

Intermediate Exercises

34. Tojolabal

Tojolabal is a Mayan language of the Kanjobalan-Chujean family, spoken in Mexico. Determine whether plain [k] and glottalized [kʔ] are allophones of a single phoneme, in free variation, or in contrast. Support your answer with specific examples. (Hint: Don't forget that near-minimal pairs can be as convincing as minimal pairs.)

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|-------------|----------------|--------------|---------------------|
| a. [kisim] | 'my beard' | g. [sak] | 'white' |
| b. [tʰakʰa] | 'chop it down' | h. [kʰiʃin] | 'warm' |
| c. [koktit] | 'our feet' | i. [skutʃu] | 'he is carrying it' |
| d. [kʰak] | 'flea' | j. [kʰu:tes] | 'to dress' |
| e. [pʰakan] | 'hanging' | k. [snika] | 'he stirred it' |
| f. [kʰaʔem] | 'sugar cane' | l. [ʔakʰ] | 'read' |

35. Spanish

Examine the following data from Spanish and answer the questions which follow. Note that [β] represents a voiced bilabial fricative, and [ɣ] a voiced velar fricative.

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|-----------------|----------------|------------|----------|-------------|--------------|
| a. [bino] | 'he came' | h. [uβa] | 'grape' | o. [siɣlo] | 'century' |
| b. [diβino] | 'divine' | i. [golpe] | 'a hit' | p. [pweβlo] | 'village' |
| c. [kaβo] | 'end' | j. [gato] | 'cat' | q. [laðron] | 'thief' |
| d. [suβteraneo] | 'subterranean' | k. [ayo] | 'I do' | r. [kaβra] | 'goat' |
| e. [brotar] | 'to sprout' | l. [iyaðo] | 'liver' | s. [loyrar] | 'to achieve' |
| f. [imbjerno] | 'winter' | m. [tengo] | 'I have' | | |
| g. [amiyo] | 'friend' | n. [leyal] | 'legal' | | |

- i. The allophones [b] and [β] are in complementary distribution, as are [g] and [ɣ]. Determine the conditioning environments for each pair, and state a rule that describes the distribution of the allophones.
- ii. Refer to Exercise 28 (Standard Spanish) and the rule for the distribution of the allophones [d] and [ð]. Describe the distribution of [b], [d], [g] and [β], [ð], [ɣ] in the most general terms possible, assuming each pair of allophones follows the same pattern.

36. Canadian French

In the dialect of French (an Indo-European language of the Romance family) spoken in Canada, consider the distribution of [t] and [tʰ] (a voiceless alveolar affricate) in the data below. State their distribution and determine if they are allophones of one phoneme or of separate phonemes. [y] and [ɥ] are high, front, rounded vowels, tense and lax, respectively.

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|-------------|---------|---------------|------------|
| a. [tu] | 'all' | g. [telegram] | 'telegram' |
| b. [abutʰi] | 'ended' | h. [trɛ] | 'very' |
| c. [tɛll] | 'such' | i. [kyltʰvr] | 'culture' |