True voiceless aspirates in Yema

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Abstract: Aspirated consonants have been described as voiced with broken aspiration of release and vocalicular abduction of the glottis. In this paper, we present transcriptions and analyses of voiceless aspirated sounds in Yema, a language from the Eastern Nilotic family spoken in South Sudan. The present analysis and description of voiceless aspirates is based on transcriptions of fifteen native Yema speakers. The results indicate that voiceless aspirated sounds in Yema are produced with voicing, with no clear break in the aspiration of release; glottal abduction is described as a normal manner of production.

Materials, methods

Four native Yema participants (F, 30; M, 30; F, 40; M, 40) from an urban area were transcribed using the International Phonetic Alphabet. The productions of voiceless aspirated sounds were transcribed and recorded for this study.

Voiceless aspirates in Yema appear to be both voiced during occlusion and unvoiced during aspiration. The presence of voicing is based on the following observations: lower frequency bursts, greater duration of articulation, increased energy, and higher formants. The absence of any break in aspiration of release is also evident in the absence of any pause between the occlusion and aspiration.

Data analysis

Research goals

1. To examine the distribution of voiceless aspirated sounds in Yema.
2. To analyze the manner of production of voiceless aspirated sounds in Yema.
3. To determine the effects of voicing on the production of voiceless aspirates.

Voiceless aspirated sounds in Yema are produced with voicing, with no clear break in the aspiration of release; glottal abduction is described as a normal manner of production.

Discussion

Voiceless aspirates are best described as voiced with broken aspiration of release and vocalicular abduction of the glottis. In Yema, the manner of production of aspirates is characterized by voicing and continuous aspiration. The absence of any break in aspiration of release is also evident in the absence of any pause between the occlusion and aspiration.

Aspiration

Aspiration is described as the voicing of the vocal cords during the occlusion phase of the sound. The presence of voicing is based on the following observations: lower frequency bursts, greater duration of articulation, increased energy, and higher formants. The absence of any break in aspiration of release is also evident in the absence of any pause between the occlusion and aspiration.

Voicing

Voicing is described as the vibration of the vocal cords during the occlusion phase of the sound. The presence of voicing is based on the following observations: lower frequency bursts, greater duration of articulation, increased energy, and higher formants. The absence of any break in aspiration of release is also evident in the absence of any pause between the occlusion and aspiration.