Transformation of Language and Thinking in the Process of Language Development

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Abstract

To understand the relationship between language and thinking and to promote the modern science and technology revolution, the essential laws of the relationship between language and thinking were studied, and their true forms were objectively described. A scientific understanding of the relationship between thinking and language was explored. Taking children as the object of investigation, according to the law of psychological development, the different stages of language development from birth to growth were studied. Various factors affecting children's thinking and language development were analyzed, and the relationship between thinking development and language development was further discussed. The results showed that children had specific thinking at the stage before the age of one year, but had not yet produced a language with words. This indicated that language was not prior to thinking. The development of thinking was the foundation of language development. Therefore, the discussion of the relationship between thought and language makes the truth of things clear. Through the understanding of the way in which language and thinking interact, the normal development of language and thinking is promoted, thereby promoting the further development of human society.

Keywords

Language; thinking; child psychology.

1. Introduction

The relationship between language and thinking can be traced back to the ancient Greek era. Plato, the great philosopher, said: "I have an idea: when the mind is thinking, it is nothing more than talking in the heart. When making and answering, I think that thought is a discourse, and judgment is a statement. However, this is nothing more than saying to yourself silently, rather than speaking to others loudly." [1] It can be seen that Plato believes that human thinking is a silent language and there is a close relationship between the two. Aristotle pointed out that language is a sign of psychological experience, but the text is a sign of language expression. Human words are different and languages are different [2]. However, the psychological experience or experience expressed in words and language is inter-connected among people. The psychological experience and the things that are expressed by the voices often have good interoperability between the subjects. This also shows that Aristotle believes that language is the sign of thinking, and thinking is not equal to language. The relationship between language and thinking is a complicated issue. It can also be said to be an unsolved problem in history [3]. This is inextricably linked with various branches of linguistics. Researchers in these disciplines have different understandings and orientations on this issue, and there is no consensus. The Samuel-Wolf hypothesis is a signpost in the long road to exploring this issue, which marks a new starting point for the study of contemporary linguistics. Studies have shown that Chinese
scholars and experts have relatively few studies on the relationship between language and thinking and children's psychology, while foreign scholars have studied the above issues comprehensively, both from the perspective of linguistics and psychology [4]. A lot of research results have been achieved. Among them, the research results from the perspective of psycholinguistics and child psychology are the most fruitful. Many scholars have successfully conducted multidisciplinary and interdisciplinary research on the relationship between language and thinking at different levels. People's research on the relationship between language and thinking has increased on a multi-faceted level, but there has never been a unified understanding. Therefore, based on the theory of children's development of Vygotsky, combined with typical examples, the relationship between language and thinking is specifically studied.

2. State of the Art

Wu (2016) believes that Vygotsky's relationship between language and thinking has been around for more than 80 years. Due to the background of the times and the experimental conditions, there are still some local deficiencies and problems in the theory of Vygotsky [5]. However, this does not affect the scientific nature of its theory as a whole and its far-reaching guiding significance and reference value for future generations. As American psychologist A Kozulin said, Vygoki's theory of language and thinking relationship is still an inexhaustible source of theory for current researchers and educational practitioners. Many different studies often draw the same conclusions as Vygotsky. Therefore, it is no exaggeration to say that Vygotsky's view of language thinking will continue to be the source of inspiration for psychological research in the coming decades.

Hu J Shan (2016) believes that language has a fixed effect on thinking. Saussure compares thinking to "a floating kingdom." It is an invisible thing before the mind is expressed. When language expresses thinking, thinking becomes meaningful information. Language has a reappearance to thinking. People often tell their own thoughts, and often think about whether their thoughts are in line with the objective situation, which requires language. Language has a transformative effect on thinking. While fixing and reappearing, language also transforms thinking into logical and hierarchical [6].

The mastery of actual information and concepts in speech is emphasized. In the kindergarten stage, thinking and language are in a period of mutual convergence and rapid development. The development of language also stimulates the development of its thinking, and the key to the combination of language and thinking is the concept of words. Vygotsky believes that the formation of concepts begins in the early childhood, and the formation of concepts is a complex process that requires the participation of basic intellectual functions. The concept is developed from a compound thinking through a false concept to an adult concept. At the beginning, the meaning of the words perceived by children in the composite stage involves the same problem that adults think [7]. The meaning of the adult is more certain, and the child is an undifferentiated whole. What adults need to do is to help the child to divide the original concept of accumulation. Krashen’s hypothesis of language input also embodies Vygotsky's view. He believes that language can only be produced when language learners are exposed to language input that is slightly above his current level of language skills, and he can focus on meaning or understanding of the information rather than the form.

3. Methodology

3.1. Vygotsky's Theory

Vygotsky was a famous psychologist at the beginning of the 20th century. He is the founder of the School of Social and Cultural History and a great child educator [8]. Despite his early death,
his works have been enriched, and his research on language and thinking, children's development and education still has a great impact on our education and teaching. Vygoski believes that the previous study of the relationship between language and thinking has been swaying between the "same theory" and "separation theory" of language and thinking, and it has never been able to jump out of this strange circle. "Unification theory" advocates the identity of language and thinking, and thinks that thinking is "language minus sound." This is a reflection of the motion part being suppressed. This claim makes the relationship between language and thinking lose its meaning. If language and thinking are the same thing, there is no relationship between the two. The "separation theory" is the opposite. There is absolute separation and sever between language and thinking. Language is the outward expression of thinking and the outer shell of thinking, just like the clothes on the hangers. This view analyzes language and thinking into two independent and essential elements. Any research on the internal relationship between language and thought is ruled out. The relationship between language and thinking can only be seen as a mechanical and external connection between two independent processes, which are studied separately in a mutually exclusive way.

Vygoski believes that the maturity of internal language does not mean that language and thinking can be completely equated. He suggested that thinking and language are just two overlapping circles. Only in overlapping parts, thinking and language occur at the same time, and produce "verbal thinking." Therefore, speech thinking does not include all forms of thinking or all forms of speech. There is a large piece of territory in mind that is not directly related to speech, such as the thinking expressed in the use of tools. Some linguistic forms are also difficult to attribute to intellectual activities, such as subconscious "sentimental" language caused by emotions. Therefore, Vygotsky proposed that thinking and language still retain partial independence after meeting. Its independence shows that "the convergence of thinking and language is not only in children but also in adults. It is also a phenomenon limited to a specific range. Nonverbal thinking and non-intellectual language do not participate in such rendezvous, they are only indirectly influenced by the process of language thinking.

In summary, the important fact revealed by Vygotsky's study of language thinking is that from the perspective of phylogeny, language and thinking have different genetic roots. From an individual point of view, the two are independent of each other and develop in parallel before a certain moment. After a certain moment, the development of the two has become complicated and has many processes of crossover and integration. Language and thinking are mutually influential, interdependent and restrictive. At the same time, they maintain their independence and present a dynamic evolutionary development, as shown in Figure 1.

**Figure 1.** The roots and dynamic development of language and thinking
3.2. Vygotsky’s Theory of Children’s Language and Thinking Development

Through research on the growth process of children, Vygotsky believes that “thinking and voiced language are not the same thing.” That is to say, in the process of the growth and development of children’s thinking, there is also a pre-language period. In the development stage of children's voice language, there is also a period of pre-thinking.

The baby's various early expressions, such as babbling, shouting, etc., have little to do with the development of sound and thinking. Children around the age of two begin to name things, and language can become a tool for thinking. Therefore, children's vocabulary has begun to increase rapidly. From the perspective of the development of thinking, children's cognition begins with a meaningful whole, and then gradually masters the unit of meaning of the split. From the perspective of language development, the process is the opposite, which is from the split to the whole. Words are first learned, and then two or three words are connected together to form simple and complex sentences. Therefore, in the development of language, the voice form and thinking of speech are based on word sentences, which are developed in opposite directions. At the same time, they are connected.

![Logical diagram of language and thinking]

The above examples show that the development of children's language and thinking is different. Sometimes, in writing, people choose synonyms, which shows that thinking does not depend on language, but on dominating language. This is the choice of synonyms in thinking. It is often said that to speak a good foreign language, learners must first think in a foreign language. Learners do not need to express their own thoughts in their mother tongue and then translate them into foreign languages. They must connect their thinking with the expression of foreign languages. This means that thinking exists independently of the language.

4. Results and Discussion

4.1. Thinking before Language

Human evolution has gone through a long period of time. In the struggle against nature, through hard work, the brain has become more developed and thinking activities have gradually formed. At the very beginning, primitive people's reaction to the living environment and the expressions, movements, and eyes that communicate with each other are all forms of primary thinking. Later, humans began to work, and primitive people discovered that there are many complex emotions and labour tools that cannot be expressed clearly with expressions, movements, and so on. At this time, human language appeared. Therefore, thinking is produced before language.
4.2. Relationship between Thinking and Language

The development of cognitive ability precedes the development of language ability. Therefore, it is inevitable that the development of thinking ability affects the development of language ability, and thinking determines language. This process is irreversible. In cognitive activities, thinking takes the decision. When humans need to express the results of thinking activities, people will use the language tool to put the information they want to communicate into the outer layer of the language. Language is an auxiliary tool for the thinking process. Especially in abstract thinking, it plays an important role. It can make thinking precise and clear, but the initiative of thinking itself plays a leading role. Therefore, thinking determines the language. Based on the relationship between thinking and language development, it is concluded that thinking is the basis of language development. Thinking is first produced and then the language is produced. Thinking determines the language. The higher a person's level of thinking, the stronger his language ability.

4.3. Enlightenment to Children's Education

Correct treatment of the intrinsic relationship between language and thought can inspire people to think about education from different perspectives. Especially in children's education, the cultivation of thinking style and the ability of language expression have important implications. In the process of children's education, parents and teachers must clarify the relationship between language development and thinking development. The cultivation of children's language ability and the cultivation of their thinking style should be treated differently. In the long run, teachers should not deliberately urge children to develop their language skills, but should pay attention to children's living environment. For example, children's activities are enriched, and children can get a variety of sensory stimuli. The imagination of children is developed, which lays the foundation for the development of thinking, especially creative thinking.

First, the cultivation of thinking ability in children's language development. The sensitive period of children's language development is also an important period of thinking development, so parents and teachers should cultivate children's thinking ability in the development of children's language. Parents should respect "children's words and phrases." "Children's words" is an objective description of children's real life. This is a direct expression of children's inner life experience. It is a child's perspective, understanding and thinking about life. Although some children's words are not accurate enough, adults must correctly treat children's language, respect "children's words and phrases", and cannot negate and attack children's language. The childhood stage is a sensitive period of language development. Parents and teachers should not only be good at listening, but also actively encourage children to express in words and provide more opportunities for children to exercise their language expression. This is also to support the development of their thinking ability. Adults and children should communicate on an equal footing. Parents and teachers need to communicate effectively with children, which can stimulate children's desire for language expression. The warm and pleasant conversation between adults and children not only reflects the respect of adults for children, but also equalizes each other’s status, and enriches children's language experience and promotes the development of children's brain thinking. Adults must create a good language environment for children and create good conditions for children's language learning.

Language has a very important influence and effect on the development of thinking. Therefore, parents and teachers must provide children with good language activities in a positive attitude, flexibly help children to accumulate skills in language use, develop children's language skills, and promote children's thinking ability.

Second, the improvement of language ability in the development of children's thinking. Children's thinking development is divided into three levels: intuitive action thinking, concrete
image thinking and abstract logical thinking. The level of development of children’s thinking determines children's language ability. Therefore, in the process of children’s education, language ability and level of thinking should not be equated, and language skills should not be confused with the level of thinking. Parents and teachers should pay attention to the characteristics of children's thinking. According to the characteristics of children’s different levels of thinking, parents and teachers should create rich life content for children, understand the world in practice, observe life, and cultivate children’s language ability in the process of children’s thinking. Children’s life is rich in content and their thinking is broadened. Parents and teachers should encourage children to get hands-on, brains, and mouths to gain a wealth of knowledge and develop language, and improve their language skills. Various environments and media are utilized. This can stimulate children’s thinking and language skills. Parents and teachers can make full use of children's favourite things. In the process of playing, children can understand things. Parents and teachers should ask inspiring questions to children. In this way, the child’s way of thinking is exercised. Adults should encourage children to bravely express their ideas.

Thinking plays a decisive role in the development of language. Therefore, to improve children's language skills, children’s good thinking skills are first cultivated. In the development of children’s thinking, adults need to improve children's intuitive thinking ability, help children to master rich emotional experience, pay attention to the development of children’s image thinking, and guide children to sublimate emotional experience into rational experience. In this way, children develop their abstract thinking skills. When children form good habits of thinking, their language skills are also improved.

5. Conclusion

In the cognitive structure of human beings, any specific feature of natural language is independent. On the one hand, language relies on thinking; on the other hand, language acts to a certain extent on thinking. From the perspective of child psychology, the relationship between language and thinking is discussed and studied. The study found that children had specific thinking at the age of one year ago, but there was no language with words. This shows that language is not prior to thinking. The development of thinking is the foundation of language development. Through the exploration of the relationship between thinking and language, the truth of things is kept clear. Through the understanding of the interaction between language and thinking, the normal development of language and thinking is improved, thus promoting the further development of human society.

References

