

Inter-lingual Homophone Retrieval Distinction in Bilingual Younger Adults

Rajalekshmi. S., Satish. K. & Dr. T. A. Subba Rao

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Abstract

For decades there has been a debate as to whether bilinguals are like two monolinguals within the same individual or they share the same lexicon. Is language representation in the brain shared or are they absolutely separate is still being researched. Inter-lingual homophones are words that have identical phonology across languages but different meanings. These provide a real challenge to a bilinguals' and multi-linguals' recognition system. Studies have been done on the inter-lingual homophone retrieval ability in Hindi-Kannada bilinguals. The present study investigates the language of dominance and its pattern in Hindi-English bilinguals and multilinguals using inter-lingual homophones. Data was collected from 40 participants who were bilinguals. Twenty paired-words which consisted of inter-lingual homophones were used as stimulus. Result shows that the retrieval of the meanings of the inter-lingual homophones is superior in their native languages (L1) in younger adults. Those who learn different languages other than L1 exhibits equal proficiency in L1 and L2. The study has its implications in the assessment, diagnosis and the intervention planning programs for younger adults.

Keywords: Biliguals, Multilinguals, Inter-lingual homophones, Lexicon, Retrieval.

Introduction

Homophones are one group of words which are pronounced in the same way but differ in meaning or spelling or both. Inter-lingual homophones are words that have identical phonology across languages but they denote different meanings. An example is /more/ which means “peacock” in Hindi and pronounced as “more” in English.

Bilingualism is commonly defined as the use of at least two languages by an individual (ASHA, 2004). It is a fluctuating system in children and adults whereby use of and proficiency in two languages may change depending on the opportunities to use the languages and exposure to other users of the languages. It is a dynamic and fluid process across a number of domains, including experience, tasks, topics, and time.

Hindi is an Indo-Aryan language and, with all its dialects taken together, is the third-most-widely spoken language in the world. The standardized Hindi is studied, taught, spoken and understood widely throughout the sub-continent, whether as mother tongue or as a second or a third language.

English is a West Germanic language that was first spoken in Anglo-Saxon England in the early middle ages. It is now the most widely used language in the world. There are about 375 million native speakers (people with first language as English), which makes English the second most spoken language in the world. About 220 million more people speak it as a second language and there are as many as a billion people who are learning it.

A number of models have been proposed to explain the phenomenon of visual orthographic processing in bilingual individuals and to study whether the bilinguals have separate or shared representation. Kroll and Stewart (1994) proposed a hierarchical model (Figure 1) to capture the implications of early reliance on L1 for the form of word-to-concept connections.

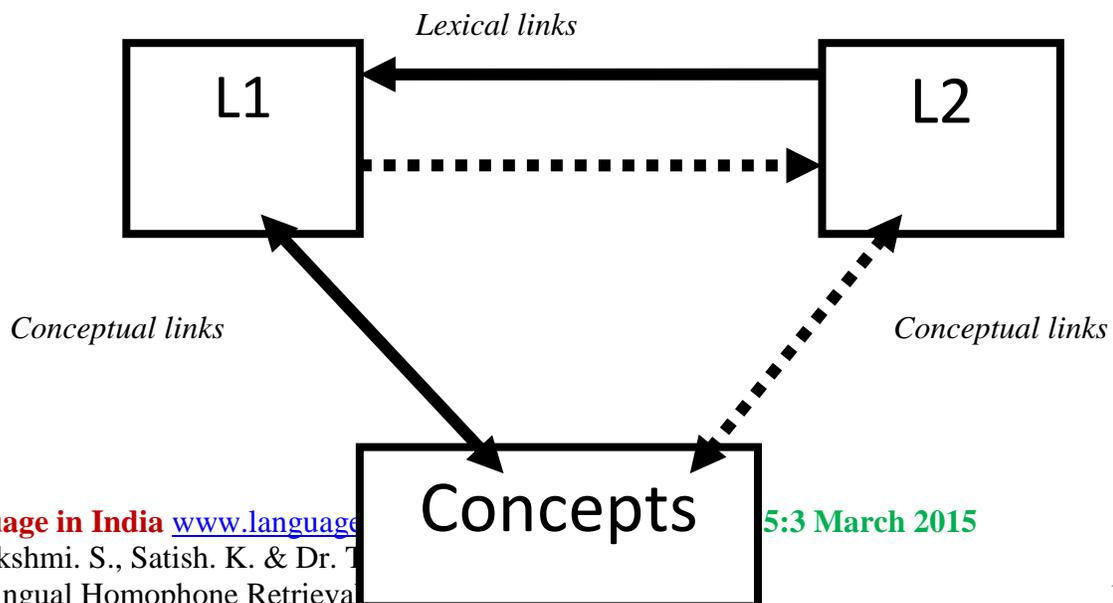


Fig.1. Hierarchical Model (source: Adapted from Kroll & Stewart, 1994)

The model fuses the word association and concept mediation alternatives into a single model in which the strength of the connections between words in L1 and L2 and concepts is proposed to take on different values. The initial dependence on L1 to mediate access to meaning for L2 words is assumed to create strong lexical level connections from L2 to L1. However, at the lexical level, the connections from L1 to L2 are not assumed to be particularly strong because there is little need for the learner to use L2 in this way. Likewise, the model assumes that connections between words and concepts are stronger for L1 than for L2. A number of empirical findings support the predictions of this hierarchical model. More critically, only translation from L1 to L2 was influenced by the presence of semantic information. The absence of semantic effects in the L2 to L1 direction of translation suggests that it was possible for bilinguals to translate directly at a lexical level.

Paradis (1987) showed that most individuals lose or recover multiple languages equally, but some recover one before the other, and some recover either L1 or L2. These outcomes suggest that two or more languages may have different representation or levels of activation.

Maitreyee and Goswami (2009) investigated the inter-lingual homophone retrieval abilities in Hindi-Kannada bilinguals. The results revealed that the native language was more dominant for retrieval of the meanings of the words for children and adults in both Kannada and Hindi native speakers. On the other hand teenagers performed similarly in both the languages. It is hypothesized that a bilingual has separate lexicons for L1 and L2 in the younger age, and then an interaction occurs between both the lexicon and finally the most used language becomes dominant.

Venkatesh, Edwards and Saddy (2011) investigated the two later-acquired but proficient languages, English and Hindi, of two multilingual individuals with transcortical aphasia (right

basal ganglia lesion in GN and brain stem lesion in GS). Dissociation between lexical and syntactic profiles in both the languages with a uniform performance across the languages at the lexical level and an uneven performance across the languages at the syntactic level were observed.

Kisser, Wendell, Spencer and Waldstein (2012) examined the performance of native and non-native English speakers with similar age and educational backgrounds on a variety of cognitive tests. The results suggest that non-native English language may have a negative influence predominantly on language-dependent tasks.

Need for the Study

There has been a debate as to whether bilinguals share the same lexicon, or whether the lexicons are similar to two monolinguals within the same individual. Previous study cited earlier has found the inter-lingual homophone retrieval ability in Hindi-Kannada bilinguals. So, it is necessary, then, to determine how the inter-lingual homophone retrieval ability operates in Hindi-English bilinguals.

This study tries to explore the aspects of the inter-lingual homophone retrieval ability in bilinguals (younger adults).

Aim & Objective

The present study is aimed to investigate the language dominance and its pattern in Hindi-English bilinguals and multilinguals using inter-lingual homophones, i.e., words which have similar pronunciation but different meanings within or across language.

Method

Participants

40 subjects in the age range of 19 to 23 participated in the study. The purpose and procedure of the study were explained to the participants. An informal verbal consent was taken from the participants for the study. The study group consisted of both native speakers of Hindi

(20) and non-native Hindi speakers (20). The participants were divided into two groups. Group 1 included 20 participants with Hindi as L1 and Group 2 included 20 participants with Hindi/English as L2. All the participants were proficient and comfortable in using both the languages. All the participants were graduate students. The Australian Second Language Proficiency Rating was administered to the participants.

Materials

1. ***Stimulus used:*** A non-standardized list of 20 paired-words was formed as the test stimuli. Words belonging to both the languages (Hindi and English), having the same structure but different meanings were chosen for the study.
2. ***Selection of stimulus:*** The most commonly used Hindi and English words which formed homophones were chosen for the study. These words were given to different proficient native speakers and their performance was judged.
3. ***Recording of stimuli:*** The pairs of words were tape recorded by a Hindi-English speaker, who has same proficiency in both the languages. The words were recorded as naturally as possible with an interval of one second between the words of a pair and an inter-stimulus interval of one minute.

Procedure

The test material was presented to the participants in an individual set-up in a quiet environment. The stimuli were presented using a headphone. The participant's task was to listen carefully to the pairs of words and write the meaning of each word. The responses of each individual were tabulated according to the number of correctly repeated words with correct meaning in each language (Hindi and English).

Results and Discussion

The aim of the present study was to investigate the language of dominance and its pattern in Hindi-English bilinguals and multilingual using inter-lingual homophones.

The data were tabulated and analyzed using SPSS version 16.

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Rajalekshmi. S., Satish. K. & Dr. T. A. Subba Rao

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From the statistical analysis it was observed that in Group 1 (Native Hindi speakers) shows significant difference between retrieval of Hindi and English words (χ^2 value = 15, $p < 0.01$), indicating that their retrieval ability for Hindi words are better than English words.

However, in Group 2 (Non-native Hindi speakers) there was no significant difference between retrieval of Hindi and English words (χ^2 value = 3.243, $p > 0.05$), i.e., they performed equally well in both the languages.

The results show that the retrieval of the meanings of the inter-lingual homophones is superior in their native languages (L1) in younger adults. Those who learn different languages other than L1 exhibit equal proficiency in L1 and L2.

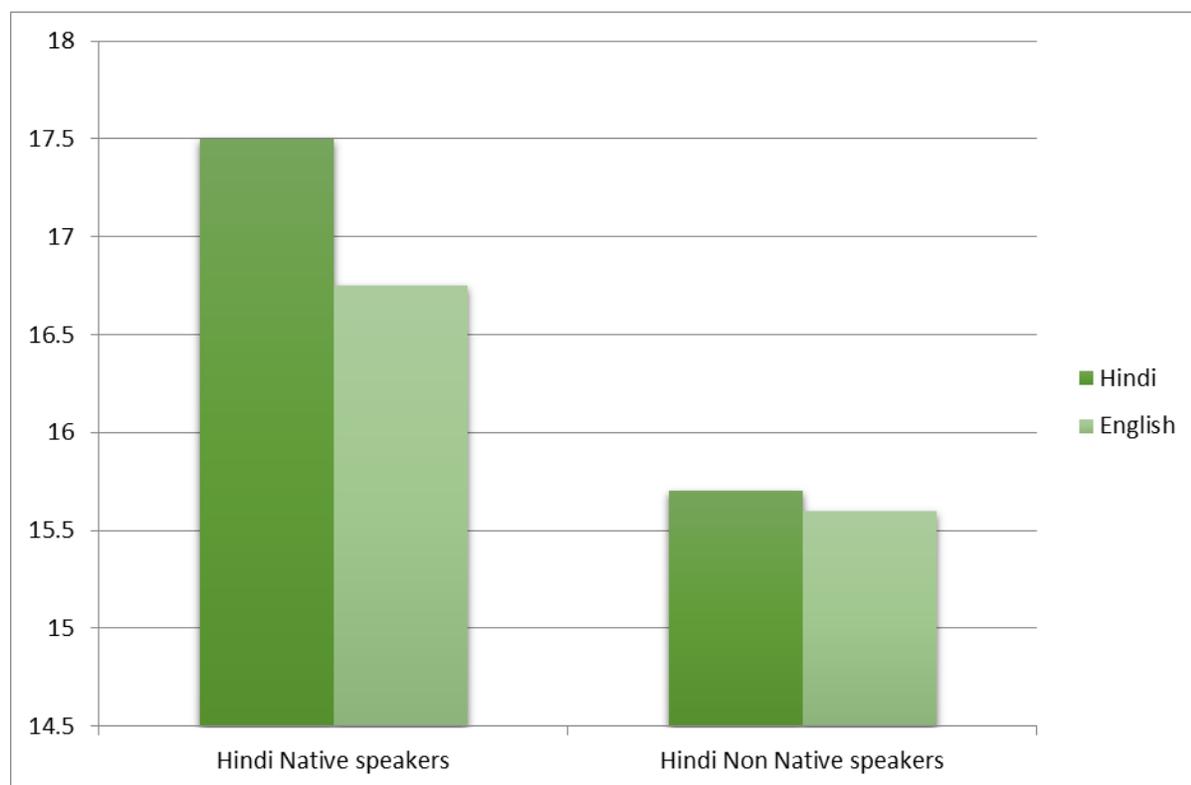


Fig .2. Interlingual homophone retrieval for Hindi and English words in Hindi native and non native Hindi speakers.

The finding is in agreement with study done by Maitreyee and Goswami (2009) which states that native language will be more dominant for the retrieval of the meanings of words for children and adults.

The results of the present study suggest that for individual with minimum formal education and exposure of 12 years or more appear to be equally proficient in L1 and L2. Disclosure plays an important role in becoming proficient in L2. Formal education becomes an additional advantage. Thus, while assessing or designing language therapy the role of L1 and L2 may not be a variable particularly at the semantic level.

Summary and Conclusion

Examining how lexical items are stored in the mind and how bilinguals' retrieve this lexical representation is quite complicated. Lexical access is more complex for bilinguals because they have two or more languages in their mind.

Separate patterns of performance were seen across the individuals of two different groups. The present study suggests that individuals with a minimum formal education and exposure of more than 12 years to the languages appear to be equally proficient in their second languages.

Implication of the Study

The study has its implications in the assessment, diagnosis and the intervention planning programs for younger adults. For adults, L1 can be considered as a medium of instruction during remediation, but care should be taken about the exposure to the language.

Limitations

The study included limited number of participants and words. Also the study excluded English-Hindi bilingual children and older adults.

Future Studies

The present study can be further extended to a larger population. The study can also be done with other bilinguals like Malayalam-Hindi, Hindi-Tamil, etc.

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Rajalekshmi. S. (Corresponding Author)
Second Year Post-Graduate Student
Dr. M.V. Shetty College of Speech and Hearing
Maladi Court, Kavoor
Mangalore - 575015
Karnataka
India
srajalekshmi1990@gmail.com

Mr. Satish Kumaraswamy
Principal
Dr. M.V. Shetty College of Speech and Hearing
Maladi Court, Kavoor
Mangalore- 575015
Karnataka, India
sat8378@yahoo.com

Dr. T. A. Subba Rao
Professor
Dr. M.V. Shetty College of Speech and Hearing
Maladi Court, Kavoor
Mangalore- 575015
Karnataka, India
drtasr.slp@gmail.com

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