



Assessing the Tonality of Punjabi Language

Nishtha Setia, Aditya, Sanjay K. Jha

Amity School of Liberal Arts
Amity University Haryana, India

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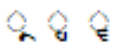
Abstract

The prime objective of this study is to explore whether Punjabi is a tonal language or not. Punjabi is one of the languages of Indo-Aryan family. Punjabi inherits the tonal characters from the Gurumukhi script. The tone in Punjabi can be marked with the High or rising tone, Low or falling tone or neutral. Punjabi tone represented by the production task and tone is usually recognized by stressed syllabus. This paper will use the data of 37 words. It is analyzed that characters such as ਭ (bh) with tone /p/, ਘ (gh) with tone /k/, ਢ (dh) with tone /t/, ਢ (dh) with tone /t/ and ਝ (Jh) with tone /tʃ/, changes the tone according to their position. ਚ/ ਛ/ placed after ਚਿ /u:/, ਞ /ə/, ਈ /i:/ vowels has weak sound or no sound as the first consonant sound is extend to the second consonant. ਙ (Adhak) it doubles the sound of letter. ਙ (Bindi) It serves to add a nasal sound. ਙ Tippee, it works as nasal sound.

1. INTRODUCTION

Punjabi language, which belongs to Indo-Aryan family, is widely spoken by the North Western India and Northeastern Pakistan. Punjabi is the 10th most spoken language in the world with speakers counted as 125 million approximately. The Gurumukhi is the script of Punjabi. Gurumukhi have 35 letters is unlike Greek and Roman alphabets, arranged as vowels first, then

consonants (Gutturals, Palatals, Cerebrals, Dentals, and Labials) and semi-vowels. Previous research on tonal language says that ‘there are five tonal consonants in Punjabi recognized by the position of the consonant’ and as well as consider as empirical proof of the linguistic rules on Punjabi tones illustrated by Gill, H.S (1986). The Punjabi tone system has three levels of tone first high tone, secondly level tone and thirdly low tone. It is said that tone in Punjabi is not represented with any symbol in the Gurumukhi script.

- Punjabi have three subjoined consonants means belonging to the feet that is attached under the letter.  / ੳ ੲ ੳ /.
- There are 6 supplementary consonants ੴ /ʃə/ ੴ /xə/ ੴ /ʒə/ ੴ /zə/ ੴ /fə/ ੴ /lə/. In supplementary consonants ੴ (ਖ), ੴ (ਗ), ੴ (ਜ), ੴ (ਫ), ੴ (ਲ) they are pronounced same except ੴ /ʃə/
- Nasal Consonants: ੴ /ŋə/ ੴ /ɲə/ ੴ /ɳə/ ੴ /ɳə/ ੴ /mə/ other then this ੴ Bindi ੴ Tippi.
- In Punjabi we have three independent vowels (ੳ, ਅ, ਏ)
- In Punjabi we have 10 dependent vowels:

	<u>Dependent Vowel</u>	<u>Name</u>	<u>Sound</u>	<u>IPA</u>
1.	Invisible	Mukta	ਅ(a)	/ə/
2.	ੴ	Kanna	ਆ(ā)	/a:/~ /ā:/
3.	ੴ	Sihari	ਇ(i)	/i/
4.	ੴ	Bihari	ਈ(ī)	/i:/
5.	ੴ	Aunkar	ਉ(u)	/u/
6.	ੴ	Dulainkar	ਊ(ū)	/u:/
7.	ੴ	Lava	ਏ(e)	/e:/
8.	ੴ	Dulava	ਐ(ai)	/ɛ:/~ /əɪ/
9.	ੴ	Hora	ਓ(o)	/o:/
10.	ੴ	Kanaura	ਔ(au)	/ɔ:/~ /əʊ/

- Gurumukhi Alphabhets :

	Tenuis	Aspirates	Voiced Stops	Nasal
Gutturals	ਕ	ਖ	ਗ	ਘ
Palatals	ਚ	ਛ	ਜ	ਝ

Cerebrals	ਟ	ਠ	ਡ	ਢ
Dentals	ਤ	ਥ	ਦ	ਧ
Labials	ਪ	ਫ	ਬ	ਭ
Semi-Vowels	ਯ	ਰ	ਲ	ਵ

- ੱ (Adhak) it doubles the consonant before it appears.

1.1 Research Objectives

The objective for this research is to find the different tonal characters in Punjabi and Does that make language as tonal. The other prospect is to look in to the tone level of the words as per data of 37 words.

1.2 Research Questions

- Which letters in Punjabi work as tonal?
- Does Punjabi can be considering as Tonal Language?
- At what basis lexicon to be as tonal word?

4. FINDINGS AND ANALYSIS

Tone

Tone is the use of pitch in language to distinguish lexical or grammatical meaning-that is, to distinguish or to inflect words. (Wikipedia) To express information, emotion or to convey emphasis and to contrast something in verbal languages, the language uses the pitch. Any languages use tone to distinguish words or their inflections, comparable to vowels and the consonants of the language. According to Pike, in tonal language each syllable must carry at least one significant pitch unit.

In Punjabi, there are three types of tone: Low, High, and Neutral. For the low tone , tone is recognized by the voice below the normal pitch and rising back to the following syllable. For high tone, tone is high in the pitch and falls back to the following syllable.

From the data collected, it is analyzed that ਹ (ha), ਘ (gha), ਝ (jha), ਢ (dha), ਧ (dha) and ਝ (bha) at the initial position have low tone and high tone when placed in middle and final. The same letter conjoined with half ਹ (ha) like ਗ੍ਰ (gha), ਜ੍ਰ (jha), ਢ੍ਰ (dha), ਧ੍ਰ (dha) and ਬ੍ਰ (bha) have low tone at final position or middle and when it is placed at the beginning the tone of letter is neutral.

ਹ (ha) when placed after independent vowels (ੳ, ਅ, ਏ) then the sound of vowel is extended to next syllable. If half ਹ (ha) is at the end then the tone of the word is high. The other analysis is that Adhak ੱ it puts the stress on syllable and doubles the sound of following syllable. ਝ when conjoined with ੱ the syllable is stressed and has high tone.

HIGH TONE			LOW TONE		
Punjabi Word	English meaning	<u>Remark</u>	Punjabi word	English meaning	<u>Remark</u>
ਦੱਸ /ʌḏəssə/	Tell	The initial pitch is high and stress is on ਦੱ /ḏə/ and ੱ (Adhak) it doubles the sound of letter ਸ /s/ will become /ss/	ਦਸ /ḏəssə/	Ten	
ਨਾਂ /n̄ḏā:/	Name	ੰ (Bindi) It serves to add a nasal sound and stress is on ਾ:	ਨਾ /n̄ā:/	No	
ਕਾਰਲਾ /kʌḏā:lā:/	Hurry up	When ਾ is before ਹ then ਹ is tonal means it is weak letter, another fact is ਹ is also tonal or weak when it is placed in middle position	ਕਾਲਾ /kʌ:lā:/	Black	
ਚਾਹ /tʃʌḏā:/	Tea	When ਾ is before ਹ then ਹ is tonal or weak character	ਚਾਹ /tʃā:/	Desire	
ਕੜੀ /ʌkḏri:/	Curry	Here stress is on ਕ and half ਹ-subjoined letter follows ੱ /i:/	ਘੜੀ /kḏri:/	Watch	It is studied that ਘ in initial position

		so ँ becomes so week and appears as silent.			produces the sound of /k/
कॅद /kəddə/	Height	The initial pitch is high and stress is on कॅ /kə/ and ँ (Adhak) it doubles the sound of letter द /dd/	कद /kəddə/	When	
कर /kə /kərə/	Perform	In this word stress is on letter क /kə/	कर /kərə/	Home	क in initial position produces the sound of /k/
केड़ा /kə:rdə:/	Leper	/ko:/ and /a:/ are stress letters and the subjoined letter half ँ has no tone.	केड़ा /ko:rdə:/	Horse	क in initial position produces the sound of /k/ and Stress is on ँ /a:/
कॅल /kəulə/	Mix	ँ /əu/ it sounds as oo and stress is on /k/	कॅल /kə:lə/	With	ँ /o:/ it gives the sound of o
पी /p /pi:/	Drink	ी /i:/ and is produced as i.	पि /p /pi:/	Buzz	ि /i/ and it is produced as ee.
पार /pa: /pɑ:rə/	Across	Here, in this word stress is on प /pa/	पार /pɑ:rə/	Burden	भ /bh/ when placed initial it sound as /p/, if it is placed I middle or final its sound as /b/ ex. नीभ /d̄zi:bhə/
तीर /ti: /ti:fə/	Thirty	The pitch and stress is on /ti:/. When ि /i:/ is before ँ then the sound of ि /i:/ is extended to second syllable.	पी /di: /di:/	Daughter	ध /dh/ its sound as /t/ when placed initial and when placed in middle or final पूषान (Preident) /prədd̄hɑ:nə/
पीर /pi: /pi:rə/	Pain	The pitch goes high and stress is on /pi:/	पीर /pi:rə/	Crowd	भ /bh/ when placed initial it sound as /p/
तेरां /te: /te:rɑ:/	Thirteen	The stress is on /te/ and /ɑ:/ ँ (Bindi) It	तेरा /te:rɑ:/	Your	The stress is on /a:/

		serves to add a nasal sound			
ਉਂ / ^ˆ u:̃/	Them	/u:/ is spoken with stress.	ਉਂਹ / ^ˆ u:̃.hə/	Daughter-in-law	When ੁ/ u:/ comes before ੇ/ə/, the sound of first syllable is extended to second.
ਜਾਨ / ^ˆ dʒɑ:nə/	Spirit	The pitch in initial is high and stress is on ਜਾ /dʒɑ/ and ਨ /n/ is a dental nasal sound	ਜਾਣ / ^ˆ dʒɑ:nə /	Going	ਣ /ɳ/ retroflex nasal sound
ਜਾ / ^ˆ dʒɑ:/	Go	/ɑ:/ is stress syllable.	ਜਾਂ / ^ˆ dʒɑ:̃:/	Or	ੰ (Bindi) It serves to add a nasal sound
ਪਾਹ / ^ˆ pɑ:hə/	Mordant	ਾ /ɑ:/ sound is extended to the ੇ / ə/	ਪਾ / pɑ:/	Put	
ਬਚਾਅ /bətʃ ^ˆ ɑ:ə/	Escape	/ɑ:/ sound is extended to /ə/	ਬੱਚਾ /bətʃiɑ: /	Child	ੰ (Adhak) it doubles the sound of letter ਬ /b/ will become /bb/
ਭੋਰਾ / ^ˆ boo:ra:/	Basement	ੋ with ਭ makes ਭੋ and makes letter as stressed syllable with sound /boo/	ਬੋਰਾ/bo:ra:/	Gunnysack	In this word stress is made on ੋ /ɑ:/
ਗਲ੍ਹ /gə ^ˆ lhə/	Cheek	The stress is put on ਲ /l/	ਗੱਲ੍ਹ/gəlhə/	Talk	ੰ (Adhak) it doubles the sound of letter ਗ /gə/ will become /gg/
ਅੱਖ / ^ˆ akkʰə/	Eye	ੰ (Adhak) it doubles the sound of letter ਅ /ə/ will become /əə/	ਆਖ / ^ˆ ɑ:kʰə/	Ask	
ਕੰਡਾ /kə ^ˆ dɑ:/	Thorn	ੰ Tippee, it work as nasal sound. The pitch of final letter rises.	ਕੰਢਾ /kə ^ˆ dɑ: /	Coast	
ਟਿੱਕੀ / ^ˆ tɪkki:/	Bread	ੰ (Adhak) it doubles the sound of letter ਕ /k/ will become /kk/. The stress will be given on ਟਿੱ /tɪ̃/ and	ਟਿਕੀ/tɪki /	Kneely	The stress will be given on ੀ /i:/

		ੀ /i:/			
ਭਾਈ / b ^h a:i:/	Brother	ਭ /b ^h / the stressed syllable.	ਬਾਈ /ba:i:/	Twenty two	/i:/ is the stressed syllable.
ਵੀਹ / [^] vi:ɦə/	Twenty	When ੀ /i:/ is before ਚ then the sound of ੀ /i:/ is extended to second syllable.	ਵੀ /vi:/	Also	
ਪੀਤਾ / [^] pi:tɑ:/	Drank	The pitch will be high at initial and stressed syllable is /tɑ:/	ਪਿਤਾ /pɪtɑ:/	Father	The stressed syllable is /pɪ/
ਕੀ /k ^h i:/	What	/ [^] i:/ the stressed syllable.	ਕੀ /k ^h i:/	Clarified Butter	ਕ in initial position produces the sound of /k/
ਪੋਲਾ /po:l [^] a:/	Hollow	The stress syllable is /a:/	ਭੋਲਾ /po:la:/	Innocent	ਭ /b ^h o:/ when it is placed initial it produces the sound of /p/
ਭੂਰੀ / [^] bu:ri:/	Brown/f/	ਭ when subjoined with ੁ /u:/ its pitch goes high and becomes stressed syllable.	ਬੂਰੀ /bu:ri:/	Bad /f/	/i:/ is the stressed syllable.
ਧਾਨ / [^] ta:ɦə/	Paddyrice	ਧ /dh/ its sound as /t/ when placed initial. The stress syllable is /ta:/ and pitch is high at initial.	ਤਾਨ /tɑ:ɦə	Tune	
ਵੇਹੜਾ / [^] ve:ɦəɾɑ:/	Backyard	ਏ /e:/ followed by ਚ, then ਚ becomes silent. The stressed syllables are /ve:/ /ɾɑ:/ and the pitch is high at initial.	ਵੈੜਾ /vəɾɑ:/	Wicked	
ਤੇਹ / [^] te:ɦə/	Thirst	ਏ /e:/ followed by ਚ, then ਚ becomes silent. The pitch is high and stress syllable /te:/	ਤੇ /te:/	At	

ਚੈਣਾ /^t ^h o:ŋa:/	Carry	ਚ /t/ when placed initial it sound is produced as ਟ /tə/. The stress syllable is on initial and pitch is also high.	ਟੈਰਣਾ /tə:fiəŋ a:/	Search	ਣਾ /ŋa:/ is stressed syllable.
ਪਾੜਾ / ^pa:ɽa:/	Learner	The stressed syllable is /pa:/ and /a:/ and the pitch is high at initial.	ਪਾੜਾ / pa:ɽa:/	Gap	
ਪੂਰ /^pu:rə/	Batch	/pu:/ is produces with the high pitch and is stressed syllable.	ਪੂਰ / purə /	Full	
ਭੈ /b ^h o:/	To Plant	ਭ / b ^h / when it is placed initial it produces the sound of /p/. ੱ with ਭ makes ਭੈ and makes letter as stressed syllable with sound /boo/	ਬੈ /bo:/	Smell	

3. CONCLUSION

It is observed that tone in Punjabi varies according to the position of consonant and in some cases it depends on vowel or following syllable like ਚ/ਚ/. When placed after independent vowel, the tone is low or silent. The same rule is for ਚ/ਚ/ half, the subjoined consonant. The Punjabi have tonal characters and it is considerable that more research can be done on the part of tonal language in Punjabi lexicon. The data collected show that Punjabi can be considered as tonal language and as pervious research says Punjabi has five tonal consonants but the findings of this study revealed six consonants and the independent vowels make the difference in consonants too.

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