Homework Assignment 7

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1 Exercise 1 : Phonetics

1.1 Question 1

- a) [m, n, ŋ] are all voiced nasals consonants
- b) [s,ʃ,f,θ] are all voiceless fricative consonants
- c) [ɔ, a] are both vowels made with the tongue in the back and in a low position.
- c) [tʃ, dʒ, ʒ, ʃ] are all palatal consonants

1.2 Question 2

My English is not good enough for me to see a problem with those transcriptions. To me, the only critic to be made is of the word *pass* which I believe is made with a long vowel instead : [paːs]

2 Exercise 2 : Phonology

2.1 Part 1 : Contrastive segments and rule-based phonology

2.1.1 Question 1

This is false since we might find that two consonants are always followed by different vowels for example. We might want to take as an example the following : In French, z is always followed by either e or *E* while w is never followed by those vowels.

2.1.2 Question 2

- a) [r] and [l] do not appear in minimal pairs.
- b) [r] and [l] do appear in complementary distribution in this subset of Korean, since they never appear between the same vowels nor consonants, [l] does not appear at the beginning of words and [r] at the end.
- c) [l] is always preceeded by a vowel and followed either by nothing or by a consonant, while [r] is always followed by a vowel and preceeded by either nothing or a vowel.

2.1.3 Question 3

- a) From this subset, we seemingly get for *to* the following forms : [ap], [ab], [api]
- b) The first occurs before a vowel or any of [m, t, s], the second before [g, z, d] and the last before [b, d].
- c) The underlying representation of the prefix is [ap] since the sound [b] can be produce by voicing the sound [p] and [pi] can be produced by adding a liaison vowel when voicing would not make the sounds more distinct.

2.2 Part 2 : Optimality Theory

2.2.1 Question 1

- a) Based on the fact that *kurisumasu* is the valid proposition, we have evidence in favor of the second ordering CV > Max-IO. However, we cannot conclude for the other two orderings.
- b) The following orderings are correct based on this example alone : CV > Dep-IO > Max-IO, CV > Max-IO > Dep-IO and Dep-IO > CV > Max-IO

2.2.2 Question 2

First, we propose the following ordering : Dep-Syll-IO > Max-Stress > NIAO > Max-Syll-IO. It indeed produces /se.ry.ri/ as its candidate. We use Nil to denote a case there is no need to fill.

	Dep-Syll-IO	Max-Stress	NIAO	Max-Syll-IO
se.ry.rə.ri			× × !	Nil
se.ry		×!	Nil	Nil
se.ry.rə		×!	Nil	Nil
se.ry.ri			×	Nil
se.ry.mə.rə.tə.ri	× × !	Nil	Nil	Nil

- a) This ordering is not the only that will work. Indeed, Max-Stress > Dep-Syll-IO > NIAO > Max-Syll-IO would also produce // as its candidate.
- b) We could have included se.rə.ri in the candidate set. This would have brought ambiguity in the set of candidates. Indeed, we would have a tie between se.ry.ri and se.rə.ri, since they have the same score in all the rules.