PROSODIC AND PARALINGUISTIC FEATURES OF ONOMATOPOEIA IN KAYABÍ

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ABSTRACT

This paper presents some aspects of the prosodic and paralinguistic features of onomatopoeia of informal oral communication in Kayabí (Tupian language of Brazil).

1. INTRODUCTION

Kayabí belongs to the Tupí-Guaraní language family of Brazil as classified by Rodrigues [7]. The language is spoken by about 600 Indians living in the rain forest of Mato Grosso and Pará of Central Brazil, where these data were gathered.

2. FUNCTION OF ONOMATOPOEIA

Onomatopoeia is used extensively in conversation and narration of texts, but less in formal and written style. Verboid onomatopoeic forms specify and add detailed information to the finite verb they accompany or substitute. This information can be aspect of the action (progressive, iterative, etc.), rhythmic pattern of the action (tempo, effort exerted, regularity of movement, etc.), or description of the actor or instrument (weight, size, number, etc.).

Verboid onomatopoeia form part of the lexical inventory of the language. They are not inflected like finite verbs, but can lexicalize into verbs by adding a causative prefix to the onomatopoeia.

Onomatopoeia referring to bird and mammal sounds are mostly echoic of their calls or noises. Many of the bird names are formed according to their echoic form.

Onomatopoeia involve the production of sounds, sound sequences, prosodic and paralinguistic features, all of which require unique physical movements and adjustments of the vocal tract, as well as rhythmic and phonotactic patterns that do not follow the phonological rules of the language. Imitations of bird and mammal calls show a greater variety of these phonetic phenomena.

The onomatopoeic words and phrases are generally followed by the inflected verb form /ʔjau/ 'say' or /imonou/ 'do', but can also occur without these, or even function on their own as a complete sentence. Thus onomatopoeic utterances show similarities to direct quotes.

One of the functions of onomatopoeia is imperative use, especially when talking to children with a limited vocabulary of the language (to make them sit, get up, sleep, etc.).

3. ARTICULATIONS AND PHONOTACTICS

The following are the phonemes of Kayabí:

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p t k kʷ ?
m n n
f s
   r
w j ɣ

  i ĩ    ɨ ɨ̃    u ũ
  e ẽ    a ã    o õ
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The permitted syllable pattern is CV in running speech and (C)VC utterance final.

Onomatopoeia show deviance in manner and place of articulation, adding the following segments and sequences:

[m̩] [x] [r] [ɽ] [ʙ] [U] [ɨ] [Ō] [ə] [ə] [ə]
[ʌ] [pɹ] [pr] [pɽ] [kʷr] [kɽ] [eᵘ] [Eᵁ].

Phonotactic differences are that the segments [?] and [h] (voiceless vowel equivalent) can occur also word final, syllabic consonants [m̩] [s̩] [x̩] [ɨ̩] [ɾ̩] and [ɽ̩] as nucleus, and preglottalised fricative [?s] initially.

CVC can also occur utterance medial in sequences of onomatopoeic words and reduplication, accompanied by specific tempo, pitch and stress patterns. Examples are:

/'pōk 'pōk 'pōk/

(reduplication) 'chop lots'

/ˈpók ˈpɨ̄m/

(sequential) 'chop and fall'

4. PROSODIC AND PARALINGUISTIC FEATURES

4.1. Rhythm

Timing, stress, pitch, duration and iteration often co-occur to achieve the desired rhythmicality and aspect of the action.

Rapid speech (‿) expresses an action with fast movements, smallness, light weight, or repeated actions; whereas slow speech (⌒) indicates slow movements, largeness, heavy weight, or fewer actions.

Staccato with pause breaks, often linked with lengthening, can indicate a heavy actor with slow movements; whereas legato indicates a continuous or prolonged motion. Speed-up in tempo signals increase in force of action, like 'coming-to-a-boil'. Duration can be of vowels and of syllables.

/ˈpɨ̄ˈɨ̄ˈɨ̄ ˈtóm ˈtóm ˈtóm/

'small fish bounce on water and fall'

/ˈpɨ̄ːː ˈɨ̄ːː ˈtòm/

'large fish jump on water surface and fall'

/pɨ̄ ˈtòm/

'large fish jumps high and falls'

/sósó'sók/ 'bird walks fast.'

/ˈsòk ˈsòk/ 'jaguar walks slowly'

/ˈsóːrók/ 'several pigs walk'

/sōːˈrōk/

'one pig walks on leaves'

/só'rók só'rók só'rók/

'rat runs around'

/ˈmák ˈmák ˈmák ˈmák/

'water starts to boil'

/mak mak mak mak mak mak mak/

'water boils hard'

/tɨ̄/ 'small stone falls down'

/tɨ̄ːːː/ 'large stone falls down'

/pɨ̄m/ 'animal jumps once'

/ˈpɨ̄m ˈpɨ̄m ˈpɨ̄m/

'animal jumps around'

/pɨ̄m 'sórók/

'monkey jumps and lands lightly'

/pɨ̄m 'sōːːːrōk 'tɨ 'tɨ 'tɨ/

'jaguar jumps, lands forcefully, and runs with heavy steps'

/wã̄ːm/ 'jaguar slanders along'

/wã̄ːːːm̩/ 'aeroplane rises up'

/ˈwãm ˈwãm/

'howler monkey swings from branch to branch'

4.2. Pitch

Verboid onomatopoeic words and phrases spoken with high pitch signal a fast action (often accompanied by allegro tempo), light weight, small, lots; whereas low pitch indicates a slow action (often accompanied by legato tempo), heavy weight (accompanied by lengthening), few, or large.

/wã́ wã́ wã́ wã̃m/

'mosquitos passing by fast'

/wã̃ wã̃ wã̃m/ 'aeroplane flying'

4.3. Phonation

Voice qualities used for echoic onomatopoeia are: creak (a̰), ingressive creak, falsetto creak, breathy voice (a̤) and whisper (ḁ).

/"m̰: "m̰m 'm̰ 'm̰/ 'currasow call'

/mḛ:ʔ/ 'paca noise'

/ka̰/ 'macaw call'

/ʎ̄:::/

(laryngealised and ingressive) 'howler monkey noise'

/pɨ'rɨ pɨ'rɨ pɨ'rɨ x3/

'paca flaps ears'

/'kxʊ̰ 'kxʊ̰ 'kxʊ̰ x3/ 'toucan call'

4.4. Articulatory Control

Some animal imitations are articulated with different articulatory gestures such as constricted larynx (small monkey), lowered larynx (large monkey), a more precise and forceful articulation accompanied by speed up of reduplications (chopping), unrounding of rounded vowels (noise of howler monkey), and other modifications of the vocal channel which are combinations of several of the above gestures.

/m̩ m̩ m̩ m̩ m̩ m̩/

(low larynx) 'piranha fish jumps up to get leaves'

/ʎ̄:::/

(ingressive creak) 'howler monkey'

4.5. Initiation of Airstream

Some echoic forms are pronounced with an ingressive airstream, such as noises made by certain fish, monkeys, and other animals.

/eↄ̀ eↄ̀ eↄ̀ eↄ̀/

(ingressive breathy) 'capibara in water'

/ɘↄ̄ ɘↄ̄ ɘↄ̄ ɘↄ̄/

(ingressive, whispered-breathy) 'spider monkey'

4.6. Reduplication

Onomatopoeic words can be repeated up to eight times to signal increased length of time or space, the number of repeated actions, actors, or participants. Reduplication describes iterative actions, or sequential happenings.
Many of the examples given in 4.2 fall into this category. Other examples are:

/tòk/ 'give to one person'

/tók tók tók/ 'give to several persons'

5. ACOUSTIC ICONICITY

Acoustic representations of iconic sounds show the following tendencies:

Initial fricatives give the idea of entering, piercing:

/suk̄/ 'fall into, pierce'

A final stop seems to be telic and imitative of the forceful endpoint of the action (such as hit or fall):

/pòk/

'something hard or heavy falling or being cut'

A final nasal represents a continuous sound:

/tén/ 'ring, rattle'

A voiceless trill indicates a series of quick movements:

/pr̥̄/

'humming bird flying on the spot, or a small fish jumping along the water surface'

A final vowel indicates a continuous movement similar to an atelic aspect:

/tɨ̄ tɨ̄ tɨ̄/ 'walk along'

A high front vowel seems to convey the idea of smallness or fear:

/kí/ 'noise of tapir pup'

/wí:n/

(weak voice) 'noise of spirits'

A high back vowel gives the idea of largeness:

/kò/ 'noise of a howler monkey'

6. CONCLUSION

In Kayabí an action that is expressed by a generic term can be further qualified by a vast choice of onomatopoeic words and phrases, transmitting detail about the performer and performance to reinforce the oral message thus making it understood and vivid.
Tape recordings of several hundred verboid and echoic onomatopoeia made by several men show that onomatopoeic forms are not coined arbitrarily by the speaker, but are part of the lexicon of the language and reflect a specialised knowledge relevant to the community's environment and everyday life.

REFERENCES

[1] BROWN, R. (1963), "Words and things", New York: The Free Press.
[2] CRYSTAL, D. (1976), "Prosodic systems and intonation in English", Cambridge: Cambridge University Press.
[3] LADEFOGED, P. (1980), "What are linguistic sounds made of?", Language: 56, 485-502.
[4] LAVER, J. (1980), "The phonetic description of voice quality", Cambridge: Cambridge University Press.
[5] LEHISTE, I. (1970), "Suprasegmentals", Cambridge: Cambridge, Mass.: MIT Press.
[6] OHALA, J. (1983), "Cross-language use of pitch: an ethological view", Phonetica: 40, 1-18.
[7] RODRIGUES, A. D., (1958), "Classification of Tupí-Guaraní", IJAL: 24, 231-244.