Individual writing tutorials in the zone of proximal development

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Abstract

This paper reports on some preliminary ideas for the design of a research study to be done in the near future. The study will look into individual writing tutorials in order to uncover the dynamics of and learner's development in dialogic activities between the learner and the tutor. The Vygotskian concepts of mediation, regulation, and microgenesis provide a crucial basis to establish, what is called, the zone of proximal development, within which the interactions between the learner and tutor will take place. The paper will argue that such a zone enhances potential learning in a dynamic collaborative framework.

Key words: The zone of proximal development, Vygotskian theory

1. PURPOSE AND OUTLINE OF THE REPORT

This report describes some preliminary planning for a research investigation to be carried out in the near future. The investigation will focus on the dialogic interactions between and a tutor and a learner in the context of individual writing tutorials. This report tries to establish a tentative framework for the design of the study. Three points are important. The research study will be motivated by certain core concepts in Vygotskian psycholinguistic theory. Furthermore, it will collect data from some existing practices in English language courses being taught at the International University of Japan. Finally, the study will utilize the framework of another study that has already been carried out. This paper is thus organized as follows. It first briefly introduces the Vygotskian theory and some of its core concepts. It then summarizes the existing study (Aljaafreh and Lantolf, 1994). Finally, it outlines a tentative framework for the intended research investigation.

2. VYGOTSKIAN THEORY AND SOME CORE CONCEPTS

Vygotskian theory is named after Lev Semenovitch Vygotsky (1896-1934), a Russian theorist, whose seminal works in the 1920s and early '30s, laid the foundations for this theory. His works were introduced into the West in the 1960s and the '70s in such areas as children's cognitive development, literacy, and education (see Vygotsky 1962,

1978; Wertsch 1985a, 1985b, 1991, 1998; Moll 1990). It has gained increasing attention among L2 researchers since the mid-80s (see Lantolf and Appel 1994; Lantolf 1994, 2000).

Vygotskian theory is called a psycholinguistic theory because it is at its core a theory of human cognitive development in which language plays an underlying role. However, given Vygotsky's view or human mind, it will not be accurate to view his theory as exclusively psycholinguistic, as the term is normally understood in the West. In fact, Vygotsky would not view psycholinguistics and sociolinguistics as separate areas of study. His theory of cognitive development emphasizes human mind as rooted in sociocultural contexts. Hence, in L2 research, the label 'sociocultural theory' is being increasingly associated with the Vygotskian theory among researchers.

Some of the core concepts in the Vygotskian theory that are relevant to the planned study reported in this paper are: mediation, regulation, genetic domains, and the zone of proximal development. The following subsections briefly introduce these concepts.

2.1 Mediation

The concept of mediation is considered as the cornerstone of Vygotskian theory. It analytically precedes other concepts. As Lantolf (2000, p. 1) puts it, in Vygotskian theory "human mind is *mediated*" (italics in the original). In other words, cognitive development occurs through activities that are mediated by various tools. Humans utilize physical tools to act upon and transform external nature; they also use symbolic tools to act upon and transform their inner psychological world. These tools originate within and develop through specific social and historical contexts. Computers, along with the Internet, are a prime example of a sophisticated physical tool in today's world. Language is the most sophisticated tool in the psychological sense.

At the same time, interpersonal social relations constitute important channels of mediation. Individual cognitive development begins in external social relations and goes through a process of internationalization. An individual begins as a social being, appropriates the external social experience, and becomes increasingly an individual in his/her own right. In short, when looking at individual cognitive development, and by

extension second language learning, Vygotskian theory draws attention to various mechanisms of physical, social, and psychological mediation.

2.2 Regulation

Given this view of mediation, regulation becomes an important concept. It refers to the locus of control in human behavior and cognition. In other words, when examining an individual engaged in a specific activity, it becomes important to find out if the locus of control resides within the individual, or externally in some other individual or object.

An interesting example would be the activity of oral presentation in a second language classroom setting. A student is supposed to make a presentation by using PowerPoint. If the student effectively uses the mouse and the slides, if he uses his hands as gestures to communicate, if he maintains good eye contact with the audience, he is able to use the PowerPoint equipment as a means of enhancing his presentation. He controls the equipment. On the other hand, if the student is not able to use the mouse and the slides in a coordinated manner, if he loses control of the slides, and if he gets stuck and frantically tries to figure out how to handle the equipment during the presentation, then he does not control the equipment; the equipment controls him. In this case, the locus of control gets shifted to the equipment. The equipment in itself is not significant when the issue is the locus of control; what is important is how the equipment functions when the student tries to make use of it and relate to it. In this sense, the student may control or may be controlled by the equipment.

In this example, if the student effectively controls his equipment, he is *self-regulated*; on the other hand, if he loses control, he becomes *object-regulated. Other-regulated* is the third important category in this regulatory scheme.[1] This refers to the locus of control in interpersonal relations. For example, if in a small group discussion, one member takes control of the discussion and another member becomes quiet and just listens, this quiet member is other-regulated.

In brief, in Vygotskian theory, human activities show regulatory behaviors in terms of object-regulation, other regulation, and self-regulation. The above examples illustrate external or social forms of mediation. However, mediation is also internal within the mind of an individual. In fact, the external and the internal are not mutually exclusive;

they relate to each other in a dialectical manner. In this sense, the highest form of cognitive development is self-regulation in an internal, psychological manner. More importantly, cognitive development in terms of regulation is *linguistically* organized. Speech thus becomes the most sophisticated psychological tool (means) to gain self-control both intellectually and affectively, and it is synthesizing tool for regulatory behavior, both socially and psychologically. Frawley (1987, p. 147) emphasizes this point by specifying that the function of language is "the regulation of self, others, and objects in the social environment."

2.3 Genetic domains

The Vygotskian theory argues that in order to gain a full understanding of some phenomenon, we need to investigate its origins and historical development. In other words, the full significance of any product lies in its creation and growth. Thus, Vygotskian research attempts to investigate, what is called, *genetic domains*.[2] In the intended study being reported in this paper, microgenetic domain is relevant. In this domain, a researcher focuses on changes that take place in a relatively short time, even in seconds or fractions of a second. Thus, for example, if we are looking at the linguistic feature of verb tenses in the speech of an individual engaged in a mediated dialogic activity, we would do a discourse analysis of shifts in verb tenses that may occur in seconds in relation to the speech of the other interlocutor. The emphasis here is not on counting the number of particular verb tenses, but on analyzing the shifts among the tenses.

2.4 The zone of proximal development

The concept of the zone of proximal development (ZPD) should be understood in relation to the above concepts. The ZPD has both theoretical significance and practical applications. Theoretically, it implies that collaborative, dialogic interactions underlie an individual's development. Practically, it suggests that, for example, assessments could and should be conducted in pairs or groups, in which an individual can show his/her potential for doing tasks with support from another person. This is quite different from

how we usually understand assessment in the West, which focuses on isolated individual performance.

Vygotsky (1978, p. 86) defines the ZPD as "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." In other words, Vygotsky makes a distinction between "actual development" and "potential development"; the former focuses on what an individual can do on his/her own, the latter on what the individual can do with support from another individual. ZPD, thus, draws attention to the importance of looking at individual performance, and hence development, within some collaborative framework. In general, the ZPD provides a setting in which individuals engage in collaborative activities, and one individual develops through support from another individual, not by just copying but by actively appropriating means of development and expertise from the other individual.

In specific terms, it brings to mind dialogic activities between a child and an adult, or an expert and a novice. However, the ZPD does not necessarily mean activities only in pairs, or transmission of expertise from a more capable individual to a less capable one. It could also refer to peer-peer activities and group activities. Furthermore, expertise does not necessarily reside in one or more capable individuals. Expertise could be a distributed feature residing in the collaborative activities of pairs or groups, activities that are mediated in various ways. The ZPD, thus, becomes a complex mediating mechanism.

3. THE EXISTING STUDY ON THE ZPD

This paper, by Aljaafreh and Lantolf (1994; henceforth A&L), looks at the activity of writing tutorials, in which students have individual discussion sessions with a tutor to revise the first drafts of their essays. Subjects include three students enrolled in an eight-week ESL writing and reading course at an English language institute at a university. They were in the same class on the basis of a placement test. These students wrote one essay every week for their course. In addition, they had volunteered for a free weekly tutorial with a tutor (the researcher, different from the course instructor) for each paper.

Each tutorial session was held in the tutor's office and lasted for 30-35 minutes. All the sessions were audiotaped.

Typically, before the individual tutorial session began, the tutor asked the student to read the first draft in his presence, identify the errors, and correct them. The session than began with the tutor asking the student if he found any errors. They then went through each sentence and corrected the errors collaboratively. The tutor provided negative/corrective feedback in the course of the tutorial for error correction.

The data reported in the paper covers four grammatical features—articles, verb tenses, prepositions, and modal verbs. The data analysis is presented in the form of discourse analysis within the Vygotskian framework. The paper presents selected protocols from the tutorial sessions to analyze these features, using the microgenetic approach.

The analytical framework is derived from the Vygotskian concepts. It looks at the individual tutorial sessions as activities in the ZPD, involving mediation, regulation, and microgenesis. It is seen as a collaborative activity between the student and the tutor, in which the tutor provides help for error corrections. The help is operationalized as "graduated" help, in which the tutor begins with implicit (strategic) feedback, then, depending on the learner's response, makes the feedback more specific and localized. Furthermore, the help is couched in terms of other-regulation and self-regulation. For this purpose, the paper presents five levels of regulation to show transition from other-regulation to self-regulation. For example, at level 1, "the learner is not able to notice or correct the error, even with intervention from the tutor" (p. 470). At the other end, at level 4, "the learner notices and corrects an error with minimal, or no obvious feedback from the tutor, and begins to assume full responsibility, " and at level 5 the self-regulatory behavior demonstrated at level 4 becomes automatic. (p. 470). On this basis, the paper presents a 13-level regulatory scale, showing movement from implicit to explicit feedback. Appendix A (copied from the paper) describes in detail these levels.

Furthermore, the study adopts, what it calls, two "developmental criteria" to assess the learner's development. The first (traditional) criterion looks at the learner's speech during subsequent tutorials to see if there is a reduction in the linguistic errors on which the tutor gave feedback. The second (Vygotskian) criterion looks at whether the learner

becomes more self-regulated in the presence of the tutor. The study also analyzes a student's development that occurs within a tutorial and across tutorials. The development is shown in terms of other-regulation and self-regulation, resulting from corrective feedback from the tutor. This regulatory behavior on the part of the students is measured by how implicit or explicit the level of the feedback is.

The paper argues that the subjects showed different ZPDs for the same errors. In other words, they needed different levels of feedback from the tutor to correct their errors. This implies that two students may show the same level of actual development (by being in the same class based on a placement test), but the levels of potential development could be different.

In short, the paper focuses on investigating ZPD, by utilizing the concepts of mediation, regulation, and microgenesis. The study examines negative feedback as a form of regulation and analyzes "the dialogic activity collaboratively constructed by learner and tutor" (p. 467), i.e., "a dialogic activity that unfolds between more capable and less capable individuals" (p. 468). It asserts that "Effective error correction and language learning depend crucially on mediation provided by other individuals," and that "learning is not something that an individual does alone, but is a collaborative endeavor necessarily involving other individuals" (p. 480).

The A&L study discusses several aspects of the activity, couched in Vygotskian conceptual terms. First, it focuses on the help given by the tutor to the learner, i.e., error corrections. The error corrections are in the form of "various mechanisms of effective help in the ZPD" (p. 468). In other words, this help is "graduated. Furthermore, help is "contingent" upon the learner's reactions, i.e., if the learner understands the tutor's feedback, the tutor withdraws it.

The paper, in its conclusion, points out some limitations and the need for further research. One such limitation is the nature of linguistic features. The features the paper analyzes could be considered as language specific; more abstract features, e.g., syntactic features as explained by Universal Grammar, may not be amenable to negative feedback, which the paper presents as the focus of the ZPD. The question arises: Would the ZPD concept also be able to investigate more abstract properties of a language? Another limitation is the fact that the data was audiotaped. As such, it could not capture nonverbal

information, which would have been acquired for analysis if the sessions had been videotaped. Non-verbal information, e.g., information about gestures, is significant for examining regulatory behavior.

4. THE INTENDED STUDY

As pointed out, the research investigation that will be carried out in the near future will make use of some existing practices in the English language courses being offered at the International University of Japan (IUJ). IUJ's Summer Intensive English Program offers an academic writing (AW) course that will in many ways fit the design of the intended study. In the AW course, students write academic essays that go through a revision process. Individual tutorials with the instructor are a main feature of this revision process. The investigation could be conducted without any modification of the existing practices.

4.1 The use of the Aljaafreh and Lantolf's (1994) framework

A&L's framework could be applied in several ways. The regulatory scale, as shown in the appendix, could be fruitfully applied to the intended research investigation. The concepts of mediation, regulation, and microgenesis could provide the conceptual framework for data interpretation. The tutorial activity could be viewed as taking place in the ZPD. The data analysis could be based on a discourse analysis of selected protocols, and it could include the linguistic features of verb tenses, modals, articles, and prepositions. Development could be looked at within and across tutorials.

However, an important modification would be necessary. Level 0 (in the regulatory scale in the appendix) could not be applied given the existing practices. In other words, students would not come to the tutorial session and read their essays in the presence of the tutor. In the existing practices, students submit their first drafts to the instructor; the instructor reviews the drafts, gives written feedback on the paper, and returns them to the students. The students then go through the instructor's feedback, make corrections or changes as suggested by the instructor, and comes to the tutorial prepared to discuss those changes. The regulatory scale, as shown in the appendix, thus needs to be modified.

Several extensions of the A&L study could be attempted. The scope of the data analysis could be broadened to include errors in active/passive, sentence structure, word choice and form. The categorization of errors as global and local errors may yield significant results. Problems other than linguistic errors could be included, e.g., topic focus, content development, and structural organization. Finally, the data could be videotaped to capture important nonverbal information.

4.2 Questions

Given these modifications and extensions, some important questions arise. In the A&L study, level 0 is significant in terms of setting up a collaborative framework. In other words, students are asked to show their ability to notice errors on their own before the tutorial session begins. In the existing practices of the IEP's AW course, however, it is the instructor who draws the attention of the students to the errors, by giving written feedback on the first draft. The question arises: does this significantly affect the workings of the ZPD?

Some other questions worth considering are:

1. Should classroom instruction, e.g., on grammar, be considered as a factor in the data analysis of the tutorials?

2. Would the fact that the classroom instructor also serves as a tutor affect the dynamics of the tutorial sessions?

3. Would the fact that students do not volunteer for the tutorial sessions but are required to do them and are evaluated for their tutorial performance be a factor in their regulatory behavior?

5. CONCLUSION

This report has introduced some important Vygotskian concepts and a specific study that applies these concepts. It argues in favor of a potential research investigation that could be conducted within the existing pedagogical practices of a course. It looks at modifications and extensions that could be made, and raises several questions. The report, however, just explores the applicability of some ideas and frameworks. Much remains to be done before a clear research investigation can be designed and carried out.

NOTES

[1] For a description of these categories, see Ahmed (1994, pp. 158-160) and McCafferty (1994, pp. 424-427).

[2] These domains are phylogenetic, sociocultural, ontogenetic, and microgenetic domains. For a description of these domains and relevant research studies, see Lantolf (1994, pp. 3-6).

APPENDIX A

Regulatory Scale—Implicit (strategic) to Explicit

0. Tutor asks the learner to read, find the errors, and correct them independently, prior to the tutorial.

1. Construction of a "collaborative frame" prompted by the presence of the tutor as a potential dialogic partner.

2. Prompted or focused reading of the sentence that contains the error by the learner or the tutor.

3. Tutor indicates that something may be wrong in a segment (e.g., sentence, clause, line)—"Is there anything wrong in this sentence?

4. Tutor rejects unsuccessful attempts at recognizing the error.

5. Tutor narrows down the location of the error (e.g., tutor repeats or points to the specific segment which contains the error).

6. Tutor indicates the nature of the error, but does not identify the error (e.g., There is something wrong with the tense marking here").

7. Tutor identifies the error ("You can't use an auxiliary here").

8. Tutor rejects learner's unsuccessful attempts at correcting the error.

9. Tutor provides clues to help the learner arrive at the correct form (e.g., "It is not really past but something that is still going on").

10. Tutor provides the correct form.

11. Tutor provides some explanation for use of the correct form.

12. Tutor provides examples of the correct pattern when other forms of help fail to produce an appropriate responsive action.

Source: Aljaafreh and Lantolf (1994, p. 471)

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