

32. 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.*)

- | | | | |
|-------------|----------------|--------------|---------------------|
| a. [kisim] | 'my beard' | g. [sak] | 'white' |
| b. [tʰakʔa] | 'chop it down' | h. [kʔiʃin] | '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. [ʔakʔ] | 'read' |

36. Farsi

Farsi is an Indo-European language of the Indo-Iranian family, which is the most widely spoken language in Iran. In the following data, do [r], [ɾ], and [ɹ] belong to one, two, or three different phonemes?

- | [r] voiced trill | [ɾ] voiceless trill | [ɹ] voiced flap |
|---------------------------|--------------------------|------------------------|
| a. [ærtɛʃ] 'army' | g. [ahɑɾ] 'starch' | m. [ahɑɹi] 'starched' |
| b. [fɑrsi] 'Persian' | h. [behtæɾ] 'better' | n. [bæradæɾ] 'brother' |
| c. [qædrɪ] 'a little bit' | i. [hæɾntowɾ] 'however' | o. [berɪd] 'go' |
| d. [rah] 'road' | j. [tʃɑɾ] 'four' | p. [bɪræŋg] 'pale' |
| e. [ris] 'beard' | k. [tʃedʒuɾ] 'what kind' | q. [tʃɛɹɑ] 'why' |
| f. [ruz] 'day' | l. [ʃɪɾ] 'lion' | r. [darɪd] 'you have' |

38. Greek

Modern Greek is an Indo-European language spoken in Greece. Examine the sounds [x], [k], [ç], and [c] in the following data. [k] represents a voiceless velar stop, [x] a voiceless velar fricative, [ç] a voiceless palatal fricative, and [c] a voiceless palatal stop. Which of these sounds are in contrastive distribution, and which are in complementary distribution?

- | | | | |
|-----------|----------|-------------|------------|
| a. [kano] | 'do' | j. [kɔɾi] | 'daughter' |
| b. [xano] | 'lose' | k. [xɔɾi] | 'dances' |
| c. [çino] | 'pour' | l. [xɾima] | 'money' |
| d. [cino] | 'move' | m. [kɾima] | 'shame' |
| e. [kali] | 'charms' | n. [xuʃta] | 'handful' |
| f. [xali] | 'plight' | o. [kufɛta] | 'bonbons' |
| g. [çɛli] | 'eel' | p. [çina] | 'goose' |
| h. [ceri] | 'candle' | q. [cina] | 'china' |
| i. [çeri] | 'hand' | | |