



**LANGUAGE AND THOUGHT:
A THEORETICAL OVERVIEW ON
LINGUISTIC DETERMINISM AND LINGUISTIC RELATIVITY**

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Abstract

This paper strives to encompass the concept of language and thought in the perspective of psycholinguistics. It, moreover, elaborates two major linguistic theories, namely *linguistic determinism* and *linguistic relativity* to describe the concept. By comparing these two theories, this paper provides proponents of theories along with several reasonable doubts regarding them. Eventually, by providing many theories and empirical examples relating to the concept of language and thought, it is no longer important whether a language precedes thought or conversely thought develops a language; what is really important now is that how in the end we realise that these two surely have each own contribution in the way we perceive the world today.

Keywords: linguistic determinism, linguistic relativity

Introduction

Psycholinguistic brings the concept of the language and the brain—how the language is processed inside the brain, how the language is stored in a particular part of the brain, comprehension theory, language in exceptional circumstance, first language acquisition, etc. However as stated by George A. Miller (1968, pp. 74-86) that the integration of psycholinguistic studies still has some confusing concerning on its scope and purpose. The central task of this new science is to describe the psychological processes that go on as people construct sentences.

One of the branches of this study concerns on the language and the thought in which its limitation scope merely talks about how a language influences thought—either how the people perceive the world, otherwise known as cultural world-view or people perception—or it conversely sticks on how thought precedes and constructs the language. Thinking is the systematic transformation of the mental representations (internal description) that can be manipulated to form other descriptions in one particular condition that such manipulation must be systematically governed by certain constraint of knowledge to characterise actual or possible states of the world, often in service of goals while for the thought is the action of thinking.

This discourse is formerly based on the Sapir-Whorf Hypothesis through which those two-collective master-pupils introduced two popular theories called Linguistic Determinism and Linguistic Relativity.

This paper strives to encompass several theories related to this discourse *Language and Thought* majorly elaborating two theories, namely Linguistic Determinism and Linguistic Relativity. It, moreover, also strives to discover to what extent the correlation between language and thought lies and reciprocally influences one another. Does a language precede thought or conversely does thought, somehow, develop a language?

Language and Thought

1.1 Speech Essence for Thought

In the cognitive psychology, especially one of the Vygotskian psychology, the correlation between thought and speech is of correspondence; the former is commonly considered as intra-mental activity occurred inside the mind while the latter is the vocalised thinking. These two, accordingly, are of paramount essence for the developmental process of the personality. Only by utilising inter-functional systemic unity of these two can the thought become verbal while the speech becomes intellectual. (Kozulin, 1994, p. 32; Mkrtchyan, 2014, p. 48).

Therefore, both speech and thought are interconnected or related one another. Speech on a particular occasion becomes the input of the development of thought. It can be seen from the children's growth as they attempt to build their thought by comprehending the speech of others. Even though their oral productions—in this case, it refers to speech production such as jaws, tongue, etc.—have not been shaped yet, they could comprehend the speech of others. At this phase, children receive how others view the world or how others build their perception through the speech. Hence, in other words, it can be said that the speech, seen as the vocalized thinking, is not merely the way we utter the words or sentences—having no attention within—but rather the visualization of thought through the use of speech production in form of the wave sound. The speech is essential for thought due to its salient role—as prerequisite input on how we build our thought by comprehending others' speech (vocalized thinking).

Is this tenet still relevant today? (Reasonable Doubts)

The notion that speech is essential for thought might only be relevant if the concept of speech in this context refers to the concept of what we nowadays define as perception. Otherwise, there are many reasonable doubts that worth noting regarding this notion. First, if the speech refers to what behaviourists believe as verbal production (e.g. Bloomfield, 1961, p. 31; Liberman, 1957, p. 122; Skinner, 1957, p. 449), it is then important to note (1) the case of mute children who is apparently able to think despite being unable to produce speech; (2) the children's speech comprehension prior to the development of their speech production; (3) the concept of lie, indicating that the correlation between speech and thought is not always linear (Steinberg & Sciarini, 2006, p. 180-2).

1.2 Language Essence for Thought

The language we speak affects our perception of the world (Lera Boroditsky, Cognitive Psychologist)

The idea of stating that distinct languages may reflect distinct cognitive skills was associated with American Linguists Edward Sapir Benjamin Lee Whorf. They argued that languages vary and proposed a way that speakers of different tongues may think differently (Boroditsky, 2011: 63). Ergo accordingly, the Sapir-Whorf Hypothesis majorly proposed proposition that a language determines our thought—it is the extreme notion of this hypothesis—or a language influences our thought—in a moderate version. A language, in a matter of fact, is the essential part to build our thought. We could develop our thinking skill upon matters if only we learn how to produce and understand the language. Language is one of the communication devices through which we could share information with each other. As stated by Sapir (1929, p. 210), our language affects how we perceive matters:

“Even comparatively simple acts of perception are very much more at the mercy of the social patterns called words than we might suppose. ...We see and hear and otherwise experience very largely as we do because the language habits of our community predispose certain choices of interpretation.”

Thus, for those who are behalf the Sapir-Whorf Hypothesis—later called as Linguistic Relativity—will tend to believe that the language is essential for the thought since how we perceive matters is based on how we use our language. Preferentially, a language used by a particular group affects such group to perceive matters and therefore idiosyncratically creating distinction for other groups.

Is this tenet still relevant today? (Reasonable Doubts)

Many current researches (e.g. Furth, 1966, 1971; Schaler, 1991) disproves the notion that the language is essential for thought. Steinberg & Sciarini (2006, p. 184-6) asserts two major reasonable doubts on this: Firstly, regarding the deaf people; secondly, regarding the case of multilinguals. The deaf persons (as in Furth, 1966, 1971) show no difference in terms of their intelligence compared to those of normal ones despite their far lower linguistic competence than that of non-deaf ones. In other words, this indicates that language does not greatly contribute to the thought—let alone the sole essence for the thought. Another interesting research (Schaler, 1991) demonstrated that even 27-year-old deaf man, in fact, was able to understand many concerns as other men possessing language, e.g. regarding objects, situations, and events in spite of him being unable to have any language. Later after possessing the sign language, he could adequately relate his pre-language phases as he still could think even without possessing any language.

1.3 Language Determines or Shapes Our Perception of Nature

As being experienced by Lera Boroditsky in her paper *Scientific American “How Language Shapes Our Thought”* (2011):

“Am standing next to a five- year old girl in Pormpuraaw, a small Aboriginal community on the western edge of Cape York in northern Australia. When I ask her to point north, she points precisely and without hesitation. My compass says she is right. Later, back in a lecture hall at Stanford University, I make the same request of an audience of distinguished scholars— winners of science medals and genius prizes. Some of them have come to this very room to hear lectures for more than 40 years. I ask them to close their eyes (so they don’t cheat) and point north. Many refuse; they do not know the answer. Those who do point take a while to think about it and then aim in all possible directions. I have repeated this exercise at Harvard and Princeton and in Moscow, London and Beijing, always with the same results.”

The notion of Linguistic Relativity might truly happen. The nature perception of the Pormpuraaw, small aboriginal community in Cape York, Australia in using the absolute cardinal direction for the entire matters and places has necessarily believed as the Linguistic Relativity. The use of absolute cardinal direction rather than the relative spatial terms such as left and right has shown us that the Kuuk Thaayorre, language used by Pormpuraaw is able to influence the way of that group’s perception in perceiving the direction.

In the extreme way of this discourse, called as Linguistic Determinism, Sapir gave the explanation that the language rigidly shapes or determines our thought rather than merely influences our thought or perception. It moreover reveals that the structure of anyone’s native language strongly influences or fully determines the world-view that he or she acquires during the language learning. The example of such linguistic determinism can be seen as the Whorf (1940) described how the Eskimos give a name to the word ‘snow’:

“We have the same word for falling snow, snow on the ground, snow packed hard like ice, slushy snow, wind-driven flying snow - whatever the situation may be. To an Eskimo, this all-inclusive word would be almost unthinkable; he would say that falling snow, slushy snow, and so on, are sensuously and operationally different, different things to contend with; he uses different words for them and for other kinds of snow.”

Based on the sufficient statement above, the Whorfism—those who are behalf of this theory—believes that the language used by the Eskimos, especially for the word ‘snow’ per se determines or shapes their nature perception of the snow phenomena in which they believe that the other people who do not have those various words for ‘snow’ will not perceive the snow as what the Eskimos perceive. Another example appears from the Hopi conception of time by which the Sapir manifested his hypothesis. As stated by him (Ibid.) that the Hopi does not have what we call as the time conception or it can be said that the language used by Hopi is timeless language. It does not distinguish between the present, past and future of the event.

The last mostly cited illustration regarding the language relativity in terms of perceiving the nature of colour is the distinct colour taxonomy among languages. The

language, according to this notion, emerges as the basis of both thought and people's perception of colour nature. If a race with particular language does not somehow have a word for what others perceive as 'blue', this race surely could not possess or describe the perceptual framework as those of a language having a word for 'blue'. Ergo, the way of perceiving colours in a real world is mostly determined by the language used (Whorf, 1940). Further, the realization of such perception in many languages varies greatly, ranging from small to relatively large number of colour words. Dani Language, for instance, spoken in New Guinea has merely two-colour words—one for light and another for dark colours (Steinberg & Sciarini, 2006, p. 187).

Is this tenet still relevant today? (Reasonable Doubts)

Compared to English colour words, these two classifications surely constrain the speakers of Dani language to distinguish other colour words as red, yellow, blue, etc. In fact, however, several researches (Heider, 1972; Kay & McDaniel, 1978) object to such tenet. Heider (1972) found that Dani people—in spite of merely having a binary opposition: light and dark colours—apparently were capable of differentiating many colour bands of the visible spectrum as speakers of languages with more than eight basic colour words. The limitation of colour words in Dani language appears not to constrain the speakers of this language to distinguish the nature of colour spectrum. Extensively supporting this, Kay & McDaniel (1978) showed that there is no significant difference in colour perception of distinct language speakers. Even, they eventually asserted that it was not language determining perception; rather, the perception determines the language.

1.4 Language Determines or Shapes Our Cultural Worldview

Some theorists believe that language could influence someone's cultural and social beliefs—e.g. Edward Sapir, Wilhelm von Humboldt, and Alfred Korzybski (Steinberg & Sciarini, 2006, p. 191). In other words, this tenet tries to put an asymmetrical hierarchy between language and cultural worldview in which the former determines or controls the latter. However, Sapir in his elaboration did not clearly define what he meant by “the particular language which has become the medium of expression for society” (1929, p. 209).

Reasonable Doubts

Regarding this tenet, let us take a look at this following two illustrations to provide some reasonable doubts upon this: firstly, the conceptual metaphor of colours; and second, the temporarily used of specific terms in a specific period of time, e.g. the tripartite racial dichotomy: *Totok*, *Indo*, and *Pribumi* in Indonesian which appeared as a result of colonialism at that time—in Halliday's term: closed or restricted registers (Halliday, 1989, p. 39).

The realization of the conceptual metaphor of colours may greatly differ one language to another. Nevertheless, the core pinpoint connecting the diversity of such realizations is that they result from the cultural and social factors (hence the cultural worldview constructs the language, instead) since the metaphorical concept cannot be directly inferred from its symbol (Wijana, 2015, p. 5). Rather, the interpretation of the metaphorical concept can only be interpreted through particular similarities between

the conception of source domain and target domain. Surely in this case, the target domain appears to be more abstract than that of the target domain (Kovecses, 2006, p. 374). Wijana (2015) clearly illustrated that despite the universalities of achromatic metaphoric expression between Indonesian and English, some specific chromatic metaphoric expressions in Indonesia emerged and idiosyncratically differed from other languages due to varied extra-linguistic factors, such as environment, history, religion, politics, and other socio-cultural activities. Therefore, this adequately rejects the tenet of language determinism upon cultural worldview.

Closing Words

Despite being notoriously debated over ages, the concept of language and thought—to what extent one might influence another counterpart, is it a chronological causality or these two in fact share the same equal role and develop simultaneously side by side—might unquestionably become a very challenging issue in both psychology and linguistics, or even psycholinguistics (the elaboration of these two disciplines). Either a language precedes thought or vice versa, the fact that this notion has changed the way we perceive both language and thought is surely inevitable. It does not matter whether a language precedes thought or conversely thought develops a language, what really matters is that how we, in the end, realise that these two surely have each own contribution in the way we perceive the world today.

Eventually, to sum up this, let us take a careful contemplation on what Kramersch inferred:

*“The theory of linguistic relativity does not claim that language structure constrains what people **can** think or perceive, only it tends to influence what they routinely **do** think”* (1998, p. 14).

References

- Boroditsky, L. (2011). How language shapes our thought. *Journal of Scientific American*, 63-5. Retrieved from <https://www.gwashingtonhs.org/ourpages/auto/2013/10/23/68598699/sci-am-2011.pdf>
- Bloomfield, L. (1961). Teaching children to read. In L. Bloomfield and C. L. Barnhart (eds). *Let's Read*. Detroit: Wayne State University Press.
- Furth, H. (1966). *Thinking Without Language*. New York: Free Press.
- Furth, H. (1971). Linguistic deficiency and thinking: Research with deaf subjects. *Psychological Bulletin*, 76, 58-72. DOI: 10.1037/h0031495
- Halliday, M. A. K., & Hasan, R. (1989). *Language, context, and text: Aspects of language in a social-semiotic perspective*. Oxford: Oxford University Press.
- Heider, E. R. (1972). Universals in color naming and memory. *Journal of Experimental Psychology*, 93, 10-20. DOI: 10.1037/h0032606
- Kay, P., & McDaniel, C. K. (1978). The linguistics significance of the meanings of basic color terms. *Language*, 54, 610-46. DOI: 10.2307/412789
- Kovecses, Z. (2006). *Language, mind, and culture*. Oxford: Oxford University Press.

- Kozulin, A., & Lurie, L. (1994). *Psychological tools and mediated learning: Cross-cultural aspects*. Spain: Pamplona.
- Kramsch, C. (1998). *Language and culture*. Oxford: Oxford University Press.
- Lieberman, A. M. (1957). Some results of research on speech perception. *Journal of Experimental Psychology*, 60(2), 117-23.
DOI: 10.1121/1.1908635
- Miller, G. A. (1968). *The psychology of communication: Seven essays*, 74-86. Harmondsworth: Penguin Books
- Mkrtchyan, T. L. (2014). The speech as means of the regulation the person's self-consciousness and self-checking. *International Review of Social Sciences and Humanities*, 6(2), 48-54. Retrieved from www.irssh.com/yahoo_site_admin/assets/docs/5_IRSSH-698-V6N2.39115104.pdf
- Sapir, E. (1929). The status of linguistics as science. *Language*, 5(4), 207-214. DOI: 10.2307/409588
- Schaler, S. (1991). *A man without words*. New York: Simon & Schuster.
- Skinner, B. F. (1957). *Verbal behavior*. New York: Appleton Century Crofts.
- Steinberg, D. D., & Sciarini, N. V. (2006). *An introduction to psycholinguistics* (2nd ed.). United Kingdom: Pearson Education Limited.
- Whorf, B. L. (1940). Science and linguistics. *M.I.T. Technology Review*. Retrieved from web.mit.edu/allanmc/www/whorf.scienceandlinguistics.pdf
- Wijana, I. D. P. (2015). Metaphor of colors in Indonesian. *Journal of Humaniora*, 27, 3-13. DOI: 10.22146/jh.v27i1.6397