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The Interaction between People's Learned Language and Their Habitual Thinking Patterns

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Abstract

The power of language to reflect culture and influence thinking was first proposed by an American linguist and anthropologist, Edward Sapir (1884-1939) and his student Benjamin Whorf (1897-1941). The Sapir-Whorf hypothesis stated that the way we think and view the world is determined by our language Instances of cultural language differences evidenced in that some languages had specific words or cultural patterns whereas other languages used several words to representeda specific concept. Or they used totally different cultural patterns to the same occasion. In this study researcher to obtain the influence of learning new language to habitual thinking patterns of learners' mother tongue developed a Written Discourse Completion Test (WDCT). To assess the linguistics relativity hypothesis (LRH) on foreign language learners, concerning that the language a speaker uses influence the way the speaker thinks.

Keyterms: habitual thinking patterns, cross cultural communication, language and thought

Introduction

Study of the interaction between language and thought is one of the areas of psycholinguistics, which is the study of how individuals comprehend, produce and acquired a language. In fact, language is more than just a means of communication. It is able to influence our culture and even our thought processes. One way in which culture has often been understood is as a body of knowledge that people have about a particular society. This

body of knowledge can be seen in various ways: as knowledge about cultural artifacts or works of art; as knowledge about places and institutions; as knowledge about events and symbols; or as knowledge about ways of living.

It is also possible to consider this aspect of culture in terms of information and to teach the culture as if it were a set of the learnable rules which can be mastered by students. When translated into language teaching and learning, this knowledge-based view of culture often takes the form of teaching information about another country, its people, its institutions, and so on. Culture is not, however, simply a body of knowledge but rather a framework in which people live their lives and communicate shared meanings with each other.

The question of whether languages shapes the way we think goes back to nearly two centuries. Humboldt (1836, as cited in D. Gentner & S. Goldin-Meadow, 2003) was the first one who viewed language as a formative organ of thought and held that thought and language are inseparable. Since then the matter is considered by many linguistics researchers and researchers from other discipline.

Two theories concerning the relationship between language and thought are called ‘Mould theories’ and ‘Cloak theories’. Mould theories represented language as a ‘mould in term of which teacher categories are cast’ (Bruner et al.1956, P.11, as cited in D. Chandler, 1994). Cloak theories represented the view that “language is a cloak conforming to the customary categories of thought its speakers’ (ibid). There is also a related view by behaviorists that language and thought are identical. In this sense, thought is seenas entirely linguistic which determined by language.

The Sapir-Whorf theory is a mould theory of language and the basic principles of the Sapir-Whorf hypothesis can be summarized in the following quotation by Whorf (1956, p.214):

> … 'No individual is free to describe nature with absolute impartiality but is constrained to certain modes of interpretation even while he thinks himself most free. The person most nearly free in such respects would be a linguist familiar with very many widely different linguistic systems. As yet no linguist is in any such position. We are thus introduced to a new principle of relativity, which holds that all observers are not led by the same physical evidence to the same picture of

the universe, unless their linguistic backgrounds are similar, or can in some way be calibrated'.

Whorfian hypothesis consists of two parts, i.e., *the linguistic determinism and the linguistic relativity.*

Linguistic Determinism versus Linguistic Relativity

Linguistic determinism, **Strong Whorfian**, holds that people from different cultures think differently because of differences in their languages. A native speaker of Hopi, Whorf claimed, perceives reality differently from a native speaker of English because she uses a different language. Few sociolinguistics would accept such a strong claim, but most accept the weaker claim, the focus of current paper, of linguistic relativity: the language influences perceptions, thought, and at least potentially, behavior. Janet Holmes (2008, p. 337) proffers the categories provided by a language may take it easier to draw certain conceptual distinction.

Thinking-for-Speaking Hypothesis

Thinking-for-speaking hypothesis is a version of the linguistic relativity hypothesis, the proposition that language influence thought and that different languages influence thought in different ways (Mc Neill & Duncan, 1998).

According to Slobin (1979, p. 6, as cited in, Clark, 2009, p. 130), "language evokes ideas; it does not represent them. Linguistic expression is thus not a straightforward map of consciousness or thought. It is a highly selective and conventionally schematic map." For Slobin (1987, p. 435), "we encounter the contents of the mind in a special way when they are being accessed for use." That is to say, there is a process of thinking for speaking wherein cognition plays a dynamic role within the framework of linguistic expression, a point formulated by Slobin (1987, p. 435) as follows:

The activity of thinking takes on a particular quality when it is employed in the activity of speaking. In the evanescent time frame of constructing utterances in discourse, one fits one's thoughts into available linguistic forms. A particular utterance is never a direct

reflection of "objective" or perceived reality or of an inevitable and universal mental representation of a situation. This is evident within any given language, because the same situation can be described in different ways; and it is evident across languages, because each language provides a limited set of options for the grammatical encoding of characteristics of objects and events. "Thinking for speaking" involves picking those characteristics that (a) fit some conceptualization of the event and (b) are readily en-codable in the language.

Hypothesis of this Paper

H1: Learning new language changes the way one thinks.

Methodology

Subjects

The participants were 80 Iranian students. They were all undergraduates majoring in English, Turkish, Arabic and Persian Language courses. They were students, whose native language was Persian and who received academic instruction in English, Turkish and Arabic for more than five years.

Materials

The following instruments were used:

a) **A Written Discourse Completion Task (WDCT) (Teacher Made Questionnaire, Cultural Patterns**) to elicit the influence of learning new language on thought. It contained different contextual situations followed by a blank (see appendix 1). The participants had to provide the appropriate responses of the speech acts investigated to fill in the blank and were asked to complete the dialogue as their own preference, not surley as what people say in Iran. All contexts in the test were controlled by situational variables, i.e., 'social distance' and 'power', and a culture-specific factor, three different levels of social distance represent different degrees of familiarity between participants.

b) **A Background Questionnaire or Background Questionnaire Survey** is the most commonly used method to obtain a snapshot of the conditions and events at a single point (Cohen and Manion, 1985). The background information survey was adopted to know more about the information background to select the most representative participants and developed by the investigator (see appendix 2.). It covered issues

such as the subjects' age, gender and linguality status. The participants were assured that the elicited information would be accorded full confidentiality.

Results and Discussion

The T-test was employed in order to analyze the collected data. To use t-test we need to find normality of variable, and for this researchers used the one-sample Kolmogorov-Smirnov Test with ./406. The statistical representation of analyzed data is given in the following tables:

Table 1

Groups' statistics

Groups		Number	Mean	Std. Deviation	Std. Error mean
Thought	Control group	20	10.00	.000	.000
	Experimental group	60	14.88	1.967	.254

Table 2

Equality of variance

		Levene's Test for Equality of Variances	
		(F) Fisher	Sig.
Thought of learners	Equality of variance	39.989	.000

▲ Regarding the research hypothesis (Learning new language changes the way one thinks), the results of data analyses indicate that (table 1) experiment group differed significantly with control group in their way of habitual thinking patterns. From the mean scores it is clear that experimental group had significantly higher scores than control group learners (means 14.88 and 10.00 respectively). And the SD of experimental group was 1.967 while that of the control group was 0.000. All the scores of control group were equal with 10 therefore their SD got equal with 0.000.

The Levene's test (table 2) showed that the equality of variance is rejected. In other words, the variance of two independent groups is not equal and researcher used t-test with unequal variances.

Table 3

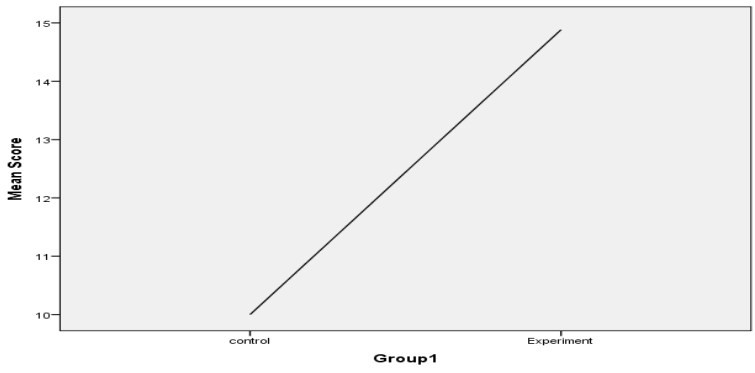
T-test of groups

t-test of two independents group with unequal variances						
T	Freedom	Level of significance	Mean Differences	Std. Error of mean differences	95% confidence *interval estimate of the* difference *between the* mean	
					Lower bound	Upper bound
-19.234	59.000	.000	-4.883	.254	-5.391	-4.375

▲As indicated, in the process of analysis (T-test), there is significant difference between control and experimental group in their thought patterns means scores. (t=-19.234). As the low bound (-5.391) and upper bound (-4.375) were excluded of zero point, the null hypothesis is rejected. Therefore, according to the data analyses, the hypothesis of learning new language changes the way one thinks is accepted.

Figure 1

Mean scores of subjects in control and experimental groups



Conclusion and Implication

In this research, the researchers wanted to show and emphasize that cognition which develops earlier controls mother tongue language and shapes its habitual thinking patterns.

As Dedre Gentner and Susan Goldin-Meadow (2003) in "Language in mind" stated, the habit that people acquired in thinking for speaking a particular language will manifest itself in their thinking even when they are not planning speech in that language. In learning a new language it was the new language which altered and omitted the existing mother tongue habitual thinking patterns or even shaped the new patterns of thought.

Actually, many studies prove the weak version of Whorf hypothesis, linguistic relativity or thinking-for-speaking of Slobin. For example, Micheal Marlow (2011) studied the effect of language upon thinking. He concluded there is broad agreement among linguists that language does influence thought in various ways, though not as strongly as Whorf's statement. It is obvious that at least some of us are capable of thinking outside the box of language when we make a conscious effort.

Lera Boroditsky (2011) studied how language shapes thought, and she concluded different languages may impart different cognitive skills and change how people talk, may change how they think and also change how bilinguals see the world depending on which language they are speaking. As a result she remarked there may not be a lot of adult human thinking where language does not play a role.

Liangguang Huang and Xueqing Wang (2011) worked on the influence of different thinking patterns between Chins and English on English writing. They concluded people with different cultural background may use different discourse and showed how differences in English writing between Chinese and American students caused by the influence of thinking patterns.

John A. Lucy (2005) assessed the influence of language diversity on thought and concluded that language universally mediates culture and mind in human groups, so it appears to play a role in producing cultural and mental diversity. Also particular language commits us to the specific conventions of that language and consequences for our thinking.

Lera Borodistky (2001) studied that English and Mandarin talk about time differently. English treats time as if time were horizontal while Mandarin describes time as vertical, this difference between two language can play the most important role in shaping how their speakers think.

Levinson (2001, as cited in D. W. Carroll, 2008, p.411) in support of Whorfian hypothesis expressed, when a child learns a language she is undergoing a cognitive revolution, learning to construct new macro-concepts. These macro-concepts which are part of our cultural baggage are precisely the contribution of language to our thinking. Language invades our thinking because languages are good to think with (p.584).

By understanding the influence of learning new /foreign language on thought, one can prevent the interference of cultural patterns on learning new languages and teachers can use them to prevent misunderstanding of interlocutors and even the translators in their translating. In addition, it is helpful to adjust the teacher programs, curriculum development materials and syllabus design base on different languages along with different thinking patterns. We need not only to develop the students' new learning skills, but also their cultural awareness. Therefore, the main point to consider in language teaching should be to teach our learners to think like native speakers, and use the formal devices as they do rather than overusing the available formal devices in order to make certain conceptual distinctions.

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