Demystifying the Concept of Sociocultural Theory

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ABSTRACT

Sociocultural theory as a branch of psychology has been under much controversy and hot debate. Applied linguist researchers and practitioners also have tried to interpret and apply this new theory and its various aspects in the context of their papers and classrooms. Looking at different sides of the sociocultural theory and following a descriptive way, the present report aims to shed more light on the relations this theory can have with language learning and specifically second language learning theories and technical terms.

KEY WORDS: Sociocultural theory, Mediation, Regulation, cultural development, Activity Theory, Dialogic Interactions

INTRODUCTION

The Sociocultural Theory is associated with the work of Vygotsky, whose goal was to overcome what at the time he characterized as a "crisis in psychology." This crisis arose because of the diversity of perspectives and objects of study, all of which were grouped under the general rubric of psychology. At that time, various approaches to the study of psychological processes were grouped into two broad categories: one followed a natural science approach to research and sought out causes of psychological processes; the second followed the humanistic tradition and emphasized the description and understanding of mental activity. The causal natural science branch of psychology focused its research on the study of elementary, or biologically endowed, mental processes, that is, those processes that humans shared with other species, especially primates. These processes were largely automatic and included involuntary memory and attention, and reflex reactions to external stimuli. The descriptive branch focused its concern on what Vygotsky called higher (mental) processes such as problem-solving, voluntary memory and attention, rational thought, planning, and meaning making activity (Wertsch, 1985).

SOCIOCULTURAL THEORY OF LEARNING

Vygotsky's sociocultural perspective suggests that learning is a process of appropriating 'tools for thinking', that are made available by social agents who initially act as interpreters and guides in the individual's cultural apprenticeship (Rogoff 1990). It is not just that the child learns from others in social contexts and during social exchange, but rather that the actual means of social interaction (language, gesture) are appropriated by the individual (internalized and transformed) to form the intramental tools for thinking, problem-solving, remembering, and so on (Wertsch, 1985).

Vygotsky's explanation of the relationship between language and thought provides a compelling illustration of the process of appropriation. As Wertsch (1985) notes, the title of Vygotsky's book, Thought and Language, is more accurately rendered in the active voice as 'Speaking and Thinking', which captures the notion that speaking and thinking are ways of acting on the material and social world. In Vygotsky's analysis, the changing functional relationship between speaking and thinking is the most compelling example of the general process of development in which social tools (initially serving social functions) are appropriated and transformed into individual tools of thinking and problem solving. The movement from the social plane of functioning to the individual and internal plane of functioning, however, requires active engagement by children in social interaction with peers and supportive adults. In social interaction, the child uses speech and gesture to regulate joint attention, to identify and label objects, to classify, to elaborate experiences, and to offer explanations. It is the socially situated use of language that enables the child at a later time to recapture, reflect on, and transform experience. Levina expressed this idea succinctly when she wrote, 'Vygotsky said that speech does not include within itself the magical power to create intellectual functioning. It acquires this capacity only through being used in its instrumental capacity' (Lantolf, 2000). The opportunity to use speech as a means of making sense of experiences with other participants is a crucial step, therefore, towards independent intellectual functioning.

Vygotsky distinguished between two lines of development - the natural line of development and the cultural line of development. This duality is similar to a series of other concepts that he explored-everyday concepts and scientific concepts; rudimentary mental functions and higher mental function. These dualities were proposed and examined by Vygotsky to demonstrate that progress in thinking involved the transformation and interpenetration of more natural, spontaneous and elementary processes, by the cultural, abstract, organized and mediated processes. In describing the growth of spontaneous and scientific concepts, for example, Vygotsky wrote that "Scientific concepts grow downward through spontaneous concepts; spontaneous concepts grow upward through scientific concepts "(Vygotsky, 1986, p.194). The elements proposed in the dualities are seen by Vygotsky as meshing together, as intertwining to form a single thread of development. The more natural and elementary processes are viewed as providing the necessary but not sufficient conditions for progress toward more powerful thinking tools. It is culture that has the crucial role in driving development forward. Vygotsky expressed this view in the following way:

An organism internally prepared, absolutely requires the determining influence of the environment in order to enable it to accomplish that development... The organic maturation plays the part of a condition rather than a motive power of the process of cultural development (Vygotsky 1986)

SOCIOCULTURAL THEORY AND MEDIATION

The central concept for Vygotsky and SCT is the mediation of human behavior (i.e. activity, labor, what we do, and our work in the classroom) with tools and sign systems -- most importantly language. Vygotsky saw tools and language as the evolving products of the forward march of human history and its cultural development. We use these historically developed cultural artifacts, tools and language, to mediate relationships with ourselves, others, objects, and the world. The Vygotskian perspective makes human communication through the use of the mediation of language the central object of analysis rather than language as a system, like a grammar, abstracted from use. Vygotsky saw that external social speech was internalized through mediation (Vygotsky, 1986). In this way Vygotsky and SCT link society to mind through mediation. Language as a tool of the mind bridges the individual understanding of our selves and particular contexts and situations within the world.

MEDIATION BY SYMBOLIC ARTIFACTS

Vygotsky (1986) reasoned that humans also have the capacity to use symbols as tools not to control the physical environment but to mediate their own psychological activity. He proposed that while physical tools are outwardly directed, symbolic tools are inwardly or cognitively directed. Just as physical tools serve as auxiliary means to enhance the ability to control and change the physical world, symbolic tools serve as an auxiliary means to control and reorganize our biologically endowed psychological processes. This control is voluntary and intentional and allows humans, unlike other species, to inhibit and delay the functioning of automatic biological processes. Rather than reacting automatically and non-thoughtfully to stimuli, which could result in inappropriate and even dangerous responses, we are able to consider possible actions on an ideal plane before realizing them on the objective plane. Planning itself entails memory of previous actions, attention to relevant aspects of the situation, rational thinking, and projected outcomes. All of this, according to Vygotsky, constitutes human consciousness.

Language is the most pervasive and powerful cultural artifact that humans possess to mediate their connection to the world, to each other, and to themselves. Humans also use other cultural artifacts to mediate their mental and social activity, including numbers, graphs, charts, art, music, and the like to free themselves from the circumstances of their immediate environment and enables us to talk and think about entities and events that are displaced in both time and space, including those events and entities that do not yet exist in the real world.

MEDIATION THROUGH A SECOND LANGUAGE

To what extent are we able to use L2s to mediate our mental activity? The primary way in which we use language to regulate our mental functioning is through *private speech*. When we communicate socially, we appropriate the patterns and meanings of this speech and utilize it inwardly to mediate our mental activity, a phenomenon called private speech. Considerable research has been carried out on the development of private speech among children learning their first language (Wretch, 1985). L2 researchers) have also begun to investigate the cognitive function of private speech in the case of L2 users.

Among the features of private speech are its abbreviation and the meaning that it imparts. Vygotsky suggested that private speech, as is the case of social speech between people who have a great deal of shared knowledge, need not be fully syntactic in its form.   Thus, close friends might produce a dialogue such as the following: A: "Eat yet?" B: "No, you?" where it isn't necessary to use the full version of the question and response: "Did you eat yet?" or "Have you eaten?" "No, have/did you?" In the case of private speech, it is assumed that the speaker already knows

the topic addressed in the speech and is instead having problems figuring out what to do about it. Hence, in documented cases of private speech in children, we find examples such as the following: The child is trying to solve a puzzle and says to himself or herself, "Now, the red one," or "Next?" Without full access to what it going on, it is difficult to know what the child is referring to in either case, but the utterances are not intended to be interpreted by others. They are addressed by the child to himself or herself.

It is argued that such utterances serve to focus the speaker's attention on what needs to be accomplished, how to accomplish it, and when something has been accomplished, and then allows the speaker evaluate what has been accomplished. He points out that different languages offer their speakers different linguistic options for carrying out such mental activities. Common expressions frequently encountered in the private speech of L1 English speakers include "Oh!" (often indicating that speakers have discovered what it is they are to do or that they have recovered a particular word from memory), "Next," "OK" (often used to direct the self to begin to do a task), "Let's see" (an indication that the speaker needs to take time to think about what the task or problem is), or "There" (indicating that a task has been completed). Importantly, all of these forms are derived from their use in social interaction.

L2DEVELOPMENT AND MEDIATION

One of the most intriguing questions addressed by SCT research on L2 development is whether individuals who learn a new language as late adolescents or adults can deploy this language to mediate their psychological activity.

Based on a series of studies with Russian native language speakers learning L2s in tutored and experimental settings, although L2 speakers can use their new language for social communication, they cannot use it as a psychological artifact to mediate their thinking. According to Ushakova, the "second language is incorporated into the classification system already available in the first language, relies on the previously developed semantic system , L1 inner speech, and actively employs first language phonology".

GESTURE AND MEDIATION

One of the most exciting new areas of SCT L2 research deals with the appropriation and use of gestures as a form of mediation. There are two general areas of interest here: the extent to which L2 learners are able to appropriate gestures that are specific to particular cultures (McCafferty, 1998) and the interface between speech and gesture. McCafferty (1998) argued that there is a close connection between speech and gesture that goes beyond social communication. Gesture can contribute to the development of thinking and, as such, can "function as a separate, spatio-motoric mode of thinking". Indeed, recalling Vygotsky's observation that speech is at first "a conventional substitute for the gesture" in child development, McCafferty noted that "the overall movement towards semiotic mediation starts with gesture in the form of pointing, a way by which we not only come to indicate but to know objects and the world around us."

SOCIOCULTURAL THEORY AND REGULATION

One form of mediation is *regulation*. When children learn language, words not only function to isolate specific objects and actions, they also serve to reshape biological perception into *cultural* perception and concepts. For children, thinking and actions at early stages of ontogenetic development are at first subordinated to the words of adults (Luria & Yudovich, 1972). According to Luria and Yudovich, subordination of the child's actions and thinking to adult speech lifts the child's mental and physical activity to a new, and qualitatively higher, stage of development. It signals the onset of a "long chain of formation of complex aspects of his conscious and voluntary activity".

By subordinating their behavior to adult speech, children acquire the particular language used by the other members of a community and eventually utilize this language to regulate their own behavior. In other words, children develop the capacity to regulate their own activity through linguistic means by participating in activities (mental and physical) in which their activity is initially subordinated, or regulated, by others. This process of developing self-regulation moves through three general stages.

In the first stage, children are often controlled by or use objects in their environment in order to think. This stage is known as object-regulation. For example, given the task by a parent of fetching a particular object such as a toy, a very young child is easily distracted by other objects (a more colorful, larger, or more proximate toy) and may thus fail to comply with the parent's request. This is a case of the child being regulated by objects. At a slightly later age, children learning mathematics may find it difficult or impossible to carry out simple addition inside of their heads and must rely on objects for external support. This is an example of using objects to regulate mental activity. The second stage, termed other-regulation, includes implicit and explicit mediation (involving varying levels of

assistance, direction, and what is sometimes described as scaffolding) by parents, siblings, peers, coaches, teachers, and so on.

Self-regulation, the final stage, refers to the ability to accomplish activities with minimal or no external support. Self-regulation is made possible through internalization, the process of making what was once external assistance a resource that is internally available to the individual. Thus, at some point children no longer need blocks to add 2 & 5. Some activities, however, are rarely if ever completely carried out inside of our heads. Thus, when asked to multiply multi-digit numbers, most adults use paper and pencil to write down the numbers and carry out the necessary calculations in culturally specified ways.

To be a proficient user of a language, first language (L1) or otherwise, is to be self-regulated; however, self-regulation is not a stable condition. Even the most proficient communicators, including native speakers, may need to re-access earlier stages of development (object-regulation) when confronted with challenging communicative situations. Under stress, for example, adult native users of a language produce ungrammatical and incoherent utterances.

SOCIOCULTURAL THEORY AND ZPD

The zone of proximal development (ZPD) has had a substantial impact in a variety of research areas, among them developmental psychology, education, and applied linguistics. The most frequently referenced definition of the ZPD is "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (Vygotsky, 1986).

The ZPD has captivated educators and psychologists for a number of reasons. One is the notion of assisted performance, which, although not equivalent to the ZPD, has been the driving force behind much of the interest in Vygotsky's research. Another compelling attribute of the ZPD is that in contrast to traditional tests and measures that only indicate the level of development already attained, the ZPD is forward-looking through its assertion that what one can do today with assistance is indicative of what one will be able to do independently in the future. In this sense, ZPD-oriented assessment provides a nuanced determination of both development achieved and developmental potential.

The story of the ZPD concept begins with Vygotsky's genetic law of cultural development. Vygotsky's well-known formulation is that: Any function in the child's cultural development appears twice, or on two planes. First it appears on the social plane, and then on the psychological plane.

First it appears between people as an inter psychological category, and then within the child as an intra-psychological category. This is equally true with regard to voluntary attention, logical memory, the formation of concepts, and the development of volition. Two issues standout in the preceding characterization of the ZPD: that cognitive development results from social and interpersonal activity becoming the foundation for intrapersonal functioning, and that this process involves internalization.

With the ZPD, Vygotsky put into concise form his more general conviction that "human learning presupposes a specific social nature and a process by which children grow into the intellectual life of those around them" (1986). Vygotsky was particularly intrigued with the complex effects that schooling had on cognitive development. The activity of participation in schooling involved, at least in part, learning through participation in socio-culturally and institutionally organized practices. One of Vygotsky's most important findings is that learning collaboratively with others, particularly in instructional settings, precedes and shapes development. The relationship between learning and development is not directly causal, but intentionally designed learning environments can stimulate qualitative developmental changes. In this sense, the ZPD is not only a model of the developmental process but also a conceptual tool that educators can use to understand aspects of students' emerging capacities that are in early stages of maturation. When used proactively, teachers using the ZPD as a diagnostic have the potential to create conditions for learning that may give rise to specific forms of development in the future.

SOCIOCULTURAL THEORY AND ACTIVITY THEORY

Activity theory provides a framework to analyze what learners do in interaction with an aim to understand their goals through action and motives through activity. It analyzes a system in activity from the broad perspective of the larger social systems through the eyes of the member or participants co-constructing the activity. They study through tasks and what transpires around that activity system.

Activity theory raises the question "what is the individual or group doing in a particular situation?" (Wertsch, 1985, p. 211). Rather than focusing on skills, concepts, information processing, units, or reflexes, activity theory can provide a response through analysis at the level of: 1) *activity*, 2) *action*, and 3) *operations*. At the global level is

activity which is the frame or context in which something occurs. The second level is goal-directed *action*. It tells us "what" must be done to get from A to B and through this implies a motive. The context or *activity* cannot inform us of the reasons and outcomes that develop, the *action* that happens in some outcome. Thus, *activity* and *action* are distinguished. The third level is operations, which describe "how" something is done. This is associated with "the concrete conditions under which the action is carried out" (Wertsch, 1985, p. 202-204). Thus *activity* relates to context, action relates to goals, and operations relate to conditions.

ACTIVITY THEORY AND THE CONCEPT OF DIALOGIC INTERACTIONS

Drawing on Vygotskian views of knowledge building in dialogic interaction, Wells (2002) states that in the process of producing a meaningful utterance for others, the speaker has to formulate a suitable response contingent on what others have said and the particular goals and nature of the activity, and which also augments the shared understanding attained thus far.

Wells attributes speakers' mental development to this constructive and creative process in terms of the active effort involved in formulating meaningful and appropriate contributions that are clear and convincing for one's self and others.

Extensive associated L1 research, as Cross (2010) notes, supports the act of constructing explanations. That is, there seem to be benefits for mental development when speakers are involved in successively explaining their understanding to one another in problem-solving and learning. Webb and Mastergeorge (2003) also believe that in explaining to others, speakers are uniquely challenged to create and communicate meaning effectively, and in doing so can modify, clarify, extend, and solidify their own understanding as they say things they have not said before, or state them in a new way.

L2 neo-Vygotskian researchers, as Swain (2000) notes, have also explored the effect of peer-peer dialogue on learning in terms of collaborative dialogue, the interactional talk between two or more learners in which knowledge is co-constructed in problem-solving activity.

Swain, Brooks, and Tocalli-Beller (2002) present a major review of empirical research in which peer-peer dialogue was explored in L2 learning reading, writing, listening, and speaking activities. The wider outcomes of Swain et al.'s extensive review are that (1) in the dialogue which emerges as learners work together towards task completion, the co-construction of knowledge is evident and can result in improved language ability, awareness, accuracy, and self-confidence, and few detrimental effects are evident; and (2) dialogue is a useful research tool for investigating developmental processes. He and Ellis (as cited in Cross, 2010) also came to the finding that peer-peer interaction groups outperformed teacher-controlled exchange groups, and others found evidence of strategy verbalization in their qualitative analysis of taped peer-peer interactions.

From a SCT perspective, as Cross (2011) notes, neo-Vygotskian researchers have also more recently advocated the potential of dialog as a tool for eliciting and examining verbal protocols regarding what learners attend to as they work together to complete a task. Swain, Brooks, and Tocalli-Beller (2002) present an extensive review of studies which have used peer-peer dialog as the source of data for examining language development as learners engaged in a range of activities. In purely methodological terms, Brooks and Swain (2009) illustrate that peer-peer dialog emerging as learners interact during task completion, essentially pair or small group 'think aloud (Cross, 2011), is a useful tool for gaining informative insights into learners' cognitions. All in all, Cross (2010) believes that such investigations have served to bolster and broaden earlier findings into the utility of peer-peer dialogue in mediating the co-construction of L2 knowledge.

CONCLUSION

The founder of Sociocultural Theory, Vygotsky, tried to find a way to cope with a so called "crisis in psychology" which had come about due to the diversity of perspectives and various approaches to the study of psychological processes in psychology. Vygotsky tried to enlighten the psychologists and language learning researchers and practitioners about the role society, living environment and context can play in one's learning and mental development. To do so, he chose a descriptive branch of psychology focused on what he called higher mental processes. He was on the belief that it's not a one way relationship i.e. the child is the receiver of the information and the one who acts as a passive listener, rather it is the mere nature of social interaction between the child and the contexts and social exchanges that determine and form the child's later capabilities to manipulate their surrounding environment. After years of contemplation and application of the sociocultural theory by researchers and practitioners in different areas of psychology and specifically in applied linguistics, it seems that in case foreign language teachers would like to lead their language learners towards better learning and mastering of any language skills, they have to pay enough attention to the role contexts and social interactions, especially meaningful ones play

in the process of learning. This fact can be regarded as the missing link in the chain of learning and especially foreign language learning.

Conflict of interest
The authors declare no conflict of interest.

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