

Assignment 3 Phonology

1. Review of Terms and Concepts in Phonology

1. In English, [t] and [t^h] are _____
2. In English, [t] and [b] are _____
3. [bɔl] and [hɔl] is a _____
4. The choice of which allophone of the phoneme /p/ to use in a specific phonetic environment is _____
5. The fact that [k] and [k^h] do not occur in the same phonetic environment is an example of _____ and indicates that [k] and [k^h] are _____
6. The fact that we could say *economics* as [ikənāmɪks] or [ɛkənāmɪks] is an example of _____
7. If two sounds form a minimal pair, the two sounds are _____

2. English

Consider the pronunciation of the English words below. The diacritic [:] after a vowel means that the vowel is long, i.e. that it is produced a little longer than other vowels. Describe the process occurring in the words, and state the rule(s) as generally as you can by answering the questions that follow.

- | | | | |
|--------|------|----------|--------|
| 1. næp | nap | 8. næ:b | nab |
| 2. kot | coat | 9. ko:d | code |
| 3. bɪt | bit | 10. bɪ:d | bid |
| 4. bæk | back | 11. bæ:g | bag |
| 5. lik | leak | 12. li:g | league |
| 6. mɪs | Miss | 13. mɪ:z | Ms. |
| 7. rɛf | ref | 14. rɛ:v | rev |

a. List the environments for the short and long vowels (e.g. [o] and [o:])

short vowels

[V]

long vowels

[V:]

b. Do you find anything in common in the environments for each of the sets of sounds, i.e. for the short vowels and the long vowels? That is, can you make any generalizations for each?

(i) short vowels [V]

(ii) long vowels [V:]

c. Based on any patterns you may have found, are short and long vowels in this dialect of English in complementary distribution or do they contrast, i.e. do they occur in the same environment(s)? (Circle your answer.)

(i) complementary distribution

(i) they contrast

d. Based on your answer to c, are short vowels and long vowels in this dialect of English separate phonemes or allophones of the same phoneme? (Circle your answer.)

(i) separate phonemes

(ii) allophones of the same phoneme

e. If they are separate phonemes, what is your evidence? If they are allophones of the same phoneme, state the rule for where each one occurs.

(Optional)

3. English

Look at the following data from English and determine whether [r] and [ɹ] are **separate phonemes**, or **allophones of the same phoneme**.

- | | | | |
|-----------|---------------------|-----------|----------------------|
| 1. pray | [p ^h ɹe] | 6. crab | [k ^h ɹæb] |
| 2. gray | [gre] | 7. fresh | [fɹɛʃ] |
| 3. tray | [t ^h ɹe] | 8. regain | [riɡen] |
| 4. par | [p ^h ɑr] | 9. shriek | [ʃɹik] |
| 5. broker | [brɒkər] | 10. tar | [t ^h ɑr] |

- a. State their distribution (i.e. list the phonetic environment in which each one occurs).

[r]

[ɹ]

- b. State any generalizations you notice. (That is, state in words any patterns you find.)

[r]

[ɹ]

- c. Based on any patterns you may have found, are voiced ([r]) and voiceless ([ɹ]) r in English in complementary distribution or do they contrast, i.e. do they occur in the same environment(s)? **(Circle your answer.)**

(i) complementary distribution

(i) they contrast

3. Based on your generalizations, are they separate phonemes or allophones of the same phoneme? **(Circle your answer.)**

(i) separate phonemes

(ii) allophones of the same phoneme

4. If they are separate phonemes, what is your evidence? If they are predictable, i.e. if they are allophones of the same phoneme, state a rule in words that explains their distribution (i.e. where each one occurs).