Comprehension questions for *A typology of intermediate phonological relationships*

1a In phonology there are two ways in which two sounds can be related. What are they? (The whole paper depends on understanding these relationships.)

1b Which of these two diagrams illustrates the two different relationships?

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/ \       /a/
|   |       /a/
[a] [b]   [a] [b]
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2 What are intermediate phonological relationships?

218 “many of the current criteria that are used for determining phonological relationships were developed in this period” This refers to the concepts of minimal pairs, interchanging phones to see if the meaning changes or not, contrastive distribution and complementary distribution.

3 Do generativists give importance to the structuralist idea that some phones contrast and others do not?

4 How do generativists encode the two relationships as far as underlying representations and rules are concerned?

We will look at undespecification theory and optimality theory, don’t worry about them for now.

5 The distinction between contrastive and allophonic relationships is important in understanding how speakers conceptualize and perceive one’s first language as well as how second language is processed. Why is it important to understand the intermediate relationships in phonology?

6 In your own words what is predictability of distribution?

7 In your own words, what is the commutation test (minimal pair)?

8 In your own words, what is native speaker judgment?

Allomorphs are different pronunciations of the same morpheme. Sometimes two phones that are normally contrastive (e.g. [s] and [z] in Sue and zoo) can become non constrastive when they are allomorphs of different morphemes (dog[z] and cat[s]).

9 In your own words, what is the alternation criterion?
10 In your own words, what is the phonetic similarity criterion?

11 In your own words, what is the orthographic criterion?

Don't worry about the place in the system criterion for now.

12 These criteria were used to determine what?

13 Is the phoneme a psychological entity, a physical entity, or an entity completely abstract from physical or psychological reality?

14 There are a number of problems with these criteria. Discuss two.

Problems with predictability. Sometimes the appearance of two phones is mostly unpredictable (contrastive), but in certain environments it is predictable (allophonic). These are referred to as neutralization in the literature. Some people assume another unit to handle them—the archiphoneme.

15 Use these data to discuss the problem with predictability.

[m] and [n] appear in the same context, and you can't predict which will appear where:

- word initially: name vs. maim
- word internally: beaner vs. beamer
- word finally: feign vs. fame

But, before a consonant, you know the nasal with the same place of articulation as the consonant will appear:

- input is i[m]put
- intolerance is i[n]tolerance
- incubate is i[ŋ]cubate

16 Use these data from Spanish to discuss the problem with predictability.

[rr] occurs word initially: [rr]ojo, [rr]ed
[r] never occurs word initially: *[r]ojo

Word finally [rr] and [r] are fine: po[r] or po[rr]. There is no meaning change. Intervocically you can't predict which will occur. They both do, and the meaning changes accordingly: pe[r]o vs. pe[rr]o, mi[r]a vs. mi[r]a
In Canadian [ʌɪ] and [ɔɪ] and [ɑʊ] are generally predictable:

- [ʌɪ] before voiceless sound in same syllable: ice [ʌɪs]
- [ɔɪ] elsewhere: eyes [ɔɪz]
- [ɑʊ] before voiceless sound in same syllable: about ab[ɑʊ]t
- [ɑɪ] elsewhere: loud l[ɑɪ]d

17 The problem in Canadian English is this pair: writing [rʌɪɾɪ] and riding [rɔɪɾɪ]. What is the problem?

One issue is what constitutes predictability, with the main point being should the predictability be based on phonological information only or is morphological information admissible.

In German, [x] appears after back vowels and [ç] after front vowels.

18 This distribution makes it look like what kind of relationship exists between [x] and [ç]?

19 What is the problem for this idea when you consider Kuchen ‘cake’ [kuxən] and Kuhchen ‘little cow’ [kuçən]?

20 How could you change the context “[x] appears after back vowels and [ç] after front vowels” so that the rule works everywhere? Consider that Kuchen [kuxən] has one morpheme while and Kuhchen is made up of two: [ku] + [çən]?

In English, [s] and [ʃ] appear in minimal pairs (e.g. shoe, Sue) so they are contrastive, on the other hand [ʃ] appears before [r] but, [s] doesn’t (e.g shrew, shred, *strue, *sred) which makes them look somewhat allophonic.

21 In Japanese [t] appears before [o, u, a] but never before [i]. In that case [tʃ] appears.

mat- wait
matanai wait negative
matʃimasu wait polite

What is the relationship between [t] and [tʃ] in Japanese?

22 Some borrowings from other languages, however contain [ti]:

Citibank > [ʃɪtɪbɑŋku]
teapot > [tiipotto]
lipstick > [ripusutikku]

How does this lead to an intermediate phonological relationship?
23 Discuss how variability in the Spanish data below lead to an intermediate phonological relationship.

    Intervocally you can't predict whether [rr] or [r] which will occur. They both do, and the meaning changes accordingly: pe[r]o vs. pe[rr]o, mi[rr]a vs. mi[r]a

    Word finally [rr] and [r] are fine: po[r] or po[rr]. There is no meaning change.

    In descriptive grammars

    [rr] occurrs word initially: [rr]ojo, [rr]ed
    [r] never occurrs word initially: *[r]ojo

    but in reality [rr] and [r] are both used word initially.

24 In English, [p] and [b] can be found in may mimimal pairs, but [b] often devoices to [p] in words such as lab and stab. What problem does this pose for determining the relationship between [p] and [b]?

    In a language, some contrasts may occur in many words ([l] vs. [r] in English), but what about a pair that only contrasts in a handful of words. E.g. nasal vs. non-nasal [a] in want versus watt ([wa?] vs. [wã?]?

25 If a contrast is only found in one or a few words, and another contrast is found in many words, how does this relate to intermediate phonological relationships?

    Don't worry about section 3.5-3.6.