Interaction Of Phonological Systems In Multilinguals: A Case Study Of Heritage Konkani Speakers Of Kerala

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Heritage Languages

- Heritage Language (HL) is a language that is spoken by a community at a place where the community is a minority.

- Diverse diasporas (Tamil, Punjabi, Spanish, German, Italian, Hebrew, Arabic, etc.) in Canada have led to the coinage of the term.

- According to Montrul (2013) the term "heritage language" began to be used in the United States in 1990s to refer to the minority languages of immigrants".

- Linguistic scenario in which a language, which once used to be primary and native, becomes a secondary language.

- It is not necessary that an HS has to have competence in his/her native language (Carreira 2004).

Heritage Konkani Speakers Of Kerala

- Heritage Konkani speakers (HKS) of Kerala migrated from Goa to Kerala during 13th to 16th century (Mallaya 1994).

- Konkani distribution in Kerala is scattered.

- Many Konkanis have settled in Kasargode, the northernmost district of Kerala, bordering Karnataka. Their Konkani is more similar to that of the Konkanis in Karnataka. The rest of the Konkani population are settled in Ernakulam, Alappuzha, and Kollam districts of Kerala and their Konkani is largely influenced by the local varieties of Malayalam.

- Konkanis in Kerala belong to five different castes. They are: Gowda Saraswat Brahmins (GSB), Saraswat non-Brahmin, Konkan Sonar, Vaishya Vaniyar, and Kudumbi.

- GSBs of Kochi/Mattancherry

Linguistic dimension		Heritage Konkani Speakers of Kerala
Socio-political dimension	Majority	Malayalam
	Minority	Konkani
Order of Acquisition	L1	Konkani
	L2	Malayalam
Functional dimension	Primary	Malayalam
	Secondary	Konkani

What are we looking at?

- Over the years, Konkani, an Indo-Aryan language, must have had several influences from its contact Dravidian language Malayalam. As a closed community that gives much importance to language maintenance, they must have retained many of the language's features as well.

- Keeping both possibilities in mind, we will investigate which language (Konkani or Malayalam) affects the English speech of the community. (segmental level)

- According to Weinreich (1974), bilinguals have two separate phonemic systems for their coexisting languages.

- Influence of L1 and L2 on L3.

Methodology

- To avoid experimental manipulation, Konkani GSBs settled in Kochi were considered as subjects for this study.

- 18-35 yrs (male and female)

- all the informants were also tested for their proficiency in Malayalam and English.

- it was maintained that all the informants were born to Konkani GSB parents, living in Kochi since birth, and have learnt English as second language since the age of six.

- questionnaire was prepared to identify the pronunciation patterns of each sound in English. Every sentence had one word with the target sound.

- Apart from the structured interviews, narration and elicitation methods were also used.

- Most of them did their schooling in TD school, which is run by Konkanis and uses both Malayalam and English as its medium of education. Informants' medium of education is not considered as a control variable.

Questions

- Do heritage Konkanis of Kerala and Malayali community speak an identical variety of English?

- If not, how different are their varieties in terms of their segmental features?

- Which language—Konkani or Malayalam—has a greater influence on English spoken by heritage Konkanis of Kerala?

	Bilabial	Labiodental	Dental	Pre-alveolar	Alveolar	Post alveolar	Retroflex	Palatal	Velar	Glottal
Stop	p　　b pʰbʰ		t̪　　d̪ t̪ʰ d̪ʰ				ʈ　　ɖ ʈʰɖʰ		k　　g kʰgʰ	
Nasal	m mʰ		n̪ n̪ʰ		n		ɳ		ŋ	
Trill					r					
Tap				ɾ						
Fricative	(f)				s	ʃ				h
Approx		ʋ ʋʰ						j		
Lateral approx					l lʰ		ɭ			
Affricate								tʃdʒ tʃʰ dʒʰ		

Table 3.10 Consonant chart of heritage Konkani

	Bilabial	Labio-dental	dental	Pre alveolar	Alveolar	Post alveolar	retroflex	Palatal	velar	Glottal
Stops	p b		t̪ d̪		t d		ʈ ɖ		k g	
Nasal	m				n		ɳ	ŋ		
Trill					r					
Tap				ɾ						
Fricative		f			s z		ʂ			h
Approximant		ʋ						j		
Lateral approximant					l		ɭ			
Affricate								tʃ dʒ		

Table 4.1. Inventory of HKE consonants

What makes MalE different from other Indian varieties?

- Presence of palatal nasal [ɲ] and retroflex approximant [ɻ]

- Insertion of /j/ and /ʋ/ between diphthongs

- Absence of aspirated stop [t̪ʰ] and voiced alveolar fricative [z]

- Absence of [ɛ] and [æ]

HK English And Malayali English

- It is observed that although HKE and MalE are similar on various ground, HK variety has many segmental features that are absent in the MalE. Similarly, HKE lacks a number of MalE features that are mostly present due to mother tongue influence.

a. **Morphophonological Alternations (HKE & MalE)**

- [kæt**s**] *cats*   [d̪og**s**] *dogs*   [dʒʌddʒ**es**] *judges*

- [pɑ:rk**d̪**] *parked* [ʋɑ:kə**d̪ə**] *walked*   [miks**ed̪**] *mixed*

- Photo [ˈfo:ʈo]   photography [ˈfo:ʈogrəfi]   photographer   [ˈfo:ʈografər]

- Psychology [saiˈko:ɭədʒi]   psychological   [saiˈko:ɭədʒikəl]

lack of morphophonological alterations is a feature of both MalE and HKE.

b. Gemination

- *happy, funny, teddy, sunny, settle, lilly*

- In bisyllabic words, gemination is observed even in words that do not have repetition of consonants in its orthography (both HKE and MalE).

- Eg: City [sitti], bucket [bʌkkət]

- However, intervocalic gemination in HKE and MalE does not happen uniformly.

Word	HKE	MalE
Meter	mi:tər	mi:ttər
Super	su:pər	su:ppər
funny	fʌɳɳi	fʌɳɳi
city	sitti	sitti

- HK does not allow intervocalic gemination if the word is of the syllabic structure CV:.CV(C)

- gemination in HKE and MalE is influenced by the rules of gemination of their respective mother tongues.

c. Substitution of Sounds

- HK is abundant with retroflex consonants, and so is HKE.

- Both HKE and MalE varieties have retroflex sounds /ʈ, ɖ, ɳ, ʂ, ɭ/ and their distribution is similar in the medial and final positions.

Words	HKE	MalE
Now	[ɳau]	[nau]
Love	[ɭau]	[lauʋ]
White	[ʋaiʈ]	[ʋait]
Nurse	[nɜːs]	[neːɻs]
Mars	[mɑːs]	[mɑːɻs]
Zebra	[ziːbrɑ]	[siːbrɑ]
Zoo	[zuː]	[suː]
Yellow	[jello]	[ello]
Yesterday	[jɛsterɖeː]	[esterɖeː]

d. Post nasal voicing

Words	HKE	MalE
Punch	[pʌntʃ]	[pʌɲdʒ]
Simply	[simpɭi]	[simbɭi]
Temple	[ʈɛmpiɭ]	[tembiɭ]

e. Realization of diphthongs

Diphthong	Word	HKE	MalE
əu	Go	[go:]	[go:]
eə	Bear	[bə:r] [beər]	[bejər]
ɪə	Tear (v)	[tə:r] [ʈiər]	[tijər]
ɔɪ	Choice	[tʃo:is] [tʃɔis]	[tʃo:jis]
eɪ	Cake	[keɪk], [ke:k]	[ke:jk], [ke:k]
uə	Cure, Tour	[kjuər] [ʈu:r]	[kjuʋər], [tu:r]
ɑi	High, Higher	[hɑi] [hɑiər] [hɑijər]	[hɑi] [hɑjər]
ɑu	How, Our	[hɑu] [ɑ:r]	[hɑu] [ɑʋər]

Malayalam Or Konkani: Experimental Evidence

- comparison the vowel spaces of an HK speaker's Konkani, Malayalam, and English

- Vowels sounds common in all three languages were studied

- F1→ vowel height, F2→ backness of vowel

Sound	Word	Duration	F0	F1	F2	F3	-(f2-f1)	(-f1)
/iː/	piːʈʰɑm	0.185663	284.85	293.286	1657.348	2990.281	-1364.06	-293.286
/eː/	keːʈʈu	0.188791	287.54	400.473	1977.128	3138.008	-1576.66	-400.473
/ɑː/	pɑːʈi̯	0.235711	276.15	1052.50	1406.947	3248.483	-354.443	-1052.5
/oː/	poːku	0.211009	278.86	550.52	1132.99	2751.633	-582.47	-550.52
/uː/	kuːʈʈəm	0.150335	300.66	319.635	797.936	2004.824	-478.301	-319.635

Table 1 Formant frequencies of HK speakers' Malayalam

Table 2 *Formant frequencies of HKE long vowels*

Word	sound	Duration	F0	F1	F2	F3	-(F2-F1)	-F1
Seat	/iː/	0.168406	246.712	293.653	2814.294	3050.142	-2520.64	-293.653
Mary	/eː/	0.191865	289.2	361.835	2091.292	3231.914	-1729.46	-361.835
Palm	/ɑː/	0.167623	270.8	1016.409	1267.077	3608.58	-250.668	-1016.41
Port	/oː/	0.134767	276.322	533.732	868.522	2978.15	-334.79	-533.732
Soup	/uː/	0.139223	301.834	359.003	1049.642	3004.085	-690.639	-359.003

Table 3 *Formant values of long vowels in HK*

HK	Gloss	Vowel	F1	F2	F3	-(F2-F1)	(-F1)
gi:nʈʯ	Song	/iː/	311.635	2952.164	3349.679	-2640.53	-311.635
ke:su	Hair	/eː/	463.613	2776.422	3288.282	-2312.81	-463.613
sɑ:li	Skin	/ɑː/	1006.077	1537.393	2965.735	-531.316	-1006.08
kho:re	A weapon	/oː/	715.199	1090.033	3026.576	-374.834	-715.199
ru:ku	Tree	/uː/	337.741	897.142	2624.194	-559.401	-337.741

Fig 1 Vowel space plotting for HK speakers' Konkani, English, and Malayalam
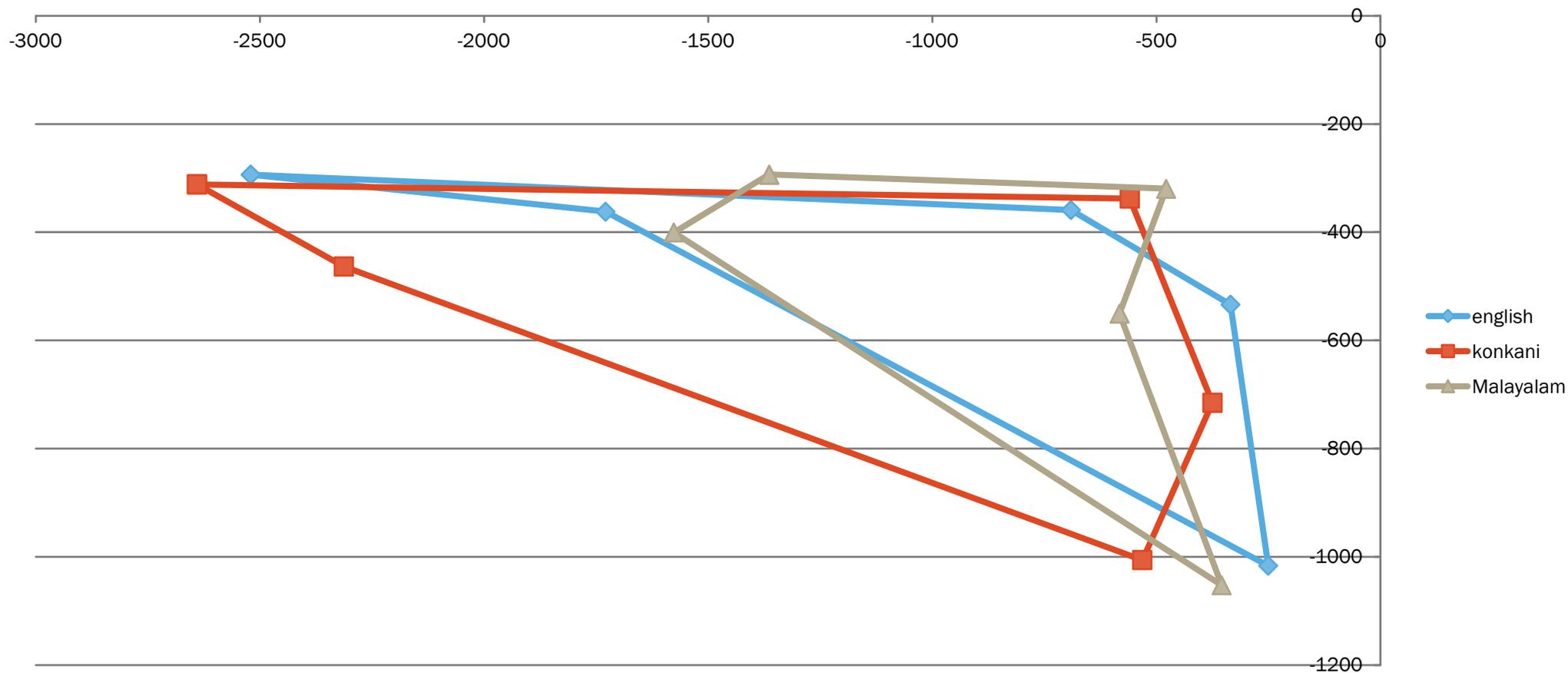
Sounds	Diff between HK and HKE F1	Diff between HK and HKE F2	Diff between Mal and HKE F1	Diff between Mal and HKE F2
[i:]	17.982	137.87	0.367	1156.946
[e:]	101.778	685.13	38.638	114.164
[ɑ:]	10.332	270.316	36.095	139.87
[o:]	181.467	221.511	16.788	264.468
[u:]	21.2	152.5	8.548	607.706

Table 4 Distance between HKE vowels from HK and Malayalam

Findings

- As it is evident from *Table 4,* HKE and Malayalam vowels are similar in terms of vowel height.

- The difference of F1 between HKE and Malayalam [i:] is less than 1 Hz and the average difference between all the vowels is 20 Hz. However, the average difference between HKE and Malayalam vowels' F2 is more than 450 Hz, which makes the sounds different.

- As it is evident from *Fig 1,* both English and Malayalam vowels are produced within the acoustic space of Konkani vowels and production of Malayalam vowels is more back when compared to HK and HKE.

- The average difference between HK and HKE vowels' F1 and F2 is 53 Hz and 293 Hz (mid-range) respectively and therefore, does not cause an evident variation in sound perception.

Conclusion

- Seliger, Krashen, and Ladefoged (1975) argue that although early bilinguals have added advantages when compared to late learners, they may perceive or produce phonetic and phonological systems like monolinguals yet will be different from monolinguals. That is, it may have the influence of the learner's first language.

- The examination of the segmental features of HK speakers' English also suggests the inevitable influence of their mother tongue, Konkani.

- although HKE and MalE share many features (lack of morpho-phonological alterations, spelling pronunciation, gemination), the predominant influence in them is of Konkani.

- status of Konkani in Kochi.

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