

LANGUAGE IN INDIA

Strength for Today and Bright Hope for Tomorrow

Volume 9 : 12 December 2009

ISSN 1930-2940

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Socio-Linguistic Constraints of Code Switching in Hindi-English-Kannada Multilinguals

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Introduction

In many situations of languages in contact, constituents of one language can be found with the constituents of another language in a number of linguistic phenomena, namely lexical borrowing, transferring, interference, diffusion, reflexification, code switching and code mixing, etc. (Annamalai, 1989). Code switching and code mixing are the two linguistic phenomena claimed to be the most prevalent and common modes of interaction among multilingual speakers. They can occur in all the levels of language (phonological, lexical, semantics, syntactic) and in all modalities (spoken or written language). Brock and Eastman (1971) suggest that topic discussed influences the choice of the language. It was seen that markers and the pauses might be used to predict the likelihood of the code switches regardless of the topic, speaker and setting or where in a sentence the switch occurs.

De Bot (1992) stated that majority of the world's population is bilingual. A bilingual can bring in language in several ways: by switching completely to that language for a word, a phrase, a sentence or by borrowing a word from the language and integrating phonologically and morphologically into the base language.

Code-switching

Code-switching is a common phenomenon in societies in which two or more languages are used. Studies of code-switching enhance our understanding of the nature, processes and constraints of language (Myers-Scotton, 1993a; Azuma, 1998), and of the relationship between language use and individual values, communicative strategies, language attitudes and functions within particular socio-cultural contexts. (Auer, 1998; Jacobson, 1998; Myers-Scotton, 1993b; Lüdi, 2003)

Patterns of Code-switching

Patterns of code-switching are found to be different from one another because of several distinct processes such as 'insertion', 'alternation' and 'congruent lexicalization'. These three processes correspond to dominant models, and approaches (Muysken, 2000). The approach associated with Myers-Scotton (1993) that departs from the notion of 'insertion' views "the constraints in terms

of the structural properties of some base or matrix structure. Here the process of code-mixing is conceived as the insertion of an alien lexical or phrasal category into a given structure” (Muysken, 2000). Another approach which departs from alternation is Poplack’s (1980) that views “the constraints on mixing in terms of the compatibility or equivalence of the languages involved at the switch point”(Muysken, 2000).

Various Approaches

The identification of various constraints, though sometimes controversial, has inspired a great deal of work in syntax, morphology, and phonology. A structural focus has been similarly constructive for production models (e.g. Azuma 1991) or as evidence for grammatical theory (e.g. MacSwann 2000; Jake, Myers-Scotton and Gross 2002). By ignoring questions of function or meaning, though, this structural focus fails to answer basic questions of *why* switching occurs. Auer (1984) warns, “Grammatical restrictions on code-switching are but necessary conditions” they are not sufficient to describe the reason for or effect of a particular switch. Code switching can serve different purposes as shown by the different researchers (Grosjean 1982), like quoting, repetition, addressee specification, clarification, emphasis, elaboration, personalization, interjection, topic shift etc. this code switching has been shown to be a complex rule governed phenomenon that requires a high degree of linguistic competence in more than one language.

Looking Beyond Formal Features

This paper is, thus, positioned within the discipline of sociocultural linguistics, an emerging (or one might say, revitalized) approach to linguistics that looks beyond formal interests, to the social and cultural functions and meanings of language use.

Valdes- Fallis (1978) defines codes switching as the alternating use of two languages at word phrase, or at the sentence level, with a clear break between the phonemic systems. Poplack (1980) delineated four characteristics of language mixing in the normal bilingual adults:

- Smooth transition between L1 (first language) and L2 (second language) without false starts, hesitations and lengthy pauses.
- Seeming unawareness of alternation between the languages.
- Switches composed of the segments larger than single nouns are inserted into an otherwise L2 sentence and
- Code switching is used for purposes other than conveying untranslatable items.

Function Words in Code-switching

The pattern of the mixing is very evident in multilingual in the linguistic form. Ringbom, (1987); Stedje, (1977); Vildomec, (1963); Williams & Hammarberg, (1998), studied the use of function words in third (L3) or fourth (L4) language written production in multilingual, which suggest that multilinguals seem to favor the use of functional words in their non native language rather

than their native language production. Chengappa (1984) studied code alternation in a 3 year old child with Kannada- Kodava bilingual exposure. Code switching was evident at this age itself and was determined by the interlocutors, context, form and function of the interaction.

Reasons for Code-switching

Valdes-Fallis (1976) found that code switching does not simply occur because the informant lacked equivalent expression in the base language chosen. Switching patterns were seen to be influenced by the particular proficiency of the speakers and their performance for the one or the other language or the blend of the two. Some studies on bilingual speech production regard the use of L1 content or function words in L2 speech as a form of borrowing that speakers employ in order to compensate for their lack of knowledge in the target language. The use of L1 form is regarded as compensatory strategy (Poullisse & Bongaerts, 1994, Poullisse, 1997).

Poullisse & Bongaerts (1994) examined the use of L1 content words (nouns, verbs, numerals, adjectives, and most adverbs) and L1 functional words (preposition, determiners, conjunctions, and pronoun). They carried it out on 45 Dutch learners of English. The authors found that Dutch learners of English used more of L1 content words than L1 function words in their L2 speech.

Need for the Study

The human interaction in present day exposes individuals to various new culture and environment. Social acceptance becomes a prerequisite in such cases. Awareness of the language and usage of that language becomes an utmost event. Thus it is seen the acquisition of the local language takes place in rapid pace. This when the phenomenon of code switching becomes so evident in the individual's language to meet his daily requirements and maintain the association with the new culture and its people. According to 1971 census report, 13.04% of the India's population was bilingual/multilingual (Mahapatra, 1990), which increased to 19.44%, for bilinguals and 7.26% for trilingual's as reported by censuses of India 1991. This increasing trend stresses the importance of studies on bilingual phenomenon in the Indian context

Most of the studies have observed the pattern of the switching that was studied in typical bilinguals, but there is a vast interaction that takes place between languages in case of multilinguals. So, this study was taken up to consider the language transfer function in normal multilingual with first language as Hindi, second language as English and third as Kannada and study the patterns i.e. the syntactic juncture, grammatical significance, the sociolinguistic context of listener, language context and the word dominance of the code switches.

Objectives

The present study is a two fold one examining the linguistic forms of Hindi-English-Kannada code switching in multilinguals and explores its socio-cultural connotations.

Method

Participants

30 native Hindi speakers in the age range of 18 to 25 years with age appropriate language skills were considered as subjects whose first language is Hindi (L1), second language is English (L2) and who have been in touch with the third language i.e. Kannada (L3) for more than 4 years. Their language proficiency was evaluated using a questionnaire (Language and Brain Organization in Normative Multilingualism, currently ongoing AIISH project of Cognitive Science Research Initiative Funded by the Department of Science and Technology, Government of India) which also included the language usage in different daily life situations.

Stimuli

A picture (market place) was taken from the language test Bankson Language Screening Test to elicit the response for picture description task in English (L2) and Hindi (L1).

Procedure

Primarily a questionnaire developed by Chengappa & Vishnu in 2009 (developed for AIISH-DST project on Language and Brain Organization in Normative Multilingualism) was given which included self-rating of the client's language proficiency in different tasks and conditions. It also stated the language which was used mainly by the client in the given conditions.

- Language choice in the situations such as reading news paper, reading novel/magazine, watching movie, watching TV programmes, making shopping lists, writing a letter, listening to music, playing games, in a place of worship.
- Language choices in different emotional states as when tired or stressed out, angry, confused, worried, happy, arguing with a friend etc.
- Language proficiency in various activities such as counting, naming month, comprehend jokes, enquire train timings etc.

Secondly speech samples of the subjects were collected in two conditions, spontaneous speech and picture description task.

Spontaneous speech was recorded for 5 minutes from the regular daily conversation. The number of code switches taking place from Hindi to English and Hindi to Kannada was accounted. Also the pattern i.e. the number of code switching in each language was divided according to the switch in case of content or functional word.

The picture description task included description of a market picture taken from language test Bankson Language Screening Test and the subjects were asked to describe it in their L1 i.e.

Hindi and then L2 i.e. English as two sub-task. The number of code switching was counted during these tasks. Again the pattern of the language switches was observed. A qualitative description and qualitative analysis were both attempted.

Data Analysis

The data was analyzed in two steps

- The number of code switches was accounted in each language for different task.
- Analyses were made about the grammatical constraints, the grammatical occurrences, type of words i.e. function or content word involved in the code switching.

According to the two main tasks the speech samples were analyzed i.e. for spontaneous speech and picture description. The speech samples were audio recorded in a quiet room with only the subject and these conversations were later transcribed using standard IPA symbols.

S.no	Age/sex	L1-L2- L3	Spontaneous speech		Picture description			
					Only Hindi		Only English	
			Hindi to English	Hindi to kannada	H-E	H-K	E-H	E-K
1.	23/F	H-E-K	71	8	10	2	-	-
2.	20/F	H-E-K	65	6	8	1	-	-
3.	22/F	H-E-K	70	6	18	1		

Table 1: Code-switching observed in two tasks

Primarily the number of code switches was accounted from the speech samples from both the tasks. Table 1 represents the analysis of the number of code switching in the two tasks.

Secondly the grammatical pattern of the occurrence of code switching was observed i.e. The code switches taking place are function word (preposition, determiners, conjunctions, and pronoun) or are the Content word (nouns, verbs, numerals, adjectives, and most adverbs). Table 2 represents the analysis of the pattern of the code switches respective to the word type i.e. content or functional

s.no	Age/se x	L1-L2- L3	Content word				Function word				
			spontaneous		Picture task		Spontaneous		Picture task		
			H-E	H-K	Hindi	Eng	H-E	H-K	Hindi	Eng	

					h-e	h-k	e-h	e-k			h-e	h-k	e-h	e-k
1.	23/F	H-E-K	48	-	2	-	-	-	20	5	3	1	-	-
2.	20/F	H-E-K	51	-	4	-	-	-	14	7	4	1	-	-
3.	22/F	H-E-K	47	-	6	-	-	-	17	8	2	2	-	-

Table 2: Code switches in accordance to content and function word.

Also according to the speech samples collected the occurrence of the code switches was observed in specific context i.e. in what language context, in what emotional state etc. A similar pattern of the occurrence of code-switches and code switch in accordance with the function and content word was observed in all the subjects.

Results & Discussion

Our study aimed at exploring the occurrences of code switching in case of multilinguals who were exposed to three languages which is Hindi, English and Kannada and was exposed to the third language for more than 4 years. It was carried out in three phase:

- Evaluation of language usage using a questionnaire.
- Speech analysis in spontaneous speech.
- Speech analysis in picture description task.
- The grammatical pattern of the occurrence of code-switching

1. Evaluation of language usage using a questionnaire.

According to the questionnaire it was observed that the usage and exposure of the English language was much more than their mother tongue Hindi. It was observed that their preferences in watching TV programmes, writing a letter to close friend, reading newspaper, interacting with college professors and class discussions were for English language.

During other situations such as conversing with a friend, exchange of ideas for a given activity, humorous situations the subjects preferred using the combination of all the three languages i.e. Hindi, English and Kannada.

It was also observed that during the emotional variation i.e. happy, sad, anger, frustrated, fight with a friend the usage of three language simultaneously i.e. Hindi, English and Kannada was maximum up to 52% , followed by English only up to 37% and only Hindi up to 11%.

Another observation made in the questionnaire was that the usage of L2 and L3 by the subjects when speaking to their family members or people who are not aware of the language reduces, but it does occur. Thus, code switching happens in a given context.

As a student population was considered for the study, the exposure to English language was much more and as English is the common language between a Hindi speaker and a Kannada speaker, the usage of English in the entire above situation is explained. The usage of Kannada in the given situation can be explained in terms of social acceptance, the minute interjections made in the speech develops the individual's social relations.

2. Speech analysis in spontaneous speech(conversation)

Our study aimed in finding the occurrence of code switching in case of multilinguals, it was found that in case of regular conversation the number of code switches took place maximumally in Hindi to English and then Hindi to Kannada.

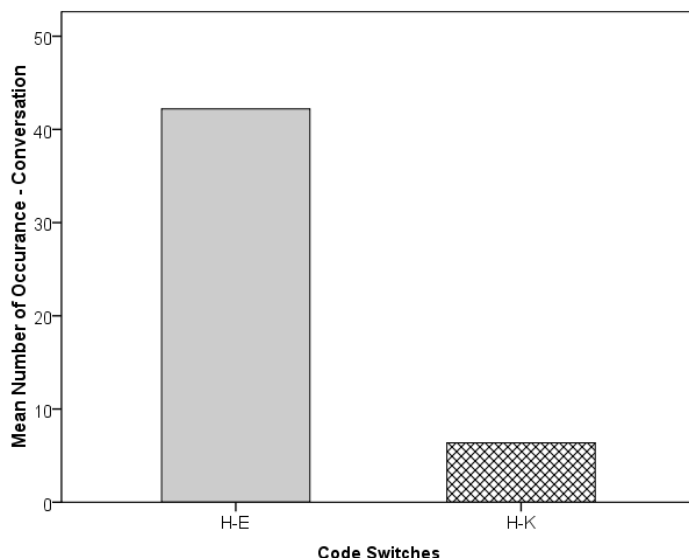


Fig 1: The occurrence of code switches in conversation

As we can observe in the graph the maximum number of switches were in English because usage of the language is maximum in their daily life and then was the switch from Hindi to Kannada which can be explained keeping the socio-contextual model in mind where the individual is influenced by aspects of contact with L2 community, L2 proficiency, and identification to both the first language and L2 community (Clement, 1980; Noels and Clement, 1996) this is the same phenomenon that takes place in case of a multilingual who is exposed to the L3 community too.

The occurrence of the language transfer thus is affected by the exposure of a language, the need of the language and the conversing audience. A study reported by Judit in 2000 described, the act of changing from one language to another, takes many forms associated with a certain mood of the speaker, circumstances of speech production or the interlocutors being present.

3. Speech analysis in picture description task

The occurrence of language transfer was studied in case of a picture description task, here it was tried to observe the episodes of code switching when the task was determined in a specific language (L1 or L2).

It was observed that the amount of code switches was reduced when the language usage was restricted. But it was majorly observed that when the subjects were asked to use only English the amount of code switches were minimum to none. But it was not so in case Hindi, the amount of code switches were lesser than in spontaneous speech but were present in a greater extent when compared to the task in English only. Yaron (2000)'s findings which shows that's some times the cognitive motivations are so strong for a bilingual speaker that it at times overrides the social communication constraints on the discourse leading to unintentional code switching.

Figure 2 describes the occurrence of the language transfer in case of the picture description task in Hindi.

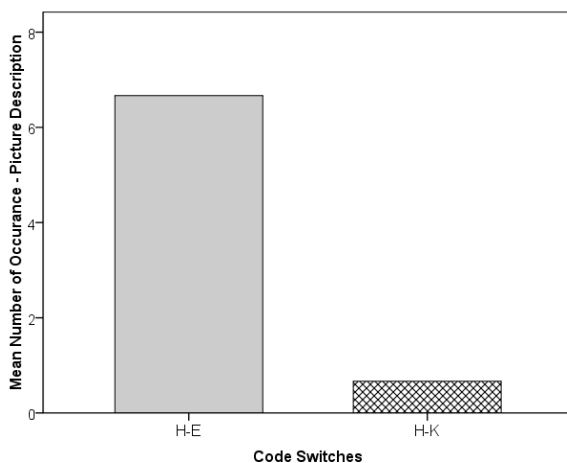


Fig 2: The occurrence of code switches in picture description in Hindi.

It is observed that the number of code switches incase of picture description task in Hindi includes code switches in both English and Kannada. This difference in the presence of code switching in case of Hindi and English usage can be explained as the demand of English in our day to day life is much more than Hindi. As already derived from the questionnaire, the population selected was more exposed to English and the usage was much more when compared to the other two languages. Our findings are also supported by study reported by Agnihotri (1998) found that the code switched utterances were highly acceptable in Hindi-English urban bilinguals. Code switching was reported to be higher in Hindi than in English.

4. The grammatical pattern of the occurrence of code-switching

The next analysis was done to study the pattern of code switching. It was observed that the maximum number of code switching to Hindi was for content word (nouns, verbs, numerals,

adjectives, and most adverbs) and then for function word (preposition, determiners, conjunctions, and pronoun). The code-switching to Kannada was observed only for function words.

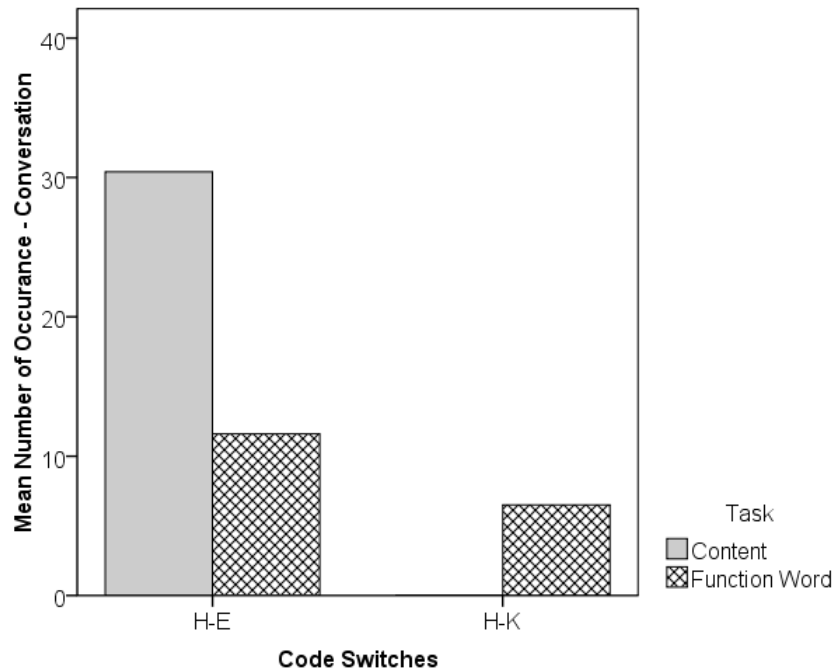


Fig 3. Pattern of code switches in conversation.

It was observed that there was no content word that was code switched to Kannada; it was only the case for function word. Figure 3 above shows the pattern of code switching in conversation and figure 4 below shows the pattern in picture description task.

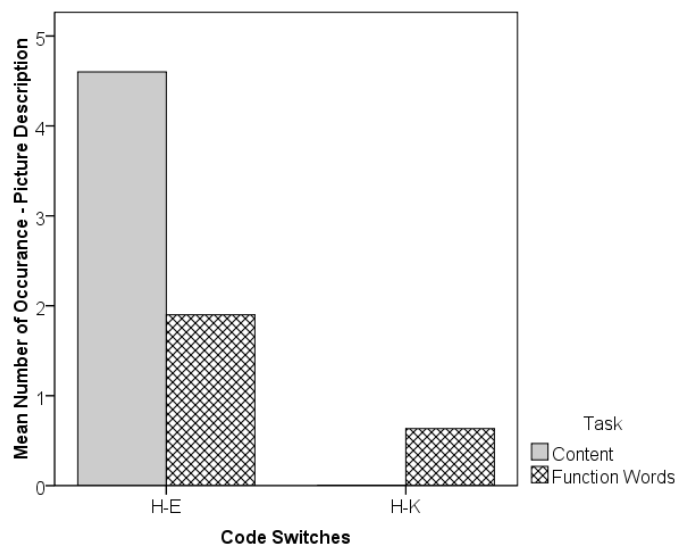


Fig4: Pattern of code switching in picture description

Poulisse & Bongaerts, (1994) examined the use of L1 content words (nouns, verbs, numerals, adjectives, and most adverbs) and L1 functional words (preposition, determiners, conjunctions, and pronoun) in case of bilinguals. They carried it out on 45 Dutch learners of English. The authors found that Dutch learners of English used more of L1 content words than L1 function words in their L2 speech. Similar finding was observed in our study in case of multilingual where the subjects used more of their L2 in case of content words. Whereas function words appeared in case of both the language transfer i.e. L2 and L3. In the study quoted by Poulisse & Bongaerts, (1994) Content word switches were in their L1 this was because the exposure and proficiency of that language was maximum and in the present study its L2 because the proficiency and exposure are both more in case of English language.

Gumperz (1964) studied Hindi-Punjabi code switching in Delhi. He observed that the more than 90% of the lexical items in urban code switching style are Hindi words. Interference was seen to exist at all the levels of grammar: semantic, syntactic, morphemic, morphophonemic and phonological as well as the lexicon. Bilingualism and syntactic change in Konkani were described by Nadkarni (1975). This study highlighted the effect of the borrowed Kannada type of Konkani on the native Indo-Aryan type due to bilingualism.

Garrett (1975) first pointed out that the speech errors of monolingual speakers hardly ever involve function words and several explanations have been provided to account for this phenomenon. Some studies on bilingual speech production regard the use of L1 content or function words in L2 speech as a form of borrowing that speakers employ in order to compensate for their lack of knowledge in the target language. The use of L1 form is regarded as compensatory strategy (Poulisse, 1997; Poulisse & Bongaerts, 1994)

The interesting fact still remains the presence of Kannada i.e. the third language code switches even though the duration of the exposure, the proficiency of the language was limited. The Kannada code-switches were observed mainly for function words. Giesber's (1989) proposed that content words are more likely to be selected correctly than the function words because they carry more meaning than function words do. L2 learners need to focus their attention on the most meaningful parts of speech, and it is therefore more likely that their attention will be directed towards the selection of content rather than function words. This explains the communication strategy in case of a multilingual who aims for both holding meaningful conversation or speech and also social acceptance in the new mixed culture.

Conclusion

Drawing a conclusion from all that has been said, this study emphasizes that code-switching is a unique feature of bil-multilingual speech production. To varying degrees, every person who is a speaker of two or more languages makes mixed use of the elements of distinct languages and changes code according to his or her proficiency and needs. However proficient a multilingual

may be in language comprehension and production, from time to time it seems rather unaccomplishable to separate completely the underlying structure and actual manifestation of one language from that of the other. The current study should be interpreted in the context of the occurrence of the code-switching, its dominance in the grammatical by acceptable form of a sentence and the need for code-switching in a multilingual environment.

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87

9 : 12 December 2009

Mandira Bhattacharjee, Natasha Rahman and Shyamala K. Chengappa, Ph.D.

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