

The influence of language on thought Study Benjamin Whorf Hypothesis and Edward Sapir¹

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Language is the medium that carries infinitely capable of everything contained in the field of human understanding. Therefore, understanding the language will allow someone to understand the forms of human understanding. Language is the medium of abstract human thought that allows factual objects transformed into abstract symbols. With this transformation of the human being can think about on an object, although it did not object that perceived by him (Suriasumantri, 1998). Ernst Cassier called man as symbolic, the creatures that use symbol. This phrase generically contains larger meaning than homo sapiens. For Cassier, human uniqueness is not merely lie in the capacity to think it lies in language ability.

A famous philosopher, Gadamer, stated that the status of human beings can not do anything without using language. In one famous statement, is clearly also a philosopher of language, Ludwid Van Wittgenstein, said that the limit of the human world is their language. An interesting description of the relationship between language and thought is expressed by Whorf and Sapir. Whorf and Sapir saw that the human mind is determined by the classification system of the particular language used by humans (Schlenker, 2004). Language is the medium that carries infinitely capable of everything contained in the field of human milieu. Therefore, understanding the language will allow researchers to understand the forms of human understanding. Language is the medium of abstract human thought that allows factual objects transformed into abstract symbols. With this transformation, human can think about on an object although it did not object when perceived thought process was done by him (Suriasumantri, 1998).

The relationship between language and the mind is a very challenging discussion in the study of psychology. History of this discussion can be traced from cognitive psychologists, philosophers and linguists. Sapir Whorf hypothesis and presents something that is very challenging to be explored further. Some aspects of the topics that affect the mind needs to be identified further, such as identification of aspects that affect the language areas of spatial reasoning (spatial reasoning) and aspects of language that affects the reasoning of other thoughts (reasoning about other minds). According to this hypothesis, the mental world of Indonesia is different from the mental world of English people because they use different languages.

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A. Briefly Sapir-Whorf Concept of Language and Mind

When I think in language, there are not 'Meanings' going through my mind in addition to the verbal expressions: the language is itself the vehicle of thought. "

Ludwig Wittgenstein

Some have sought to describe the form of the relationship between language and mind, or more narrowed again, how language affects the human mind. Of the many characters that describes the relationship between language and mind, the authors saw that the exposure of Edward Sapir and Benjamin Whorf is widely cited by various researchers in examining the relationship of language and mind. Sapir and Whorf says that there is no two languages that have similarities to be considered as the same social reality. Sapir and Whorf describe two hypotheses about the relationship between language and thought.

1. The first hypothesis is linguistic relativity hypothesis which states that differences in general language structures parallel to the non-language cognitive differences (nonlinguistic cognitive). Language differences cause differences in the mind of people who use that language.
2. The second hypothesis is that linguistics determinism states that the structure of language affects the way individual perceive and make sense of the perceptual world. In other words, the structure of human cognition is determined by the categories and structures that already exist in the language.

The influence of language on thought can occur through habituation and operation of the formal aspects of language, for example grammar and lexicon. Whorf said that "grammatical and lexical resources of individual languages heavily constrain the conceptual representations available to their speakers". Grammar and the lexicon in a language determines that there is a conceptual representation of the user's language. In addition to habituation and formal aspects of language, one dominant aspect in the concept of Whorf and Sapir is a problem of categorization in language affect human perception will be the premise of thinking, like what Whorf said the following:

"We split with a line of nature made by our native language. Categories and types that we isolate from the world of phenomena we can not meet because of all these phenomena captured by eye each observer. In contrast, the world presented a kaleidoscopic flux of impressions which are categorized management of our minds, and this is the system of language in our minds. We split the nature, to organize into the concept, sort out the elements necessary (Chandler, 2000)

Whorf conception guide social reality and the condition of individual thoughts about a problem and a social process. Individuals do not live in the objective world, not only in the world of social activities as usual understood, but it is determined by the symbols of a particular language is the medium of social communication. No two languages are similar enough to represent the same reality. The world where many people live Whorf as judged by the same world but with different characteristics. In short, it can be concluded that the human world view is shaped by language because language is different, so the view

of the world is different. Individuals selectively filter sensory yangmasuk as programmed by the language used. That way, people who use different languages also have different sensory (Newman & Grace, 1999).

B. Support to Sapir-Whorf Concept

“The fact of the matter is that the 'real world' is to a large extent unconsciously built upon the language habits of the group”

Edward Sapir

Sapir and Whorf hypothesis is supported by some research findings, especially in the field of anthropology. One anthropologist writes about language differences related to the perceptual activity. For example, two individuals who have a vocabulary of basic color (basic color) are different, will sort the secondary colors in different ways. Language relativistic sees that there are categories in the language the basis of mental activity, such as categorization, memory and decision making. If this assumption is true, then the study of language differences led to thoughts that caused the system. In addition to reflecting the language of cognitive development, language acquisition affects language and also has the potential to provide cognitive transformation.

That anthropologist tried to mediate conflicts that have to provide some guidance if a researcher want to study the relativity of language. Researchers have identified individual cognitive performance in tandem with verbal context explicitly (explicitly verbal contexts) and the emphasis on individual cognitive structures detected is shown in everyday behavior. Through this view indirectly, anthropologist had seen that cognition is a set of concepts and procedures present in the individual activities related to verbal behavior such as saying, hearing and thinking verbally.

The use of context in this language study received support from Gumperz and Levinson, who through his writings under the title Rethinking linguistic relativity theories note the importance of use in context that includes a formal semantic theory relating to the situation semantics, discourse representation theory and the theory describing the pragmatic theory and relevance Grecian theories. Whorf hypothesis is also supported by Olson (1970) who see that the category of perceptual and cognitive structures reflect individual experiences of the world. An event is always perceived and categorized relative depending on the context.

Related with emotional words Levy (1973), through his studies in Tahiti explained that there was no similarity between feeling bad (bad feelings) in understanding people of Tahiti with the word sad (sad) in the English vocabulary. People more highlights Tahiti mo'emo'e feelings (a sense of loneliness and isolation) rather than feeling sad that the English vocabulary is called with the sad. Levi adds that this does not signify that the people who speak English can not feel mo'emo'e and vice versa, people of Tahiti can not feel sad, but it indicates that the feelings have a different status that can not be paralleled. If the bad feelings (bad feeling) for the people who speak English are sad, then for the people of Tahiti are mo'emo'e.

Human beings can only say and understand one another in words terbahasakan. Language is learned since the children are not a neutral language in coding objective of reality. Language has a subjective orientation in describing the world of human experience. Orientation was then affected how people think and say. Through exposure on the face can be described some derivation of the influence of language on the human mind. Derivation is reflected from some statements to some experts, among others:

1. language creates awareness
2. Language creates self-consciousness
3. Language creates structures of thought and symbolic representation
4. Language serves as one possible cue for memory
5. Language provides "Thinking for speaking"

D. Some Objections to the concept Sapir-Whorf

The concept of Sapir and Whorf encourage some objections among linguists and researchers psycholinguistics. Used as the basic form of objection is that the same thought can be expressed in several ways. A man can say whatever he wanted in a language so that between one language with another language has a parallel character. One of the facts presented to demonstrate this objection is in the field of development. Several cases in daily life shows that babies who do not yet have an optimal language was able to reason more than the things that interest them. For example the age of 3-4 months babies can understand the distance and solve problems related to distance. About 5 months old baby is able to make sense of simple arithmetic. Having previously shown the baby two objects in hand, they try to find two objects when two objects are hidden.

The second evidence that shows that humans can think even without the use of language is the case of children who are not deaf to understand the structure of language symbols. These children can find the signal and their own movements to communicate their thoughts and desires. The third proof is the case of a mental image that was exhibited by some individuals. Artists in the visual field have the ability to reason which can be compared with the author or a scientist. Francis Cricks by thinking visually able to find a double helix structure of DNA, the famous Albert Einstein with visual reasoning (visual thinker) can spawn physics formulas are spectacular.

Controversy about Whorf opinion also directed the examples presented, such as snow. Eskimos live in the midst of snow, so they have a lot of words about the snow. Camel is very important for Arabs, so they have lots of spare vocabulary in depicting a camel. Language is developed in accordance with the cultural challenges and not true that human beings can not distinguish a few objects of perception because no words can describe it. Although the language is only using the word 'he' will but Indonesian people also understand the meaning 'he' and 'she' in English.

Humans can think without using language, but language skills facilitate learning and remembering, identify issues and draw conclusions. Language allows individuals encode events and objects in the form of words. With individual language capable of

abstracting experience and communicate it to others because language is a symbol system that is capable of unlimited express all thoughts.

While most scientists believe that language is a social object which stands on an agreement to facilitate the communication, Chomsky has a different concept. According to the language "a natural object that is part of human biological endowment". Language is a natural object that is part of the advantages possessed by human beings (Ludlow, 2000). Language for Chomsky is a reflection of the mind and the product of human intelligence. By understanding the natural language properties such as structure, organization, and procedures will be able to use research to understand the characteristics of human nature (human nature). Chomsky's view is contrary to the view than Skinner about the process of language acquisition in children, is also opposed to the concept of Sapir and Whorf. With the things that are hardwired so indirectly it can be concluded that the language has no connection with the mind. Paul Kay's concept of language indirectly opposed to the concept of Sapir and Whorf. Told him that the differences reflect the phenomena and objects in different languages do not necessarily reflect a difference in the concept. To understand the relativity of language, individuals should recognize as translating the language that there are several alternative schemes in the language and the individual language user (Jaszczolt, 2000).

Some experts see that the language relativistic lack of scientific support, since no studies that prove these connections. According to Schlenker (Schlenker, 2004), humans do not exactly use the words in thinking (think in world), because if you use a human thinking by using the words of patients who have limited language (language deficits) will automatically limited in thinking. Verbal language and the mind are different in principle. However, this does not mean that the mind is not a system that manipulates symbols in the language. For example, the concept of computational models of the mind shows that the mind can be analogous to a computer capable of manipulating abstract symbols.

E. Review of the concept of Whorf and Sapir

Sapir-Whorf hypothesis and can not be separated from what is interpreted by them as a language. Through the structure of the smallest of the language words will be aware that language can affect an individual's mind. The following are some sense of the word which enables the word can be associated with the human mind. *First*, the word as a symbol. The word means the word as a symbol representing an object more than himself. The relationship between words and symbols are constructed by social conventions in a culture. *Second*, the object attributes. Word and object is one part that can not be separated. Piaget and Vigotsky reported that children receiving the name of an object can not be distinguished anymore. For them the name of a table or chair is part of the object table. Words and objects is one part attributable. The word table belongs to a table. *Third*, the word as an object (as object words). The words are part of the human world. The word is accepted as something in the mind. When individuals hear a word spoken, saying he would react this by thinking that the object is in the real world. The words are part of the language used by humans to receive, process, and convey information. Everything related to humans

always use the language as medium. Humans can not do anything without the use of language that represented into the words (Sumaryono, 1993).

Mind, language, and culture have a very close relationship, each of them is reflects a unique construct. The link between language and culture lies in the assumption that every culture has chosen its own path in determining what should be separated and what to watch out for naming the reality. On the other hand, the relationship between language and mind lies in the assumption that language influences the way people view the world, and affects the individual's mind that the language user. The link between language and thought is possible, as thought is an effort to associate the word or concept that concludes through the medium of language. Some descriptions of experts about the relationship between language and thought, among others:

1. Language affects thought. The human mind can be conditioned by the word that they have. People who support this relationship is Benjamin Whorf and his teacher, Edward Sapir. Whorf used the example of the Japanese nation. The Japanese have a very high mind because the Japanese have a lot of vocabulary tell a reality. This proves that they have a detailed understanding of reality.
2. Thought affects language. Supporting this argument is that cognitive psychology figure familiar to humans, namely Jean Piaget. Through observations made by Piaget on cognitive aspects of child development. He saw that the cognitive aspects of child development will affect the language used. The higher the higher aspects of language it uses.
3. Language and mind affect each other. Reciprocal relationship between the words and thoughts expressed by Vigotsky Benjamin, an expert on Russian nationals who semantic theory known as the reformers say that Piaget's theory of language and mind affect each other. Vigotsky merger of the two opinions on the widely accepted by cognitive psychologists.

Words are the form of clothing in the factual reality that there are real. Subjectivity is seen as human beings from different backgrounds by cutting his own reality. Humans cut reality and classify the world into categories based on completely different principles entirely different in each culture. English words, such as table, although a round or square shape, in the minds of the western claim that the two objects are essentially one and the same is due to serve the same function. Non Indo-European is not interrupted by the reality of its functions, but the basic shapes: round, square, solid, or liquid. For the non-Indo-European criteria of shape and form is uncertain, in determining whether an object belongs to this category or categories or. In the eyes of this society, round tables and square tables are two things completely different and should be shown with different names.

Language embodied in the words of a representation of reality. To symbolize in the form of human words cut and classify the world of reality into different categories of one culture with another culture. Methods used by every culture in the cut is a subjective reality (arbitrary) as well as cutting a cake so that the phenomenon is known as the cookie cutter effect (Albrecht, 1980).

E. Implications concept Sapir-Whorf

Apart from the contradiction of opinion about the relationship between language and mind, the language does have an influence on human experience. Language provides views both perceptual and conceptual view of a particular force. Language imposing view of human perceptual because the language was used glasses to see reality. Humans the same as a blind person, can not recognize reality when they have no language.

1. Phenomenology.

Evidence of links between language and thought can be seen in the case of some of the phenomenologist. With an eloquent language that is supported by the mastery of a good vocabulary so they can argue well. Hence, why the experts in the field of phenomenology is also expert as a linguist. For example as an author of novels, poetry, and articles. Jean Paul Sartre, Leo Tolstoy, Martin Heidegger, is an example. When the researchers busy with the explanation of statistics as proof of his theory, these people use the media to explain his theory of language. The phenomenologist has directly entered into a deep of reality and what they can identify with. Many of them recognize the reality that because they have a lot of vocabulary. In the case of Children Apperception Test (CAT), a child's mastery of the language becomes an influential factor, if the recognized only the horse, so he only mentioned the horse. If the card is given to CAT Sartre is not only horses, picture frames, necklaces, until the horse's eyes, facial expression, and position the horse's body may come to tell.

Language provides a certain nuance of an idea (Valsiner, 1996). Language is an instrument that shape and develop creative ideas from the mind, through the language of ideas to be objective. Previously he was in the clouds of delusion, ideas into concrete and down to earth. Once the individual provides a form of words on the idea with the words, this idea will be the object for himself as the words that sound (audible) so easily accessible by the public.

2. Through language mastery

Language also imposes a conceptual view of language users as people indirectly evaluate the reality on the basis of human language have. With the way this affects the language of human thought and action. A poor rural population who are more difficult to find food, it is for the government is not starving, but "food insecurity". Increasing price, not said "price is increase", but "price adjustment".

Western philosophers, Harold Titus, saying that the language printed in thoughts of people who wear them. This statement, although not yet proven in the arena of scientific research but it includes an original idea. Human communication is intentional. In other words, the basic communication done by humans is to change the mindset and attitudes of others. Transmission of this information is very important for maintaining a culture of knowledge forms (known forms) has. A statement issued by Michael Foucault and Thomas Szas of language would be the key word in the language of the reverse influence behavior. Foucault said that "Who can give a name, he was the master", while Szas said that "If the law of the animal kingdom eat or be eaten, then the human world of the law applicable define or being defined"

If we dare to go any further, we will have to print the hypothesis that the language of a personality. When one language to produce a certain behavior, the behavior becomes repetitive habits that created it is personality. This is because that the first humans to form a habit, but after that habit the human form.

3. Translation problems.

Whorfian's view that language is medium to determines a meaning. Therefore the translation one language to another is very problematic and sometimes impossible. Translation sometimes only able to move the language but not able to move amount meaning, because there is a kind of thought un verbalized must also be translated. Some writers whose work is translated into another language feel there is something missing from the translation results.

4. The limitations of Emotion

Another implication of the hypothesis of Whorf and Sapir is a limited vocabulary that causes psychological disturbance. At least the emotional vocabulary that is owned by many people makes them vulnerable in describing their emotions with their words. Yet the ability to verbalize these emotions are useful for their mental health. Being able to name the emotions that may have to be used in accordance with its function and not disturbed by his presence. Goleman (2000) have detected the importance of this issue from the beginning. The ability to name the emotion is one integral aspect of Emotional Intelligence in Self Awareness. Here, individuals can observe yourself, gather vocabulary to label their feelings, and know the relationship between thoughts, feelings, and reactions. Knowing the variety of feelings, enable human to identify themselves.

With transform language into in words, they became know that emotions are very real in themselves. A psycholinguistic expert, Alfred Korzybsky said some mental disorders caused by the limited use of the word by individuals who are not able to express the reality of it carefully. He knew only two extreme choices. Happy-sad, angry, flattered, or healthy-sick. Yet the reality is not so. Life does not separate the polar extremes of negative and positive extreme. Reality is very rich with the colors of emotion.

There is an anthropologist has tried to chop the population of a tribe in the interior of Africa. He asked one resident there. "How many boys mother?". "Two" replied the mother. The anthropologist was later surprised because before she asked her husband, who replied that his son amounted to three people. Researchers found that children of people there, they are descendants of the same sex with them. When the anthropologist to gather them together and then asked how many boys and girls, they replied nine. No less with the first shock, anthropologists found that for the tribe, their children have also died in a matter of them enter. Their children who have died should remain introduced to the person who asked the number of their children (Albrecht, 1980). Events at the top are one proof that a culture has their own way of categorizing reality.

Every culture has its own way of choosing a specific area of the whole reality to be realized in a word. This activity then parallel with the concept of categorization is involved in linguistic determinism hypothesis through what is called a frame of reference. Frame of reference is a system that helps people to classify objects. Sad feelings or emotions arise without a clear meaning. They do not know what causes these emotions arise and how this

relates to the reaction they did. The student has not fostered and guided to recognize their emotions and ways of expressing it well. By recognizing emotion in progress then emotion can be enjoyed and controlled. Through the description on the face can be concluded that the language could change the mind through several formulations, among others:

1. Languages improve communication
2. Language expanding the mind with the abstraction
3. Language shapes culture
4. Language can build verbal-concept

F. CONCLUSION

Language and mind have relevance interplay (reciprocal). Variables of cognitive domains may be considered as a precursor structure of language development in the early stages of child development. However, there are stages of language production processes may be loose or not depends on other cognitive domain. As evidence, for example, some individuals who have language disorders have limitations anterior aphasics in his brain with optimal performance. For example, discovery of significant relationship between classificatory ability and understanding the word meaning in individuals who have language disorders or individuals who suffer from schizophrenic is different. Discourse made by Whorf and Sapir quite challenging researchers who want to study the theme. Some moderate view of the concept should be considered rather than the contrary view. Several considerations can be taken into consideration include: (a) determination of language can be modified with the assumption that the language in facilitating potential reason than as an absolute determinant of reasoning. (b) One-way process that can be converted into a two-way process of adding that kind of language used by humans are also influenced by how people view the world and vice versa. (c) A comparative study between different languages in different minds reflect more directed to identify the diversity in one language than the main language comparison of a community.

REFERENCES

- Albrecht, K. (1980). *Brain Power : Learn to Improve Your Thinking Skills*. Kansas: Fireside
- Chandler, M. (2000). Surviving time: The persistence of identity in this culture and that. *Culture & Psychology*, 6, 209–231.
- Goleman , D. (2000). *Emotional Intelligence*. Jakarta: Penerbit Gramedia.
- Jaszczolt, K. (2000). Language and Thought. Retrieved from www.cam.ac.uk
- Levy, R. I. (1973). *Tahitians: mind and experience in the Society Islands*. Chicago: University of Chicago Press.
- Ludlow, P. (2000). Language and Thought. In Martinich & D. Sosa (Eds.), *A Companion to Analytic Philosophy*. Oxford: Basil Blackwell.
- Newman, J. B., & Grace, A. A. (1999). Binding across time: The selective gating of frontal and hippocampal systems modulating working memory and attentional states. *Consciousness and Cognition*, 8(2), 196-212.

- Olson, D. R. (1970). Language and thought: aspects of a cognitive theory of semantics. *Psychological Review*, 77, 257-273.
- Schlenker, P. (2004). Context of Thought and Context of Utterance: A Note on Free Indirect Discourse and the Historical Present. *Mind and Language*, 19, 279–304.
- Sumaryono, H. (1993). *Hermeneutik*. Yogyakarta: Kanisius.
- Suriasumantri, J. (1998). *Ilmu dalam Perspektif*. Jakarta: Yayasan Obor.
- Valsiner, J. (1996). Whose mind? *Human Development*, 39(295-300).