Bilingualism: A Test of MLF Model

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Abstract

Bilinguals are defined as individuals or groups of people who obtain the knowledge and use of more than one language .Bilingual profile may change over time. Code switching and code mixing are two linguistic phenomena that are most rampant and common modes of interaction among bilingual speakers. The study aims to investigate the patterns of Language mixing in Typically Developing Telugu-English Bilingual Children. Thirty Children with an age range of 6-7 years participated in the study. Picture description and Narration task were used. Analysis was done using Matrix Language Frame Model (MLF). Results revealed that there was no difference in performance between boys and girls. However, language mixing was more in girls. On comparison of tasks, it was observed that instances of code mixing were greater than code switching. Language mixing was observed to be more in narration task. The study contributes to a better understanding of language mixing and the differential use of language behaviour in bilingual children. Code switching and code mixing can also explain speaker's language preference.

Key Words: Code switching, Code mixing, Bilingualism.

Introduction

Speech and language are quite different things. Speech is a physical ability, whereas language is an intellectual one (Berko & Brown, 1960). Speech and language are independent abilities. The ability to use language requires one to acquire components such as phonology, morphology, syntax, semantics and a widespread vocabulary.

Language is inextricably entangled with our mental life; it involves all our abilities to perceive, remember, attend, comprehend and think. In short our attempts to make sense of the experiences in the world (Lindfors, 1991).

Language acquisition is the process by which humans acquire the ability to perceive language and comprehend its meaning, to produce and use words and sentences to communicate effectively. It is one of the quintessential human traits, because nonhumans do not communicate by using language which is referred to as first-language acquisition. This is distinguished from second language acquisition, which deals with the acquisition of languages other than the primary language.

Bilingual acquisition is complex. Bilingual children may learn their primary language in the home like monolingual children or in the day care or neighbourhood. Monolingual children may learn language from their parents. Bilingual children's exposure to their languages differs to a great extent. Their language exposure can fluctuate greatly over time (Genesee, 2006). Bilingual children depend not only on parents but also on grandparents, playmates and caregivers to learn secondary language.

Bilinguals are generally defined as individuals or groups of people who obtain the understanding and use of more than one language. In a nutshell, bilingualism is a psychological and socio-cultural linguistic behaviour which is complex in nature having multi-dimensional aspects.

For ages India has been a bilingual mosaic. Although many languages and dialects were not given importance, bilingualism still survived. The 2001 census listed 122 languages existing in India. Moreover, 240 million Indians are multilingual with most of them being trilingual. Even within small geographic regions, one can find a multiple languages being spoken.

In the south Indian state of Andhra Pradesh where this study was carried out, 1991 census shows 9.44% of people spoke English as second language and for 2.54% of people it was third language. Telugu is the official language of the state and it is being spoken by majority of the people. English serves a prestige function for the people and has entered the realm of the social life as well.

Bilingualism in India is different compared to western countries. Early bilingualism and its effects on overall development of a child is one of the most recently researched areas

in the recent times, English bilingualism being one of them. Telugu as a language has a lot of borrowed English words with Telugu-English code switching found frequently in normal literate bilinguals.

Code-switching and code-mixing are sociolinguistic phenomena. They are features of language in contact. Code-switching and code-mixing often occur among bilinguals when their mother tongue is in contact with a second language (Roni, 2008). Therefore, two languages are bound to influence one another (Babalola & Taiwo, 2009).

Aim of the Study

The aim of the current study was to investigate the patterns of Language mixing in Typically Developing Telugu-English Bilingual Children.

Method

Participants

Thirty Children in the age range of 6-7 years participated in the study consisting of equal number of boys and girls. All the children had acquired Telugu as first language and English as second language.

Stimulus

Picture description and Narration tasks were used. Picture description involved a scene depicting activities in a park and in the narration task, children were asked to describe their activities in the school.

Procedure

Informed consent was obtained for all children from either their class teacher or their parents. Prior to data collection, all children were administered language proficiency questionnaire which was based on LEAP-Q developed by Maitreyee & Goswami (2009). The children were made to sit comfortably in a quiet room. They were provided with the picture card and encouraged to describe the picture in their native language Telugu. A 15 minute time gap was given before eliciting narration task. The language samples were audio recorded. Separate instructions were given for both the tasks before collecting the data. Overall, as many utterances as possible were collected for both tasks.

Analysis

Subject's utterances were analyzed for constituents of Matrix Language Frame Model (MLF) (Myers Scotton, 1993 & Munoz et al, 1999). Percentage was taken on the basis of number of words for each of the MLF constituent and the data was subjected to statistical analysis.

Results & Discussion

Descriptive statistics was done to calculate minimum and maximum values, Mean (m) and Standard Deviation(s). Non-Parametric Mann Whitney U test was used to find out the significant difference for MLF constituents between age groups and gender. To find out the significant difference for MLF constituents between the tasks, Wilcoxon Signed Rank test was used.

Comparison of Gender

Comparison across gender for MLF constituents revealed no significant difference. From the graph it can be seen that boys had higher mean value for ML shifts, ML+EL, borrowed forms and EL Insertion in picture description task indicating higher language mixing. Girls had higher mean of 51.6 in ML Island in picture description which reveals lesser language mixing. Occurrence of revisions was greater in girls with a mean value of 1.3 for picture description task. In narration task, girls had higher mean for borrowed forms and Revisions.

The results are quite similar to those reported by Shogren (2002) where boys tend to code switch and girls are inclined to code mixing.

It can also be observed that occurrence of ML Islands and ML+EL was found to be same in both boys and girls for narration task. This reveals that boys and girls had same level of language mixing.

Table 1: Comparison of Gender

Constituent	N	Gender	Picture Description				Narration Task			
			Mean	S.D	Z	p	Mean	S.D	Z	P
MLI	15	B	49.9	24.8	0.29	0.77	44.3	13.9	0.12	0.9
	15	G	51.6	15.7			44.2	16.5		
MLS	15	B	1.2	3.1	0.63	0.52	3.8	7.1	0	1
	15	G	0.5	2			3.6	6.8		
ELI	15	B	0	0	0	1	21.6	17.9	0.38	0.7
	15	G	0	0			19.5	21.3		
ML+EL	15	B	38.5	22.4	0.06	0.95	14.7	7.9	0.22	0.81
	15	G	37.7	16.7			14.8	9.9		
BF	15	B	8.5	4.2	0.1	0.91	14.7	6.6	0.16	0.86
	15	G	8.1	6.3			15.6	6		
EL	15	B	1.3	3.5	0.63	0.52	0	0	0	1
Insertions	15	G	0.5	2			0	0		
Revisions	15	B	0.4	1.6	1.01	0.3	0.6	2.5	1	0.27
	15	G	1.3	3.3			2	4.3		

Figure 1: Comparison of Gender
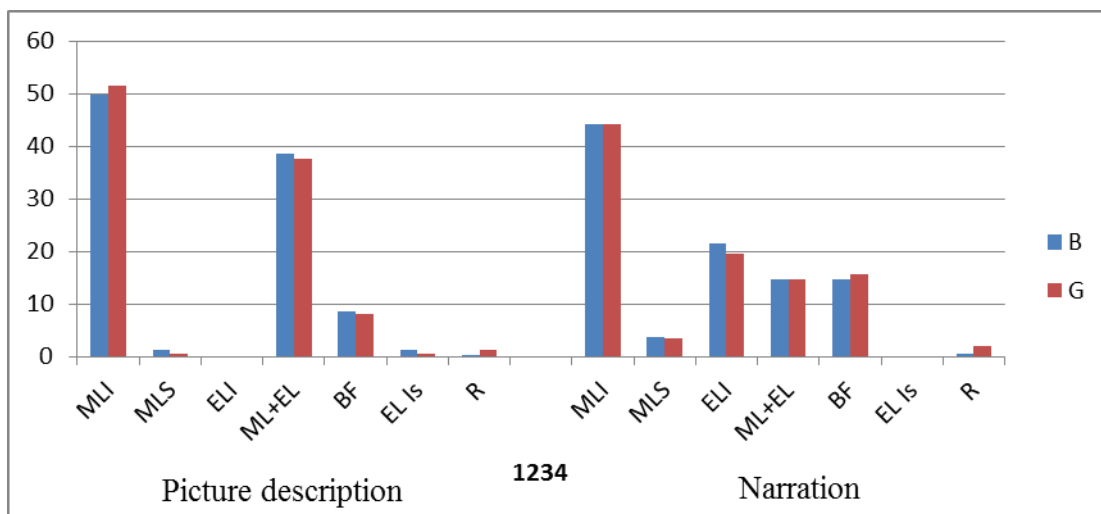
 (MLI:Matrix Language Islands, MLS: Matrix Language Shift, ELI: Embedded Language Islands,ML+EL: Matrix Language + Embedded Language, BF: Borrowed forms, EL Is: Embedded Language Insertions, R: Revisions

B: Boys, G: Girls)

Comparison of Tasks

Comparison of tasks for MLF constituents revealed significant difference for ML shift, EL Islands, ML+EL and borrowed forms. Results reveal that occurrence of ML shifts had a higher mean value of 3.7 in narration with a significant difference in performance (Z=2.1; p< 0.05). EL Islands was found to have higher mean value of 20.6 in narration with a significant difference in performance (Z=3.92; p< 0.01). ML+EL had a higher mean value of 38.1 in picture description with a significant difference (Z=4.1, p<0.01). Borrowed forms had a higher mean value of 15.2 in narration with a significant difference (Z=3.4; p<0.01). There was no significant difference observed for ML Islands, EL Insertions and revisions.

ML Islands were greater in picture description than narration task indicating lesser Code Switching and Code Mixing for picture description. This could be because of the picture used in the task i.e., 'Park', where children might visit it frequently for recreation, amusement and play. They play with their counterparts and peers where they converse in their native language resulting in higher occurrence of ML Islands. Findings are supported by Lanza, (1997), Schieffelin & Ochs (1986) that children's patterns of using language and code switching often mirror the ways in which language is used in their communities or environment.

In narration task, ML Islands were lesser with higher occurrence of ML shifts, borrowed forms, EL Islands, Revisions and EL Insertions. This could be due to the content to be spoken in the task which involves usage of more number of technical terms. As the task was to describe about their school, more of English language was used. Gumperz (1982) stated that there is a tendency in bilingual community to use different languages at different situations in order to mark a change. Switching to other language is also motivated by variables such as topic and interlocutors.

Results are also in consonance with Cheng & Butler (1989). Children are being brought up in a society which considers English as a language used for educational and occupational purpose and English takes the standpoint of the dominant language.

Table 2: Comparison of tasks

Constituent	N	Task	Mean	S.D	Z	P
MLI	30	1	50.82	20.4		0.12
	30	2	44.28	15	1.5	
MLS	30	1	0.8	2.6		0.03*
	30	2	3.77	6.8	2.1	
ELI	30	1	0	0		0.00**
	30	2	20.6	19.3	3.9	
ML+EL	30	1	38.17	19.4		0.00**
	30	2	14.8	8.8	4.1	
BF	30	1	8.3	5.3		0.00**
	30	2	15.2	6.2	3.4	
EL Insertions	30	1	0.9	2.9		0.10
	30	2	0	0	1.6	
Revisions	30	1	0.8	2.6		0.61
	30	2	1.34	3.5	0.5	

**$p<0.01$, Highly significant; *$p<0.05$, Significant

Figure 2: Comparison of tasks
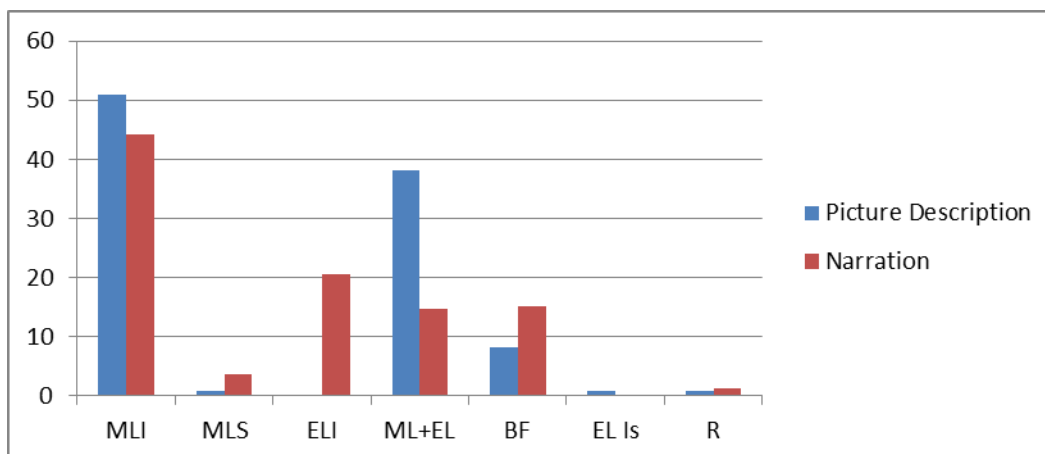
(MLI:Matrix Language Islands, MLS: Matrix Language Shift, ELI: Embedded Language Islands,ML+EL: Matrix Language + Embedded Language, BF: Borrowed forms, EL Is: Embedded Language Insertions, R: Revisions; Task 1: Picture Description, Task 2: Narration)

Conclusion

It can be concluded that it is common for children growing up in bilingual environment to merge languages extensively as they are purely learning the patterns of communication that are widespread in their community. Code switching and code mixing can also explain speaker's language preference. The study also implicates that code mixing is not a disordered behaviour and it is common among typically developing children. It also contributes to a better understanding of language mixing and the differential use of language behaviour in bilingual children.

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References

Babalola, T., & Taiwo, R. (2009). Code-switching in contemporary Nigerian
> hip-hop music. *Itupale online journal of African studies*, *1*, 1-26.

Brown, R., & Berko, J. (1960). Word Association and the acquisition of   grammar. *Child Development, 31(1)*, 1-14.

Cheng, L., & Butler, K. (1989).Code-switching: A Natural Phenomenon vs. Language "Deficiency".*World Englishes, 8(3),* 293-309.

Genesee, F., & Nicoladis, E. (2006). Bilingual acquisition,*Handbook of Language Development*. 324-342. *Oxford*, Eng.

Gumperz, J. J. (1982). *Discourse Strategies*. Cambridge: Cambridge University Press

Lanza, E. (1997). *Language mixing in infant bilingualism*. New York:
> Oxford University Press

Lindfors, J. W. (1991). Children's language and learning (2nd ed.).Boston:Allyn and Bacon

Maitreyee, R., & Goswami, S.P. (2009). Language proficiency Questionnaire: an adaptation of LEAP-Q in Indian context. *Unpublished master's dissertation.* AIISH, University of Mysore, Mysore, India.

Munoz, M.L., & Marquardt, T.P. (1999). A comparison of code switching patterns of aphasic and neurologically normal bilinguals speakers of English and Spanish. *Brain and Language, 66,* 249-274.

Scotton,   C.M.   (1993)   *Duelling   languages:grammatical   structure   in   code switching*.oxford:clarendon press

Roni, R. (2008). An analysis of Indonesian English code mixing used in song lyrics of project pop. *Master's thesis, School of Teacher Training and Education.* Muhammadiyah University of Surakarta, Indonesia.

Schieffelin, B., & Ochs, E. (1986). *Language socialization across cultures* Cambridge: Cambridge University Press.

Shogren, B. J. (2002). Analysis of Code Switching and Code Mixing among Bilingual Children: Two Case Studies of Serbian-English Language Interaction. *Unpublished master's dissertation.* Wichita state university.

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