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研究論文

# On the mechanism of the genesis of representation in L. S. Vygotsky's psychological theory

#### Kazuo NAKAMURA\*

要約:表象によって、人間は現実世界から離れ、現実とは独立した精神的世界を手に入れることができる。人間を他の動物と最も本質的に区別するものが精神世界であるならば、表象の発生の問題は、子どもの発達心理学において最重要な課題である。本論文では、ヴィゴーツキーの発達理論において、表象発生のメカニズムがどのように考えられているのかについて考察をする。表象発生のメカニズムについて、ヴィゴーツキー自身は明示的な回答を与えているわけではない。しかし、子どもの発達について述べられたヴィゴーツキーの論述を分析していくと、そこに、表象発生のメカニズムに関するヴィゴーツキーの考えが垣間見えてくる。本論文では、特に、モノグラフ『児童(発達)心理学の諸問題』の中の乳児期の記述を分析している。その分析からは、ヴィゴーツキーが表象発生の基本原因を、乳児と大人の間に成立する「本源的われわれ (Ur-wir)」意識に見ているのではないか、ということが明らかにされた。乳児と大人のこの心理的一体性を媒介にして初めて、乳児は離れたところにある対象を、その距離を克服して、自分に関与させることができるようになるからである。乳児と大人の社会的な関係に表象発生の契機を見るこのような考え方は、ワロンに近く、感覚運動的行為の内面化から表象の発生を捉えるピアジェとは異なっている。

Key words: genesis of representation, social situation of development, basic neo-formation, Ur-wir, psychological set (attitude)

#### 1. Focus of this paper

The function of perception is seeing, hearing or smelling the features of the object (inclusive of the phenomenon) that exists here and now. Therefore, perception cannot come free from the real world that exists at hand now. Perception binds its own subject to the actual present world.

On the other hand, with the help of representation, we can reproduce in the mind the object that doesn't exist here and now. Thanks to representation, we are able to separate the object from the real world both temporally and spatially, and beside that hold it in the mind. The most essential function of representation is to replace the actual object by something else mental. In such a replacement relation, the replacing one (representation = signifier) is separated from the replaced one (the actual world = signified) and comes to be able to behave independently. That is, we can become the possessors of the mental world independent of the real one by representation. Representation liberates its own subject from the perceptual bondage of the real world. Therefore, we can say that representation is the most important factor for human mental development.

Well, how does the representation bringing about the mental world that most definitely distinguishes human beings from other animals germinate in the process of child development? It must be important for every psychological theory to elucidate this problem. In this paper, we try to research what L. S. Vygotsky thinks about the mechanism of the genesis of representation in child development. As everyone knows, J. Piaget and H. Wallon, who are coevals with Vygotsky, respectively have clearly expressed their own opinions about the mechanism of the genesis of representation in child development (we will describe their ideas in detail later). On the contrary, Vygotsky doesn't necessarily described the mechanism of the genesis of representation explicitly. Probably the reason will be based on the following circumstances.

In general, Vygotsky makes an issue of the function of representation in connection with conceptual thinking, when he deals with the problem of representation. In that case, the discussion about representation is focused on the shift to conceptual thinking from preconceptual, representative one. In that context, the problem of the genesis of representation does

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(2008年9月1日 受付) 2009年1月16日 受理) not necessarily become a central issue because preconceptual, representative thinking postulates the representation already generated, and to some extent developed.

Therefore, it is a completely new attempt in itself for us to explore the mechanism of the genesis of representation within Vygotsky's psychological theory. As noted above, Vygotsky himself has not necessarily described the mechanism of the genesis of representation explicitly. However, as we will make clear later, we are able to find out Vygotsky's own idea about the mechanism of the genesis of representation by analyzing the infant's developmental features described by him. We will examine his idea concerning this problem, paying attention especially to the descriptions in his monograph entitled "Problems of child (developmental) psychology" written from 1932 to 1934.

#### 2. The social situation of development

Because our challenge is to elucidate the mechanism of the genesis of representation, it is necessary to bring into focus the analysis of infancy as to the child's age level first of all. But, there is an important concept that we must understand before analyzing the features of infancy described by Vygotsky. It is the concept of "social situation of development." According to Vygotsky, at the beginning of each age level, there develops completely original, exclusive, single and unique relation specific to the given age level between the child and the social reality that surrounds him. Vygotsky calls this relation the social situation of development. The social situation of development specific to each age level determines strictly regularly the child's whole life style, or his existence style. That is,

The social situation of development represents the initial moment for all dynamic changes that occur in development during the given period. It determines wholly and completely the forms and the path along which the child will acquire ever newer personality characteristics by drawing them from the social reality as the basic source of development, the path along which the social becomes the individual (Vygotsky, 1984, p.258: in the English version, 1998, p.198).

Therefore, the first problem that we must answer in considering the mechanism of the genesis of representation is to clarify the social situation of development specific to infancy where the genesis of representation is prepared.

# Two basic factors which provide for the social situation of development specific to infancy

Opposing the opinion that an infant is asocial, Vygotsky emphasizes that we can find completely specific and most unique sociability in the infant. According to Vygotsky, such a unique sociability of the infant, as a matter of course, comes from the single and unique social situation of development specific to infancy. Vygotsky points out two important, basic factors that provide for such a single and unique social situation of development specific to infancy.

The first factor represents that the whole life of the infant is organized through the relation to another person, that is, through the participation of adults because of his own features described as his complete biological helplessness. For example, even the most elementary and basic vital needs of the infant can be satisfied only by the help of the adults who take care of him. Feeding, changing position or even simple turning over is done only with cooperation of adults. Thus, the relation of the infant to reality is from the very beginning a social one. Therefore, in this sense, the infant might be called a maximally social being. Vygotsky describes this as follows:

No matter what happens to the infant, he is always in a situation connected with the adults who take care of him. Because of this, a completely unique form of social relations is generated between the child and the adults around him. Specifically owing to the immaturity of biological functions, all of what will later be in the sphere of individual adaptation of the child and will be done by him independently now can be done only through others, only in a situation of cooperation. Thus, the first contact of the child with reality (even in carrying out the most elementary biological functions) is wholly and completely socially mediated (Vygotsky, 1984, p.281: in the English version, 1998, p.215).

Thus, the infant's relations to reality are from the very beginning always mediated by others, and are always refracted through a prism of relations with another person.

The second factor that characterizes the social situation of development specific to infancy represents that the infant still is devoid of the basic means of social communication in the form of human speech, with all maximum dependence on adults, with all complete interweaving and intertwining of his whole behavior into the social. By the whole organization of life, the infant is forced to maximum communication with adults. However, this communication is nonverbal, often silent communication of a completely unique type.

Here appears the fundamental contradiction between infant's maximum sociability and minimum capability for communication. According to Vygotsky, the basis for all infant development is laid down in this contradiction. Thus, the first factor and the second one, in combination with each other, bring about the uniqueness of the social situation of development specific to infancy. Therefore, we also have to understand the mechanism of the genesis of representation in this unique context.

#### 4. The basic neo-formation of infancy

According to Vygotsky, after we have clarified the social situation of development that is formed at the beginning of any age level and which is determined by relations between the child and his social environment, we must immediately elucidate how "the basic neo-formation" peculiar to the given age level inevitably arises and develops from the life of the child in this social situation.

According to Vygotsky, at each given age level, there develops a basic, central neo-formation leading the whole process of development and characterizing the reconstruction of the whole personality of the child on a new basis. All the other partial neo-formations related to separate aspects of the child's personality and the processes of development connected with the neo-formations of preceding age levels are arranged and grouped around the basic or central neo-formation of the given age level. Vygotsky calls the process of development directly connected with the basic neo-formation "central lines of development" at the given age level, and calls all other partial processes and changes "accessory lines of development." Therefore, it is indispensable for us to grasp the central lines of development specific to the given age level in order that we can clarify the basic neo-formation of each age level.

Well, what is the basic neo-formation peculiar to infancy? Let's look into the basic neo-formation of infancy. Vygotsky points out two important facts that are directly associated with the basic neo-formation peculiar to infancy (Vygotsky, 1984, p.303: in the English version, 1998, p.231). That is,

- (1) the progressive increase in energy resources of the infant as a necessary prerequisite of all higher lines of development
- (2) the dynamic change of the initial relation to the world in the course of infant development, in other words, the change of the direction in which the activeness of the infant is realized through another person

Vygotsky quotes the study of P. P. Blonsky as a concrete example of these two facts in the course of infant development. Blonsky distinguishes three basic stages in infant development from the point of view of the interrelation of his energy resources and his communication with the adults around. The three basic stages are as follows (Ibid., pp.303-304; in the English version, pp.231-232):

(1) At the stage of absolute toothless childhood, the child is a weak being lying in bed and requiring care. On the part of the child, the social stimulus is mainly a cry as a reaction to pain, hunger, and discomfort. The interrelation between him and the environment is based mainly on food. At this time the child is connected most of all with the mother who feeds and cares for him

- (2) At the stage when incisors come through, the child can move in his crib. The interrelation between him and the environment becomes extremely more complex. On the one hand, the child endeavors to use the power of adults for changing position and getting the objects he wants. On the other hand, the child begins to understand the behavior of adults, and his elementary psychological communication with them is established.
- (3) In the second year of life, the child is equal to the adult in a room in the situation where little movement is required, and an elementary, simple relation of cooperation is established between them.

Based on this knowledge, Vygotsky characterizes the social situation of development that brings about the basic neo-formation of infancy as follows:

In the course of development, the infant's activeness increases, his fund of energy gets larger, his movements are improved, his hands and feet grow stronger, and new, younger and higher sections of the brain mature, and new forms of behavior and new forms of communication with surrounding people develop. Because of all of this, on the one hand, the circle of the infant's relations to reality is extended and, consequently, his making use of the way through adults becomes broader and more varied, but on the other hand, there expands more and more the fundamental contradiction between the increased complexity and variety of social relation of the infant and the impossibility of direct verbal communication (Ibid., p.304; in the English version, p.232).

This fundamental contradiction represents the essence of the social situation of development specific to infancy. The basis for all infant development is laid down in this fundamental contradiction. Therefore, we are able to determine the basic neo-formation peculiar to infancy, if we take into account the basic direction to which the whole infant's development proceeds. What is the basic neo-formation peculiar to infancy? Now, we would like to show the answer which Vygotsky provides for us. According to him, the basic neo-formation specific to infancy is what should be called "Ur-wir." This German word denotes the psychological commonality of the infant and his mother. Although it becomes long cite, we would like to quote Vygotsky's description about "Ur-wir" including the previous and next context because it is the most essential part.

The neo-formation can be determined if we take into account the basic direction to which the whole infant's development proceeds. As we have seen, this direction consists in that only one path to the external world is open to the child's activity, that is, the path lying through another person. Therefore, it is completely natural to expect that in the experience of the infant, his joint activity

with another person in a concrete situation must be differentiated, picked out and formed first of all. It is natural to expect that the infant has not yet separated himself from his mother in his consciousness. ... (snip) ...his psychological emancipation from the mother, separating himself from initial community with her, usually occurs outside the limits of infancy, only in early childhood. Therefore, the basic neo-formation of infancy may be designated best of all by the term introduced in German literature as a name for the initially appearing psychological commonality, initial community of the infant and his mother which serves as the starting point for further development of consciousness. What arises in the consciousness of the infant initially may be termed most precisely as "Ur-wir." This initial consciousness of psychological commonality which precedes the development of consciousness of his own personality (that is, consciousness of a differentiated and separated "I" ) is a consciousness of "we," but not the dynamic, complex consciousness of "we" that appears at the older age level and already includes the "I" (Ibid., p.305; in the English version, pp.232-233: highlighting by quoter).

# The infant's consciousness of "Ur-wir" and the genesis of representation

By referring to two important facts based on the studies of Wallon, S. Fajans and so on, Vygotsky confirms that the above-mentioned consciousness of "Ur-wir" is the dominant characteristic during the whole infancy. These two facts, especially the second fact, are very important in order that we can understand the mechanism of the genesis of representation in infant development. They are as follows (Vygotsky, 1984, pp.305-310: in the English version, 1998, pp.233-236):

(1) The infant cannot separate his own body from what surrounds it, and cannot become conscious of his own independent existence.

According to the study of Wallon, the infant at first doesn't separate even his body from the surrounding world of things. He becomes conscious of external objects earlier than he recognizes his own body. Initially the infant looks at the members of his own body as outside objects, and long before he becomes conscious of the body as his own, he unconsciously learns to coordinate the movement of his hands and eyes, or both hands. Thus, the infant who doesn't know his own body yet, of course, cannot have any kind of representation of himself.

However, in parallel with this first fact, here is the second fact.

(2) The infant's affective attraction to things depends on the possibility of experiencing the situation together with another person.

This second fact indicates that for the infant of this time, his social relations and his relations to external objects still blend together directly. For the infant, the social situation and the object situation are not separated yet. According to the study of Fajans, when the object moves away, affective attraction to this object is lost for the infant. For the infant, optical distance of objects is equal to mental distance and disappearance of the affective motive attracting him to the object.

However, in parallel with this point, the study of Fajans further finds out the following point. That is, even if the infant stopped reaching for the distant object - it means disappearance of the affective motive attracting him to the object ----, his lively affect for the object and his lively turning toward it resurge again so easily if an adult (his mother) moves very close to the object. The remarkable fact is that this resurgent, new attempt toward the object is directed not to the adult, but to the object itself. The approach of the adult to the object signifies a new hope for the infant. Thus, by intermediation of the adult, the intensity of the field around the object significantly is reinforced. The infant's relation to the external object transforms easily into his social relation with the adult. For the infant of this time, as already mentioned, the social relation with the adult (his mother) means the psychological commonality, the psychological community of him and his mother which we can call the consciousness of "Ur-

Thus, just under the condition of the consciousness of "Ur-wir," the infant for the first time may vitalize the affective motive to the object in the distance. Now, we could regard the consciousness of "Ur-wir" as a root cause which prepares the genesis of representation, because the very consciousness of "Ur-wir" makes it possible for the infant to assimilate the distant object into his psychological inside and deal with it in psychological plane. Based on the psychological commonality of the infant and the adult, the infant for the first time is able to bridge the distance between him and the object, and retain the psychological set (attitude) to the distant object.

#### 6. Conclusion

Piaget and Wallon respectively have clearly presented their own ideas on the mechanism of the genesis of representation in child development. Therefore, here, as a conclusion of this paper, we would like to consider briefly the position where Vygotsky's idea stands in relationship to the ideas of Piaget and Wallon.

#### (1) Comparison with Piaget

As everyone knows, according to Piaget, the origin of representation consists in deferred imitation. The very gesture of deferred imitation is a beginning of "signifier" differentiated from "signified." As a matter of course, signifier corresponds to the replacing one (in fact, representation). Thus, representation is generated as a result that the sensory-motor imitative act is internalized. Piaget describes this point as follows:

Above all, imitation foretokens representation. In other words,

imitation composes a kind of representation, though it appears not in the form of thought yet but in the form of various physical acts at the sensory-motor period (Piaget et Inhelder, 1966, in the Japanese version, 1969, p.58).

Of course, as the infant's imitative act results from the behavior of another person, Piaget also refers to the importance of the contact and emotional relationship between the infant and another person at the sensory-motor period. Nevertheless, he eventually thinks that the aspect of their communicative, emotional relations is dependent on and due to the sensory-motor development. Piaget thinks that the most essential factor developing deferred imitation is not the social relation between the infant and another person but the sensory-motor imitative act itself. That is, he regards the genesis of representation as an extension of the sensory-motor practical act working on the external world.

On the contrary, Vygotsky doesn't see the genesis of representation as an extension of sensory-motor adaptation. According to him, as we have already seen, the infant's consciousness of "Ur-wir" which prepares the genesis of representation consists in the inseparable, social relation between the infant and the adult. As the origin of representation, Piaget regards the sensory-motor act itself, but Vygotsky regards the social relation. This point seems to be the fundamental difference between Vygotsky and Piaget.

#### (2) Comparison with Wallon

As for a root cause generating representation, Wallon especially pays notice to the self-plasticizing (self-forming) act that works on human itself internally. It is just the postural activity (in other words, attitude) that is an indispensable prerequisite for the social relation between the infant and the adult. According to Wallon, the genesis of representation may be prepared by the infant's retaining a certain posture in the face of another person. That is, in nonverbal communication with another person, the genesis of representation may be prepared by the infant's tense body that retains a certain posture by keeping in his motion. Wallon describes as follows:

···it doesn't seem so wonder that the origin of thought consists in the function most tightly enclosing human inside itself, that is, the function retaining the attitude. Indeed, the first effort of subjective intuition and consciousness arose from the attitudes. That was impossible without the postural activity and its essentially plasticizing attribute (Wallon, 1949, in the Japanese version, 1965, p.59).

Both Vygotsky and Wallon regard the social relation between the infant and the adult as a precondition of the genesis of representation. That is the very point shared between them. However, Vygotsky pays attention to the infant's psychological set (attitude) to the distant object that is induced and formed on the basis of the infant's consciousness of "Ur-wir." That is, regarding the social relation between the infant and the adult as an indispensable postulate for the genesis of representation, Vygotsky nevertheless picks out anew the infant's relation to the object from the social context. In this respect, Vygotsky seems to come closer to Piaget.

On the contrary, Wallon pays attention to the postural activity that is formed as the infant's psychological set (attitude) directed to the adult. That is, Wallon consistently pays notice to the infant's attitude directed to another person in the interpersonal context in order to understand the genesis of representation. Hence, Wallon further carries forward the analysis of the interoceptive, proprioceptive senses and emotions which occur inside the postural activity. According to Wallon, a root cause of the genesis of representation should be sought in these internal senses and emotions.

Thus, the position of Vygotsky seems to be in the middle of Piaget and Wallon though it is closer to the latter relatively. Unlike with Piaget, Vygotsky emphasizes the social context as an indispensable factor of the genesis of representation, but in comparison with Wallon, he almost never pays attention to the interoceptive, proprioceptive senses and emotions that underlie the infant's psychological set (attitude) directed to another person. Therefore, we need have much to learn from Wallon if we hope to expand the idea of Vygotsky about the genesis of representation more richly from a standpoint of the social relation between the infant and the adult.

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# 付記

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いずれも原理的な問題に関わる本質的なコメントであり、ここに 記して感謝申し上げます。