CHAPTER-IV

The Vygotskyan Perspective of the Development of Higher Psychological Functions

This chapter briefly discusses Vygotsky's views on the development of the processes of thought and language in a community and in an individual, and also the implications of his views for language pedagogy.

Vygotsky sought to develop a Marxist theory of human intellectual functioning. He was the first modern psychologist to stress the social origins of language and thinking, and suggest the mechanisms by which a community's culture becomes a part of each individual member's personal make-up. Insisting at the same time that psychological functions are a product of the brain's activity, he became an early proponent of a unified psychological theory combining experimental cognitive psychology with neurology and physiology.

He argued that the mind has no tangible existence without the mediation of matter and the material world. The aspects of the mind and the material world which involve themselves in this process of mediation are the faculty of thinking and the phenomenon of language use respectively. The history of the evolution of the mind of man is the history of the evolution of the material environment in which he lives. The development of the mind of man is the process of his approximation to the various aspects of the environment.
Language, being the most dominant aspect of his environment, is the prime shaper of the mind of man. Language, a 'physical tool', is initially external to the mind of man. He internalizes it, through continuous acquaintance and trial and error, makes it his own, and then uses it like a tool that has become an extension of his own self. In the advanced stages, man uses this tool to modify aspects of his environment, the tool itself, and his own behaviour. Thus language is the tool used for thinking with; it is used for modifying other people's thinking, and also for changing and adding new dimensions to one's own; in the process, language itself gets modified.

For a child in a speech community, language takes the role of a shaper of concepts and eventually turns into the instrument for the occurrence of new dimensions in his thinking: thought and language, the two become one inseparable entity for him. In their ontogenetic development, thought and speech (language) have different origins, and there is a pre-linguistic stage for the former and a pre-intellectual stage for the latter. At a certain stage in the speech development of the child, say around the age three to four, the lines of development of thought and speech, hitherto separate and independent of each other, meet and join to initiate a new form of behaviour, whereupon the child "makes the greatest discovery of his life," that "each thing has its name." Consequently, the child feels the need for words, and his thought
becomes verbal and speech rational. This great discovery of the child becomes possible only when a certain level of thought and speech development has been reached. In other words, speech cannot be "discovered" without thinking. Language acquisition, thus, is a process in which the gap between thought and language becomes progressively reduced.

In his book Mind in Society: The Development of Higher Psychological Processes, Vygotsky states that all rudimentary psychological functions (as those manifested in animals and infants at the pre-verbal stage) are of biological origin, whereas all higher forms of psychological activity (as manifested in adult humans, examples of which are perception, cognition, memory, re-cognition, etc.) are of sociocultural origin. They are historically developed and culturally transmitted. He asserts that human thought processes have developed and continue to develop, not by evolution alone but more importantly, by revolutions too. This stand is opposed to the Darwinian concept of the continuity of species. He (Vygotsky) argues that, for ages, bees have only built honey-combs and spiders have only woven webs, nothing else. Obviously, there is some biological programming in bees and spiders and other animals for such rudimentary 'psychological' functioning, and also obviously, there is some factor about human consciousness that enables humans to build further upon past experience -- something that
makes cumulative wisdom possible. According to Vygotsky, this factor is the ability for the symbolic representation of experience -- the ability to use a sign or a symbol in order to mentally represent something which has no inherent relationship with the sign or symbol used.

Consciousness is what gives a tangible existence to the mind. It is the matrix from which mental functions such as attention, perception, cognition, re-cognition and memory are triggered. In Vygotsky's view, there is a qualitative difference between animal and human consciousness -- no evolutionary continuity from the one to the other. According to him, somewhere down the evolutionary line, there has been a "qualitative leap" from animal to human consciousness, from tool-use (which some higher animals do possess) to sign use (which certainly none other than man possesses).

The purposive behaviour of animals is independent of any sign-using activity; their elementary psychological functions, their memory and their perception are restricted to and dependent on whatever is immediately present in space and time. Man, on the other hand, can mentally represent, using signs, objects and experiences which are distant or removed from him in space and time. Each sign is like a monument, lest one should forget something that one has perceived and cognized. The sign (or the monument) later helps re-cognition and memory. Consciousness
gets structured along entirely new lines with the principle of sign-use in operation; it makes cumulative wisdom possible. The human race has been building monument upon monument since the discovery of sign-use, and has been making progress at increasingly rapid rates. All the monuments built by earlier generations are available for later generations to step on and proceed further. Thus progress becomes faster for subsequent generations. This has not been possible to any other species of beings and hence Vygotsky's claim that there is a qualitative difference between animal and human consciousness.

Observations of infants have shown that they manifest practical intelligence which operates independently of sign-use (speech in this case). In this connection Vygotsky states that although practical intelligence and sign-use can operate independently of each other in young children, "the dialectical unity of these systems in the human adult is the very essence of complex human behaviour." In his view "the most significant moment in the course of intellectual development", in the case of the individual human being as well as the human race as a species, is the moment when these two systems "converge". He asserts that as soon as sign-use is incorporated into any action, the action becomes transformed and organized along entirely new lines.

Every elementary form of behaviour presupposes a direct reaction to the task set before the organism (the S----R
formula). But the structure of sign operations requires an intermediate link between the stimulus and the response. This intermediate link is a second order stimulus (sign) that is drawn into the operation where it fulfils a special function; it creates a new relation between S and R. Consequently, the simple stimulus-response process is replaced by a complex, mediated act, which can be represented as $S \rightarrow \rightarrow \rightarrow \rightarrow R$. In this new process the direct impulse to react is inhibited, and an auxiliary stimulus that facilitates the completion of the operation by indirect means is incorporated. This type of organization is basic to all higher psychological processes.

All animal activity is governed by a direct S----R bond. However, in the case of human activities, there is no direct link between the stimulus and the response. The response is always a mediated one -- mediated by sign-use. Human beings, unlike animals, form mental representations, transcending space and time, and modify their responses wilfully. The use of signs leads humans to a specific structure of behaviour that breaks away from biological development and creates new forms of a culturally-based psychological process.

Language is the most powerful of the sign-systems developed by humans. Each word in a human language is a monument that is used as a reminder in that it is a sign or a symbol for mentally
representing some object or experience. Each language, thus, is a vast set of 'monuments' or signs, accumulated over a long period of time; it is a product of history. Just as each 'monument' leads the way on to the next and the next, and newer and newer forms of representation, each new word in a language adds a new dimension to human consciousness, and leads the way on to newer and newer thought-relationships and combinations and newer dimensions of thinking. Each language represents the user community's consciousness, or the structuring of the community's perception of reality, its world-view. It is historically developed and culturally transmitted, and its structuring or the structuring it represents is unique.

The substance of a language is its native-speaker community's consciousness, and the code it employs is the tangible manifestation of its symbolic representation. Thus the language spoken by a community reflects the socio-cultural history of the community as it embodies the complete set of 'monuments' or signs created by the community over a period of endless years. This being so, learning the use of a language, is a matter of acquiring a particular structuring of one's consciousness, acquiring a world-view which is the unique heritage of its native speaker community.

To sum up, language is a sign system developed and used by humans. It is a higher psychological function, not biologically
given, but historically developed and culturally transmitted. Individuals have to acquire it from the community. This being the case, it goes without saying that adequate exposure and sufficient experience are necessary conditions for acquisition of language use to happen. However, if something has to be acquired through exposure and experience, it presupposes the availability of authentic models one can look up to and imitate. Therefore it may be safely concluded that authentic models and imitation are inherent parts of the language acquisition process, be it the first language or subsequent languages.

In a natural setting, exposure is rich and models of native use available in plenty, and so the language is internalized and acquired spontaneously with little apparent effort. But in the case of learning a second language in an artificial setting like a classroom, exposure is scanty and models few or none, and so learning is laborious and more often than not inadequate. Therefore, while planning a second language programme, it is of crucial importance to choose the right and relevant models, decide the nature of the linguistic stimuli to be deliberately provided in the classroom, and to monitor the processes of imitation, involvement, interaction, acquisition and consolidation. These processes cannot be assumed to happen automatically in second language learning situations. Unless these are deliberately provided for and constantly monitored,
there cannot be any guarantee that the second language learning process will even be initiated. It is not enough to have pieces from native speaker discourse compiled for an ESL reading programme; equally important would be the planning of the right kind of activities for the ESL classroom, based on the passages prescribed for intensive reading and study--activities intentionally designed for initiating in the learner the processes of imitation, involvement, interaction, acquisition and consolidation.