Cognitive Development: A Social Process A Review of Vygotsky's Theory

Rina Kar (Dutta)

Assistant Professor, Dept. of Philosophy, Asutosh College, West Bengal India

Abstract

Cognitive development of an individual emerges from a social cultural concept. All our intellectual development including meaning, memory, attention, thinking, perception, consciousness evolves either from societal interaction which is inter-personal or from within the individual himself which is intra-personal. It is observed that social dimension is primary in Vygotsky's theory whereas individual dimension is derivative and secondary in nature. All higher mental functions are internalized in social relationship. Vygotsky's theory try to develop how these collective social interactions helps to develop a child's cognitive activity.

KEYWORDS: cognitive, function, social dimension, private

Introduction:

Lev Vygotsky has developed a socio-cultural approach in cognitive development because he believes that language is a social concept. He has developed a theory of socio-cultural approach in cognitive development. It is describing people's behaviour and mental processes which is shaped in by their social and cultural interactions. It is a theory which is used to describe awareness of circumstances surrounding individuals. According to him language is developed through interactions and the community plays a crucial role in this process. We cannot explain any language development of an individual without reference to any social or cultural context. According to him higher mental process of an individual has their origin in social matrix. Vygotsky's theory of language is based on constructive learning theory which assumes that acquiring language is the result of engaging oneself in social experiences. So in this situation community plays an important role in developing language. Vygotsky assumes that cognitive development of a child varies across cultures. Thus this socio cultural approaches emphasise the inter dependence of social and individual processes in the construction of knowledge. By adopting socio-cultural perspective he wants to highlight the role the society in cognitive development.

Learning as a social process

Vygotsky's socio-cultural theory of learning as a social process helps to develop the origination of human intelligence in society and culture. Vygotsky in his book Mind In Society (1978) wrote that "every function in the child's cultural development appears twice: first, on the social level and later on the individual level; first, between people (inter-psychological)and then inside the child (intra-psychological).This applies equally to voluntary attention, to logical memory and to the formation of concepts. All the higher functions originate as actual relationships between individuals."[1] So he believes that whatever we learn we have to go through the two levels. First interacting with others and second integrating them into the individual's mental structure. In explaining the first one, he accepts constructivism which holds that children learn and construct their own understanding and knowledge of the world through experiencing things and reflecting that experiences. According to Vygotsky

cognitive skill and patterns of thinking are not determined by any innate factors rather all our cognitive activities take shape within the socio-cultural environment. Learning language is the products of the activities that is practised in a social institution of culture where the child grown up. A child's family members, peer groups, history of the society, cultural matrix all are the determinant factors to develop a language. So experience is one of the crucial forces for promoting cognitive development.

Language is not only an expression of the acquiring knowledge of the child but it is essential for forming thoughts and determining personality. It is the fundamental correspondence between thought and speech as it provides resource to each other. The structure of language one uses must influenced by the environment where he belongs .According to Vygotsky from the beginning of our journey of life initially thoughts and language are two separate systems. But as the time goes on they become interdependent where thoughts become verbal and speech becomes representational. Child's monologue internalised to form inner speech. This internalisation of language is necessary according to him; otherwise cognitive development will not be possible. He is the first psychologist who speaks of the importance of private speech. He considers it as the transition point between social and inner speech. It is that momentum where language and thought unite to constitute verbal thinking. So the interaction between language and thought is necessary for understanding of intellectual development.

According to Vygotsky language as a tool for communicating with the world it play two crucial roles to cognitive development.

1) Language is the main means by which adults can transmit information to children.

2) Language itself also becomes a very powerful means for intellectual adaption.

In the process of the language development, according to him, one should go through the three forms. These three forms are Social Speech, Private Speech and Inner Speech. The first stage is social speech which develops at the age two. The child uses this speech for external communication. In this stage a child communicates with other people through language. Social interaction is an important part of language development because he learns from elder persons surrounded him. The second form is Private Speech which is directed to the self and serves an intellectual function which develops at the age of three; Private Speech is in contrast to Social Speech, as such speech always address to the self, not to others for communication. Vygotsky refers it as an internal speech and such speech develops at the age of three. It is the transition point of Social Speech and Inner Speech. It is that moment where language and thought merge for constituting and exhibiting verbal thinking. It allows a child to begin collaborative process of learning within self. Here child's communication is internalised and it becomes private speech of the self. This internalisation is an important factor for cognitive development. Finally at the age of seven it goes into the silent deeper state where its function is to regulate his self and known as Inner Speech. This is the third form of the cognitive development. Inner Speech is not an interior component of social speech rather it is a function in itself. As in this stage thought is connected with words it remains speech. In social speech thought is embodied in words but in inner speech the words embodied with meaning.

Vygotsky holds that language is an accelerator of thinking and understanding. He gives importance to private speech. According to him Private Speech plays an

important role to facilitate such cognitive process; it is a tool for children to plan their activities and strategies in the process of development. Private Speech not only helps in developing cognitive process but also to overcome obstacles, enhancing imagination, thinking and conscious awareness. As such speech is the product of an individual's interaction in social environment so children brought up in cognitively and linguistically stimulating environments can faster grasp and use the private speech. In contrast children brought up in environments of low verbal and social exchanges exhibit delays in private speech.

Zone of proximal development

According to Vygotsky potential cognitive development depends upon the Zone of Proximal Development (ZPD). ZPD is a new concept introduced by him to meet the two issues in educational psychology. a) The assessment of a child's intellectual abilities. b) The evaluation of the instructional practices. In respect to the first one, Vygotsky holds that the established techniques of testing child's intellectual abilities can only measure the actual level of development, but cannot measure the potential ability of a child. So to address this issue Vygotsky formulated the concept ZPD. It holds that there is a gap between a child's actual development levels which he acquires by solving problem independently and his potentiality of the cognitive development by solving problems under adult guidance or with the engagement with the more capable peer groups. According to him, ZPD helps in determine child's mental functions that are yet to develop. It claims that that the study of ZPD is also important because it is a dynamic function in which the transition from inter psychological to intra psychological functioning takes place.

ZPD is the area of exploration for which the child is cognitively prepared, but he requires assistance from adult and more experienced peer groups and social interaction to develop it fully. They provide the child in collaborating learning, helps in forming discourse, strategies to support their intellectual knowledge which is known as scaffolding. This helps to facilitate the intentional learning of the child. So ZPD is an important feature of learning which provides variety of internal development process that operates only when the child is interacting with the people or his peers in his social environment. Actually ZPD plays two different roles—a) instructions and b) intellectual development. Though instruction and development are not directly related with each other yet they can act as two processes that exist in the complex relationship of ZPD. He claims that as instruction helps us to raise entire functions which are in the stage of maturation it plays a crucial role in language development. Through social and language interactions, senior and more experienced members of the society assists to improve the skills, values, knowledge of the younger and less experienced members. According to Vygotsky, words are nothing but signals which refers to objects. When an object is referred merely by the children, it is primary signal. But when adults engage children in secondary signal then words refer to objects, ideas and meaning. The second signal system of the social world and the thought of the individual are linked by the inner speech. Through social and language interactions, senior and more experienced members of the society assists to improve the skills, values, knowledge of the younger and less experienced members. So there is a close connection between the development of the thought and the development of language.

Piaget and Vygotsky

Here we can refer the name of Piaget who also developed theories that addressed cogitative development and learning among children and adolescents. Piaget and Vygotsky are the two pillars in the field of development psychology. According to Piaget as children are active learner, they themselves can assimilate new information with the old one and develop languages. Vygotsky also takes the same path and gave importance on children's active participation in cognitive development process. Both are believed that as children develop language, they actively build a symbol system, which helps them to understand the world. But Vygotsky's constructive theory of language is different from Piaget's theory of language acquisition. They differ in the way in which they viewed how language and thought interact with each other. They disagree on the functional significance of private speech as well as in the course of development of private speech.

In the case of functional development of private speech Piaget holds that private speech represents an inability to take the perspective of another and therefore engage them always in relational and reciprocal communication. But Vygotsky holds that private speech always represents externalized thought. The function of the private speech is to communicate with the self for the purpose of self guidance and self direction. Vygotsky laid more emphasis on social factors contributing to cognitive development whereas Piaget underestimates it.

In the case of the course of development of language Vygotsky holds cognitive development stems from social interactions with the guided learning within the zone of proximal development during the time of co-constructing knowledge with the experienced persons. In contrast Piaget maintains that cognitive development stems largely from independent explorations in which children construct knowledge of their own.

According to Piaget language for its development always depends on thought i.e. thought comes before language. For Vygotsky in initial stage of life thoughts and language are two different systems but at the age of three languages merge with thoughts. As we see that Vygotsky emphasises more on language than of thoughts. At the same time he believes that cognitive development results from an internalisation of language.

In the development process of language, according to Vygotsky, adults and peer groups play an important role. He believes that role of adults is more crucial because all the social cultural tools of intellectual adaption are transmitted to the children by them whereas Piaget emphasises the importance of peers because he believes that peer interactions are much more powerful than any other options.

Reviewing the theory

Vygotsky's theory is not free from discussion. His theory emphasises the role of the social world and the collective effort of the society, but ignores the role of the individual. He holds that knowledge of an individual is always dependent on the situation where the individual find themselves. Lui and Matthews 2005 p 392

Chaiklin questioned on Vygotsky's ZPD theory. According to him it is clear that ZPD plays a crucial role in development of language, but the process of development and

how this development actually occurs is not addressed by him. At the same time he addressed that from the theory it is not understood how the external world can bridge across to the external minds.

Vygotsky's theory leads us to socio-epistemic relativism where the cognitive development can be explained relatively only through specific context, society, culture or individual. A rationalist can explain such theory without referring the socio cultural back drop.

To answer the first criticism it can be said that Vygotsky does not ignore the role of individual; rather he develops his theory on dialectical interaction and functional unification. According to him, though individual mastery and development of language depends on social interaction yet the individual can go beyond such phenomena and can generate new thoughts.

Let us discuss with the second criticism. In Vygotsky's theory we find the notion of collective subjectivity which can bridge the connection between the collective and individual consciousness. Actually the social external world is not static and it is not sufficient for developing a language. It is to be noted here that 'social external world' must not be viewed as a mere sum total of the individuals. The reason is when an individual belongs to a society he belongs to a social group and each individual share their unique views. These unique ideas are interchanged between them which help to formulate new ideas. So the objection against Vygotsky does not sustain.

On the other hand, the assimilation of the values, culture and practises is possible when the collaboration with the other people having different background, values, culture is permissible in society. As an educational psychologist Vygotsky holds that in school education we find three elements the environment, students and the teachers are required for the active development of the language among students.

Conclusion

We can thus conclude that Vygotsky's theory can provides us a new perspective to conceptualise the relation between human learning and development. In his theory 'social external world' and the 'individual being' is closely related to each other as well as functionally unified. The change and development in one is always influence the other and thus it provides a valid explanation for both social and individual change.

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