

Linguistics 510
Phonetics
Fall 1994
Professor Reiss

Exercise 1

Lakhota Language
Ejectives

Lakhota language has interesting ejectives--stop sounds that are produced with a glottalic egressive airstream mechanism (Ladefoged, 1993).

The phonetic symbol for an ejective is [ʔ].

The following Lakhota words were studied:

p o t k u

These ejectives are in contrast with each other in terms of their place of articulation. The first sound is bilabial, whereas the second one is an alveolar ejective. The last sound studied is a velar ejective. It is apparent that even though they are all ejectives, their places of articulation are different.

Navajo Language
Ejectives

The second language studied in SOWL group is Navajo. Like Lakhota, Navajo also has ejectives.

The following sounds were articulated and examined:

t ah ts ah nift a t ah

Hindi Language
Breathy Voiced

Hindi, an Indo-Iranian language spoken in India, has breathy voiced stops. Before the voiced stops are produced, a breathy voice or murmur precedes.

The phonetic symbol for breathy voiced stops is [h].

The following breathy voiced stops were distinguished on the basis of their places of articulation:

b al d ar al d l

Hindi contrasts between breathy voiced stops in terms of their place of articulation. The sounds studied for this projects are breathy voiced bilabial, dental, retroflex, postalveolar affricate, and velar respectively. Hindi also has voiceless unaspirated, voiceless aspirated, and voiced bilabial, dental, retroflex, postalveolar affricate, and velar sounds. These contrastive articulatory features are also found in English where voiced bilabial, alveolar, and velar stops have their corresponding voiceless stops.

Sindhi Language

Implosives

Sindhi-an Indo-Aryan language spoken in India and Pakistan-has implosive sounds. In contrast to ejectives, implosives are stop sounds that are produced with an ingressive glottalic airstream mechanism.

The symbol for implosives is a small hook on the top of the regular phonetic symbol. The following sounds were played and repeated:

The articulatory closure in the production of the Sindhi implosives is characterized by the downward movement of the glottis. However, the difference lies in the place of articulation. In this language implosives can be bilabial, alveolar, alveo-palatal, and velar.

Hausa Language

Glottalization

In addition to these languages, the glottalization in the African language, Hausa, was also studied. This language makes a distinction between glottalized sounds in their places of articulation. The relevant contrasts for the Hausa sounds are bilabial, alveolar, alveo-palatal, and velar.

Mpi Language

Creaky-voiced or Laryngealized sounds

Certain sounds of this language are characterized by creaky-voiced sounds known as laryngealized. The sounds studied were voiced vowels with the difference in the tongue position. They ranged from mid rising, mid level to high falling, high level, for example. It should be noted that laryngealization is used to discriminate between different sounds. The phonetic symbol for laryngealized sounds is [̰].

Mazatec Language

Breathy Vowels

The modal, creaky, and breathy vowel sounds in Mazatec language were practiced. The different symbols for modal, creaky, and breathy sounds are:

XOO Language

Clicks

Interestingly, this language has more than eighty different types of clicks--stop sounds made with an ingressive velaric airstream mechanism. The sounds studied are voiced velar , voiceless velar nasal , and voiceless glottal stop . In addition to these, plain , epiglottalized , strident , and breathy clicks were also practiced.

The approved IPA symbol for dental, post-alveolar, and lateral clicks are [ɖ], [ɗ], and [ɗ̠].

Nepali Language

Breathy Voiced and Voiceless stops

Finally, the Nepali sounds were studied. Nepali has both breathy voiced and voiceless bilabial stops, which are more or less similar to Hindi.