 'You lead away.' |

5. Semantics

- a. Create possible worlds to show the following sentence can be true or false.

Some student bikes to school.

World 1: True

[[student(s)]] = {*jarrold, raph*}

[[bike to school]] = {*jarrold*}

World 2: False

[[student(s)]] = {*jarrold, raph*}

[[bike to school]] = {*joshua*}

- b. Create a possible world and explain why the following sentence is always false.

The number two is odd.

World 3: False

[[number two]] = {2}

[[is odd]] = {1, 3, 5, 7, 9}

Explanation: The sentence is only true if, and only if, [[number two]] is in [[is odd]]. It's not, therefore it's a contradiction.

- c. Create a possible world and explain why the following sentence is always true.

Bill will win the election, or he will not win the election.

World 4: True

[[Bill]] = {*bill*}

[[will win the election]] = {*bill*}

Explanation: The sentence is always true because a statement and its negation are in the same sentence with the logical disjunction (OR), therefore it's a tautology.