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PRAXIS AND CLASSROOM L2 DEVELOPMENT

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Although most L2 research informed by sociocultural theory (henceforth, SCT) asserts that the fundamental concepts of Vygotsky's theory are that human mental activity is mediated by socially and culturally created artifacts (see Lantolf & Appel, 1994 and Lantolf, 2000; among others), I believe that the real key to the theory is to be found in the notion of praxis—a notion that Vygotsky appropriated from Marx and which, of course, has its origins in ancient Greek philosophy. For the Greeks, praxis had the general meaning of action as an end itself, whereas for Hegel and Marx it refers to "action which generates an object external to the subject or his [sic] acts" (Sanchez Velazquez, 1977: 1).[1] *The crucial feature of praxis in its contemporary understanding is the dialectic unity of consciousness (knowledge/theory) and action that results in the creation of an object. In Hegel's philosophy the object is Ideal, while for Marx, and for Vygotsky, the object is Material. The present article emerges from an on-going project that explores the implications of praxis in Vygotsky's theory for instructed second language development.*

In making the case for the importance of praxis and language education, I will first discuss the place of praxis in SCT and will then present some evidence from recently completed large-scale studies of instructed L2 learning by Negueruela (2003) and Yáñez Prieto (2008) that are informed by Vygotsky's theory. Along the way, I will also briefly consider some other,

[1] The Greeks reserved the term *poiesis* for this type of action.

less robust, though interesting, studies inspired by Vygotsky's theory of educational praxis.

Key words: dialectic, praxis, scientific and spontaneous concepts, zone of proximal development, second language teaching

Aunque la mayoría de las investigaciones sobre la Teoría sociocultural señalan como eje central de la teoría de Vygotsky el hecho de que la actividad mental humana se encuentra mediatizada por artefactos social y culturalmente creados (véase Lantolf & Appel, 1994 y Lantolf, 2000, entre otros), considero que la clave fundamental de esta teoría se encuentra en la noción de praxis –una noción que Vygotsky tomó de Marx y que sin duda tiene su origen en la filosofía clásica griega. Para los griegos, la praxis tenía el significado general de "acción como un fin en sí misma", mientras que para Hegel y Marx se refiere a "la acción que genera un objeto ajeno al sujeto o sus actos" (Sanchez Velásquez, 1977: 1). La característica fundamental del concepto de praxis en la actualidad es la unidad dialéctica entre la conciencia (conocimiento/teoría) y la acción que resulta de la creación de un objeto. En la filosofía de Hegel el objeto es "ideal" mientras que para Marx y Vygotsky el objeto es "material". Este artículo surge de una investigación actualmente en curso que explora las implicaciones de la praxis en la teoría de Vygotsky para el desarrollo de la enseñanza de la segunda lengua.

Con objeto de resaltar la importancia de la praxis en la enseñanza/aprendizaje de una lengua, me centraré en primer lugar en clarificar el lugar que ocupa la praxis en la Teoría sociocultural y seguidamente presentaré algunos datos tomados de estudios a gran escala llevados a cabo recientemente por Negueruela (2003), Yánez Prieto (2008), y Serrano-Lopez y Poehner (2008) sobre el aprendizaje de una L2, y enmarcados en la teoría de Vygotsky. Del mismo modo me referiré a otros estudios –menos sólidos aunque igualmente interesantes- inspirados en la teoría de Vygotsky.

Palabras clave: dialéctica, praxis, conceptos científicos y espontáneos, zona del desarrollo próximo, enseñanza de la segunda lengua

1. SLA and SCT: Important Differences

A widely accepted premise of SLA research is that L2 acquisition is fundamentally the same process regardless of where the process unfolds. Long (1998: 93) offers forceful statement in this regard:

> Remove the learner from the social setting, and the L2 grammar does not change or disappear. Change the social setting altogether, e.g., from street to classroom, or from a foreign to a second language environment, and, as far as we know, the way the learner acquires does not change much either, as suggested, e.g., by a comparison of error type, developmental sequences, processing constraints, and other aspects of the acquisition process in and out of the classroom.

When making recommendations on classroom practice, SLA researchers have based their suggestions on the universal acquisition hypothesis (henceforth, UAH) and have therefore highlighted the importance of communicative activity and backgrounded the relevance of direct instruction. Larsen-Freeman and Long (1991: 221), for instance, point out that "some writers on language teaching have advocated provision of 'natural' language learning experiences for classroom learners, and the elimination of structural grading, a focus on form and error correction, even for adults." Perhaps the most well known advocate of this position is Krashen (1981; 1985), who supports a "natural approach" in which the teacher's role is to provide comprehensible input slightly beyond the learner's current level of ability on the grounds that the Language Acquisition Device uses this input to generate the appropriate L2 grammar.

However, at least one SLA researcher, Elaine Tarone, has argued against the UAH. In a recent publication (Tarone, 2007), for example, she

asserts that different social contexts are likely to result in different L2 grammars and, more importantly that different contexts are likely to change the way learners acquire an L2. As evidence in support of the second position, she mentions the well known study of a Chinese L1 learner of English who manifested different developmental sequences when acquiring *wh*-questions depending on the environment in which learning occurred. In the classroom setting the learner appeared to adhere to the sequential order proposed by Pienemann's (1998) "processability theory", but in the home setting, the same learner showed evidence of having skipped a step in the sequence, a presumed violation of the theory.

Although Tarone parts company with the majority of SLA researchers regarding the UAH, to my knowledge, she has not proposed a specific set of pedagogical practices based on recognition of the likelihood that classroom learning is a different process from learning in other environments. Vygotsky, however, makes a very explicit and strong claim in this regard, when he asserts that:

> Education may be defined as the artificial development of the child. Education is the artificial mastery of natural processes of development. Education not only influences certain processes of development, but restructures all functions of behavior in a most essential manner. (Vygotsky, 1997: 88)

Contrary to the position espoused by Piaget, and in my view, the position reflected in mainstream SLA research, Vygotsky considered education to be a specific form of cultural activity that had important and unique developmental consequences. As is attested in the above quote, education is not just an undertaking whereby knowledge is obtained, but it is indeed an intentionally organized (i.e., artificial) activity that restructures mental behavior. Here Vygotsky is referring to the spontaneous unconscious development that occurs as we engage in the activity of living in the everyday world (Vygotsky, 1987). I will return to this issue a bit later in the discussion.

In classic Piagetian psychology, education is only effective if students are developmentally ready to learn. It does little good, on such a view, to teach abstract concepts until the stage of formal operational thinking has been reached. The Piagetian position, I believe, is clearly reflected in both Krashen's natural order hypothesis and Pienemann's processability theory. Learners can only learn what they are developmentally ready to learn and stages cannot be skipped along the way. Instruction then becomes a matter of timing and if, as N. Ellis (2007: 91) suggests, it is "ill-timed and out of synchrony with development … it can be confusing; it can be easily forgotten; it can be dissociated from usage, lacking in transfer-appropriateness" and "it can be unmotivating." Vygotsky (1987) reverses the Piagetian process and argues that effective instruction must precede and indeed lay down the path for development to follow. This of course is the basis of Vygotsky's most popular, though often misunderstood (see Chaiklin, 2003), concept of the *zone of proximal development.*

As important as the ZPD is for educational practice, it is not a topic within the scope of the present discussion and I will therefore not deal with it directly in this article (for a full discussion see Aljaafreh & Lantolf, 1994; Lantolf & Poehner, 2004; Lantolf & Poehner, 2007; Poehner & Lantolf, 2005; Poehner 2008). Instead, I would like to focus on the second, and perhaps less well known, but no less crucial, feature of Vygotsky's conceptualization of *developmental instruction* (see Davydov, 2004). This is the argument that the unit of artificial development in educational activity is scientifically organized conceptual knowledge. Before turning to this topic, however, it is necessary to address the second issue that differentiates Vygotsky from the accepted position within SLA and this is the connection between research and classroom practice.

1.1. Basic Research and Pedagogical Practice

A second general assumption within the field of SLA, which also separates it from SCT, is that there is a clear distinction between basic research and theory on the one hand and classroom practice on the other. Gass and Mackey (2007: 190), for example, reflect the SLA perspective as follows: "Like most SLA researchers, however, [Rod] Ellis is cautious about making direct connections between theory, research, and teaching practice." With regard to their own interactionist approach to SLA, the same authors go on to state that because their primary concern is with "how languages are learned … direct application may be premature."

Vygotsky, because of his commitment to *praxis,* understood that there must be a close connection between theory/research and practice, not only in education, but in all other domains of human life as well (see Bernstein, 1971). In this regard, he alludes to Marx's famous eleventh thesis on Feuerbach: "Marx has said that it was enough for philosophers to have interpreted the world, now it's time to change it (Vygotsky, 1997: 9).

Although many argue that Vygotsky's most important publication is his book *Thinking and Speech* (Vygotsky, 1987), and while I agree that it is indeed a significant publication, I believe that in many ways his foundational work is his wide-ranging manuscript "The historical meaning of the crisis in psychology" (Vygotsky, 1997), for it is in this work that Vygotsky lays down the foundation of his theory—a foundation in which he clearly specifies the relevance of praxis and its impact on how psychology must reconceptualize the relationship between theory/research and practice. The following rather extensive quote makes this point forcefully:

> Previously theory was not dependent on practice; instead practice was the conclusion, the application, an excursion beyond the boundaries of science, an operation which lay outside science and came after science, which began after the scientific concept operation was considered completed. Success or failure had practically no effect on the fate of the theory […] Now the

> situation is the opposite. Practice pervades the deepest foundations of the scientific operation and reforms it from beginning to end. Practice sets the tasks and serves as the supreme judge of theory, as its truth criterion. It dictates how to construct the concepts and how to formulate the laws. (Vygotsky, 2004: 304)

From this orientation Vygotsky concludes that the highest test of a theory is practice and that the distinction that had been made between general and applied psychology (e.g., industrial, educational psychology) was not only invalid but in fact, as he convincingly argued in "The crisis" manuscript, applied psychology *is* psychology. This was, for Vygotsky, the full implication of The Eleventh Thesis for the science of psychology.

I would like to make the same argument with regard to SLA that Vygotsky made for general psychology to the effect that SLA theory/research and pedagogical practice can and must be brought together into a dialectically unified theory. Indeed, from this perspective pedagogical practice is the relevant research that is not only informed by, but also, informs, the theory. In other words, if the theory is not closely connected to pedagogical practice it is a problematic theory. SCT is not just a theory of SLA; it is a general theory of human mental development and since SLA is one aspect of such development, the theory must also account for this particular process along with all other processes that comprise human cognition in all circumstances where it develops and functions.

2. Scientific and Spontaneous Concepts

As I mentioned earlier, arguably the most popular feature of Vygotskian pedagogy is the ZPD, and while this is certainly an important component in effective instruction (indeed it is the activity where instruction leads development), equally important is Vygotsky's proposal that the basic unit of instruction is the conceptual (some use the term 'theoretical') knowledge of a given domain as it is formulated in scientific research. Scientific

concepts "represent the generalizations of the experience of humankind that is fixed in science, understood in the broadest sense of the term to include both natural and social science as well as the humanities" (Karpov, 2003: 66). These concepts are explicit, and therefore accessible to conscious inspection, domain specific, and "aimed at selecting the essential characteristics of objects or events of a certain class and presenting these characteristics in the form of symbolic and graphic models" (Karpov, 2003: 71).

Scientific knowledge contrasts sharply what Vygotsky calls *spontaneous* knowledge formed during concrete practical experience largely on the basis of the "an immediate observable property of an object" (Kozulin, 1995: 123). They are empirically based, usually, though not exclusively, inaccessible to conscious inspection, and require lengthy periods of practical experience to develop. They are, however, at the heart of our lived experience and are, by and large, more than adequate for carrying out our daily activities. Empirical knowledge, as Karpov (2003: 69-71) points out, "may work if the common salient characteristics of objects or events reflect their significant, essential characteristics" but it runs into problems on several counts, such as when the observable common features of a set of objects are not the essential features of the entire class of objects under consideration. As Vygotsky (2004) noted, the goal of science is to discover through rigorous analysis the usually hidden essence of the object of enquiry. If things were the way they appeared under the direct scrutiny of our senses, science, and concomitantly, education, would be unnecessary. A typical example of a spontaneous concept is a kinship term such as 'uncle'. Children learn the concept through exemplars and if asked what an uncle is will usually respond with an example such as 'uncle Henry' rather than a definition such as the male sibling of my parents.

To illustrate even more clearly the distinction between everyday empirically-based and scientific knowledge, consider how the concept *circle* is understood in the two domains. Our everyday knowledge of circle is a

generalization usually arrived at by extracting the common geometric shape of objects such as wheels, pancakes, bracelets, coins, etc. It is often the way teachers introduce the concept in school. The scientific concept of circle, on the other hand, is "a figure that appears as the result of a movement of a line with one free and one fixed end" (Kozulin, 1995: 124). The scientific definition, according to Kozulin, encompasses all possible circles and "requires no previous knowledge of round objects to understand" (ibid.).

Vygotsky (1987: 218) argued that scientific and spontaneous knowledge each had it strengths and its weaknesses. The strength of the latter is that it is saturated with personal experience and its use is spontaneous, or automatic. Its weakness consists in the fact that it is tied to concrete empirical situations and is therefore not sufficiently abstract to be flexible so as to be easily extended to a wide array of circumstances. Its automatic quality, which is part of its strength, is at the same time a weakness. The fact that spontaneous knowledge is not easily accessible to conscious inspection means that we have less intentional control over it in order to make it serve our needs. Before children come to school their language is largely automatic behavior and is not very visible to them. When they enter school and encounter literacy the language becomes visible and their awareness and control over it increases as they develop the capacity to produce and read written texts, the primary medium of educational activity.

By the same token, the strength of scientific knowledge resides in its visibility and rigor, which imparts greater flexibility and control to the individual. However, its weakness is that it does indeed lack rich personal experience and it also requires a fair amount of time to gain the necessary automatic control (i.e., proceduralization) over it. Thus, for scientific knowledge to be of value it must be connected to practical activity—the domain where spontaneous knowledge dominates, otherwise the result is what Vygotsky, among others, describes as "verbalism"; that is, knowledge "detached from reality" (Vygotsky, 1987: 217). And as Ilyenkov (1974) notes, verbalism is "that chronic disease of school education." This is what

praxis, the connection between conceptual knowledge and practical activity, overcomes.

While Vygotsky argued for the value of scientific knowledge embedded in praxis he did not offer concrete pedagogical proposals for how to achieve this other than to emphasize the importance of systematic cooperation between teachers and their students. Two later adherents of Vygotsky's theory, P. Gal'perin and V. Davydov, however, did establish pedagogical programs designed to proceduralize scientific concepts. In the next section I will consider a modified version of Gal'perin's approach as it was implemented in two extensive studies on teaching Spanish as a foreign languages in a North American university setting.

3. Concept-Based Instructional Praxis

To remind the reader of the argument I am making, it is that scientific knowledge of the L2 is an essential, but too often overlooked, component of language instructional programs. Keeping in mind the principle of praxis, however, this is not an argument against communicative language teaching. On the contrary communicative activity must continue to play a central role in language pedagogy, but the activity must be guided and shaped by the appropriate conceptual knowledge.

3.1. Systemtic-Theoretical Instruction: a Brief Overview

Gal'perin (Gal'perin, 1967 and 1979; Talyzina, 1981) and Davydov (Davydov 2004) each developed slightly different models of educational praxis. The former appeared on the scene chronologically earlier, and to date has had more impact on language instruction than the later (but see Ferreira, 2005). For this reason, and because my intent is to provide the reader with a general understanding of educational praxis rather than with information on the subtleties between the models, I will focus on Gal'perin's approach, referred to as Systemic-Theoretical Instruction. To be sure, both models

share a great deal in common, given that they are both thoroughly grounded in Vygotsky's theoretical principles.

Gal'perin proposed a multiple phase procedure, which begins with presentation of the concept and terminates with its automatization (i.e., internalization) in practice. These phases are bridged by two additional procedures: materialization and verbalization. Verbalization, in turn, comprises two substeps: verbalization of the concept as such and verbalization of the concept as it accounts for and guides one's performance of practical activity. Verbalization requires learners not to memorize the verbal definition of the concept but to use the SCOBA (see Figures 2 and 3 below) as a guide to explain the concept to themselves in what amounts to private speech. This forces learners to listen to themselves and determine whether or not they feel they indeed understand the concept. It also compels learners to externalize their reasons for deploying the concept as they do. This further adds to the depth of their understanding and enhances their control over the concept. Materialization requires the conversion of the verbal representation of the concept into an imagistic depiction on the theoretical assumption that a concrete image is more coherent, more easily comprehended and thus serves as a more flexible guide of activity than does a verbal definition. Gal'perin uses the acronym SCOBA (Schema for Orienting Basis of Action) to capture the process of materialization.

While several second language researchers acknowledge a role for explicit (i.e., conscious) knowledge in L2 instruction (e.g., R. Ellis, 2006) to my knowledge, only one (DeKeyser, 1998) has raised concerns about the quality of this knowledge and its impact on L2 instruction. Yet, the quality of knowledge is a crucial matter. Hammerly (1982: 421), for example, supports rule-of-thumb knowledge, which he describes as "*simple, nontechnical, close to popular/traditional notions* "(italics in original), and recommends that grammar explanations be "short and to the point" because if they are complex and extensive "it is too much for the students to absorb"(p. 421). The problem with this orientation to explicit knowledge is

that rules-of-thumb are not always complete, coherent, or accurate. They generally describe what is typical in a specific context rather than an abstract principle that promotes a deep understanding of the concept allowing learners to use the language in a flexible way across an array of contexts.

Whitely (1986) offers a good example of a typical rule-of-thumb presented in textbooks for teaching Spanish to L1 English speakers. The rule describes use of verbal aspect (preterit/imperfect): preterit "reports, records, narrates, and in the case of certain verbs (e.g., *saber*, *querer*, *poder*) causes a change of meaning" and imperfect "tells what was happening, recalls what used to happen, describes a physical or mental emotion, tells time in the past, describes the background and sets the stage upon which another action occurred" (Whitely, 1986). The problem with the rule, as with most empirically based rules, is that it is not fully accurate, because while one can find evidence of use of verbal aspect that accords with the rule, it is also the case that one easily finds so-called exceptions to the rule, as for instance use of preterit to describe emotions. The problem is that most textbooks provide examples of language designed specifically to illustrate and therefore support the function of the rule. Ilyenkov (1974) calls this circumstance application of the "notorious principle of visual learning." The result is that the real object of study "remains outside the classroom door, beyond the boundaries of the academic subject" (Ilyenkov, 1974). The rule-of-thumb approach along with the principle of visual learning give the impression that language study is about learning to produce correct forms while avoiding incorrect forms; rather than understanding language as a cultural artifact or tool for making meaning in the social as well as in the cognitive domain.

3.2. Overview of L2 Educational Praxis

In this subsection, I will present a brief overview of some of the studies that have been carried out within Gal'perin's model. At least two of these (Carpay, 1974 and van Parreren, 1975) were very short-term studies lasting only a few hours; nevertheless, they report positive learning outcomes (i.e.,

Russian verbal aspect in Carpay's study and attributive adjectives in German in van Parreren's work). Oboukhova et al (2002) conducted a more extensive study on teaching verbal aspect in L2 French to L1 Russian speakers. In their study the concept of aspect was materialized as a cartoon and presented via computer. The students then completed a series of activities based on the cartoon in which they were asked various questions about the formation and use of French verbs. While this was happening, the conceptual explanation of how to form and use aspect in French was displayed in a corner of the computer screen. When completing the activities the students were required to verbalize their reasons for inflecting verbs for either of the two aspects of French. As they moved through the activities, the explanation displayed on the computer screen became increasingly abbreviated. Over time the students verbalizations also were increasingly abbreviated until they became subvocal private speech. However, whenever the students made a mistake they were cued to externalize their explanation. This process was continued until the students were able to complete a sequence of activities without recourse to externalization. The learners' performance on a post-test narrative was significantly better than a control group that had not received the computerized instruction. In interviews conducted with the learners, one of them commented that concept-based instruction made things easier and that "the learned knowledge has remained in my head" (Oboukhova, et al 2002: 112).

Serrano-López and Poehner (2008) report on a study conducted by Serrano-López in a North American university Spanish-as-a-foreign-language classroom. The focus of the study was on Spanish locative prepositions (*de, en, a*), which are notoriously difficult for L1 English speakers to master. In her study, Serrano-López first presented the students with an explanation for use of each preposition relative to English, as illustrated below:

IN/ON---> DE: specific object is in a specific place and there is no question of the speaker moving it DE is used. *Me gusta la planta de la esquina*.

IN/ON-->EN: specific object in a specific place and there is the possibility of (re) placement on the part of the speaker EN is used. *Me gusta la planta en la esquina*.

IN/ THROUGH/INTO-->A: when place where object is located requires movement to reach location A is used.

Juan se lanzó a la piscina.

An interesting variation employed by Serrano-López instead of presenting learners with a pre-fabricated materialization of the relevant concept, she asked her students to develop their own using images using clay modeling. Figure 1 below illustrates one student's depiction of use of the preposition a:

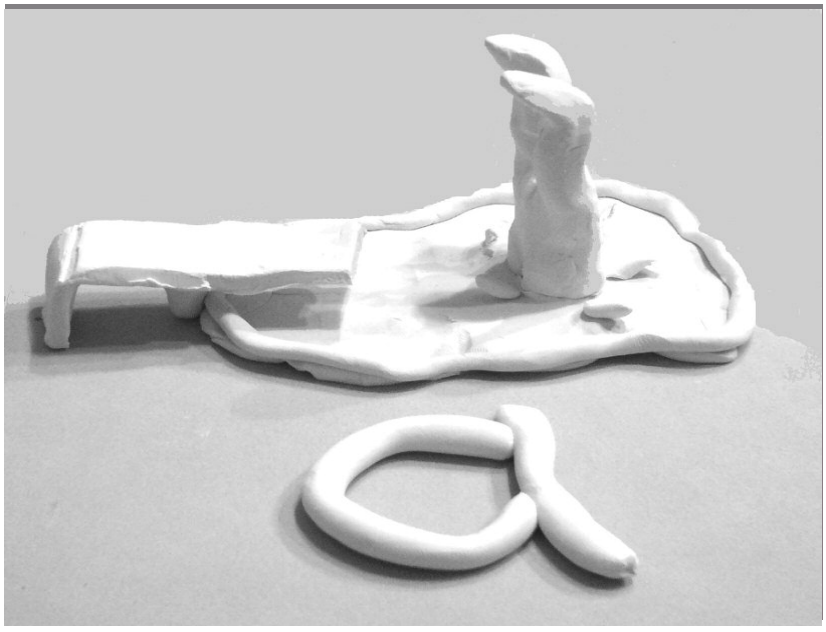


Figure 1: Clay Model of "Juan se lanzó a la piscina" (Serrano-López & Poehner, 2008)

Following instruction and modeling, the students were given a series of tests on use of locative prepositions. Their performance was compared to students who had been given the conceptual explanation but who had not done the clay modeling. They were also compared to students without any instruction but who had the opportunity to figure out for themselves how the prepositions function. The immediate post-test showed that both instructed groups outperformed the non-instructed group and that the instructed groups did not differ significantly in their relative performance. However, on a delayed post-test administered two weeks later, the clay-modeling group significantly out performed both of the other groups. According to Serrano-López and Poehner (2008) the clay-modeling had a longer lasting impact because of its imagistic and tactile qualities. The importance of connecting the hand and the mind in such a way is a potentially important area for future research to address.

3.2. Two Full-Course Studies

By far the most extensive studies on the effects of concept-based instruction in L2 development were three doctoral dissertation carried out at Penn State University. Two of these (Negueruela, 2003 and Yáñez Prieto, 2008) focused on teaching Spanish as a foreign language in the North American university setting and will be the object of discussion in the remainder of the article. Both studies were quite extensive and for obvious reasons, I cannot do full justice to either study here. However, I would at least like to provide the reader with a flavor of their work. To do this, I will discuss some of the data produced in each study with regard to instruction and learning of verbal aspect.[2]

[2] The third dissertation, already mentioned above is by Ferreira (2005). Its focus was on ESL writing instruction through the concept of genre as defined in System-Functional Linguistics. Since my immediate concern is with instruction in Spanish as a foreign language, I will not deal with Ferreira's research here. In addition to consulting Ferreira's dissertation, the

Negueruela (2003) conducted a sixteen-week study documenting the process and effects on learner performance of a concept-based intermediate level Spanish course which he, as the teacher-researcher, taught at a North American university. One of the most important effects of verbalization as documented in Negueruela's (2003) research was the students' discovery that their previous rule-of-thumb-based 'understanding' of aspect made little sense and in fact conflicted with the more coherent scientific definition presented in the respective courses. The SCOBA used in Negueruela's study is given in Figure 2 below.

interested reader can find a synthesis of her research in Ferreira and Lantolf (2008). Reports on two in-progress studies by Lapkin et al (2008), which deals with passive voice in French and by Thorne et al (2008), which focuses on use of pragmatic hedging in English by International Teaching Assistants at a North American university can be found in Lantolf and Poehner (2008b).

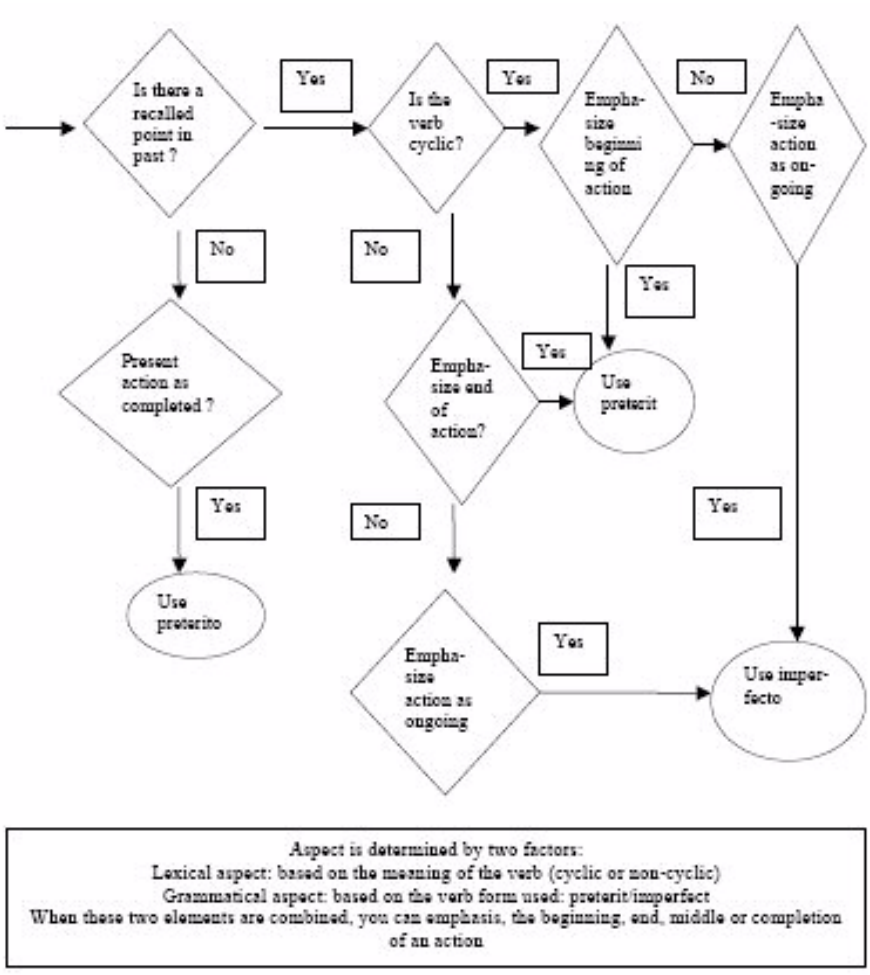


Figure 2: SCOBA for Aspect in Spanish (based on Negueruela, 2003)

As one student put it in the early part of the course, "It's more difficult to speak and rationalize using a certain tense for me, mainly because the reasoning is different from what I've been taught in the past. I'm still stuck on trying to rationalize it using old methods and it gets confusing

sometimes" (Negueruela, 2003: 356). This same student, near the end of the course, offered the following commentary, which manifests a clear shift in orientation toward the new way of conceptualizing aspect:

> the verbalizations and recordings have helped a lot because it's a more abstract way of thinking about it, so instead of saying 'ok, this situation uses this particular rule, so I need to use this tense' I say 'what is the point I'm trying to express here, and which tense best accomplishes that.' I think I've learned how to effectively communicate my ideas better. I need to consider the aspect that I wish to emphasize and what the meaning is behind the words that I'm saying so that the verb tense helps people understand what I'm saying as much as the actual verb I use. (p. 356)

Another student at the outset of the course, verbalized the concept of aspect in terms of the rule-of-thumb account exemplified by Whitely (1986) above: [preterit] "is used a lot to report a story and to present completed events that have happened. Imperfect is used for description and to open a scene. It is like to say in English: 'I was doing something' when…." (Negueruela, 2003: 358). This definition, as Negueruela points out, does not explain the meaning of aspect but instead mentions some examples of when it is used. Later in the course, and following extensive experience with the SCOBA, the same student exhibits a much more coherent and systematic understanding of aspect as dependent on the meaning a user wishes to convey: "there is no real time that you cannot use either or … *pretérito* is used for definite actions in the past when you are giving emphasis to the fact that it is over or that it just began. Imperfect is used when talking about the middle or giving background, it sets the scene and shows that the action is in progress in the past " (Negueruela, 2003: 359).

Verbalization also requires that learners explain their use of the concept in practical goal-directed activity. Here the SCOBA serves as a flexible guide that students can refer to as needed. Over time, as they become accustomed to using the concept and it becomes increasingly proceduralized, they rely less on the external version of the SCOBA and

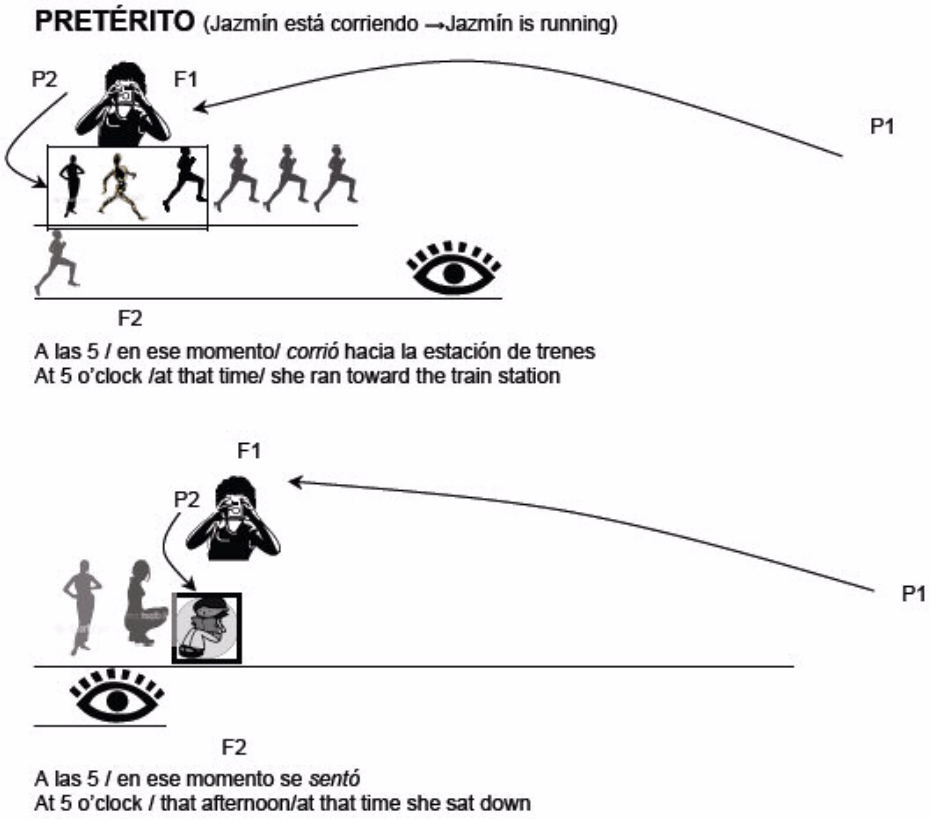
instead begin to rely on its internal ideal image.[3] In Negueruela's (2003) study the communicative activity that learners took part in was based on Di Pietro's (1987) Strategic Interaction approach. In this approach students are stimulated to speak through a procedure that Di Pietro calls the *scenario*. The scenario utilizes the notion of dramatic tension whereby people are stimulated to talk to each other because they have a concrete goal they desire to fulfill (e.g., decline an invitation to a cocktail party given by a close friend because you've finally managed to obtain tickets to a new play that you've been trying to get for over a year) that may be in conflict with an interlocutor's goal (e.g., convince your friend to attend a cocktail party where he will receive a very expensive surprise gift purchased by a group of colleagues wishing to show their appreciation for his/her hard work). The interactions were tape recorded and the students then had to listen to their individual performance in private and explain how they used aspect to achieve the appropriate meanings they wished to convey. The verbalizations were then analyzed and evaluated by the instructor. The following example illustrates how one learner explained his use of aspect based on the Negueruela's SCOBA. The utterance in question is *El seis de junio fui a la escuela a mi dormitorio para comenzar mis clases*. The student explained that "I used preterit there because it's referring to a recalled point: "*el seis de junio*" and since "*fui*" is a non-cyclic verb, it's referring to the beginning of the action" (Negueruela, 2003: 430). Negueruela used the model of aspect developed by Bull (1965).[4]

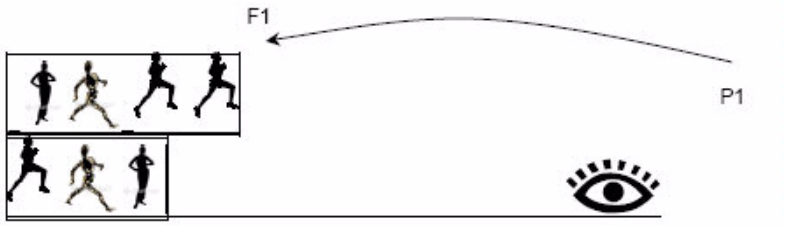
In the second study, Yáñez Prieto (2008) developed a different SCOBA to explain aspect to her students (see Figure 3 below). The SCOBA,

[3] Lantolf (forthcoming) provides concrete evidence of this process from a learner of French, who when trying to decide whether to use *imparfait* or *passe composé* demonstrates through her use of gesture that she had indeed constructed an internal image of the mirrors the SCOBA given by her instructor for use of verbal aspect in French.

[4] A more complete picture of aspect is presented in a recent study by Salaberry (2000).

in this case, is more imagistic than is Negueruela's, and in my view is therefore more readily internalized than Negueruela's, which relies far more on verbal content.



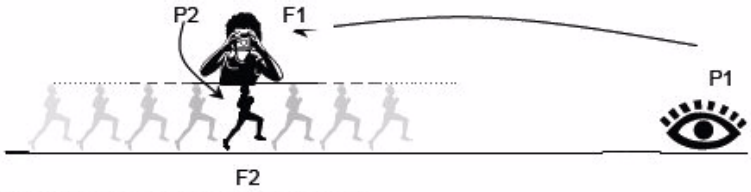


Ayer/ esa tarde *corrí*
Yesterday/that afternoon I ran

El año pasado *corrí* todos los días
Last year I ran every day

Corrí en un equipo de atletismo por dos años
I ran on a sports team for two years

IMPERFECTO (Jazmín *corría* →Jazmín ran)



Ayer/ en ese momento/ esa tarde *corría*
Yesterday/at that time/that afternoon he was running

Figure 3: SCOBA for Spanish Aspect (Yáñez-Prieto, 2008)

The advantage of the SCOBA in Figure 3 is that it illustrates quite clearly the importance of speaker perspective on an event or state when deciding which aspect to use. Thus, in the case of preterit, a speaker (or writer) can focus on the beginning or end of an event, regardless of the status of that event or state in real time. If on the other hand, a speaker wishes to bring the listeners attention to the mid-point of an event or state, the imperfect is the appropriate grammatical form to employ.

Yáñez Prieto linked the concept to practice through the reading, analysis, and discussion (oral and written) of Spanish literary texts. The catalyst through which the students experienced the full impact of aspect in making meaning was Julio Cortázar's short story *Continuidad de los parques.* According to Yañez Prieto the author's use of aspect challenged the typical rules of thumb approach. In Cortázar's story, the author plays with aspect in ways that obviously contradict rule-of-thumb pedagogy. For example, instead of using preterit to indicate that a character in the story entered a room or arrived on the scene, Cortázar casts these actions in the imperfect: "*Primero* ***entraba*** *la mujer, recelosa; ahora* ***llegaba*** *el amante, lastimada la cara por el chicotazo de una rama*" (Yañez Prieto, 2008) [bold and italics in original].

The story was then contrasted with a scene from a Spanish-language soap-opera which used aspect shifts in a very different way from Cortázar. The point was to raise learners' awareness of "free direct speech" represented in the soap-opera with "free indirect speech" represented in the stream of consciousness depicted in Cortázar's story (Yáñez Prieto, 2008). The instructor believed that the difference between the story and the soap-opera would create cognitive dissonance for the students that could be used to promote development. The students were then provided with activities where they had to transition between free direct and free indirect speech and explain the shifts in meanings that occurred in each case.

As in Negueruela's study, the initial encounter with the SCOBA created cognitive dissonance between the student's rule of thumb knowledge

and the coherent concept of aspect depicted in the SCOBA. Instead of asking students to tape record their explanations privately, as Negueruela had done, Yáñez Prieto conducted one-on-one interviews with her students, which were recorded for later analysis and evaluation. One student remarked that

> This week we learned about aspect and perspective. I feel that I am starting to understand that there are many more uses for the preterit and imperfect than those introduced in textbooks. **It is confusing however to grasp the idea that the preterit can be used to describe something in the past, when we have been taught the "rules" that the imperfect is used for description in the past**. (Yáñez Prieto, 2008) [Bold in original]

As Yáñez Prieto points out the comment does not reflect a reorientation toward a conceptual approach to aspect; instead, it indicates an attempt to expand the original rule of thumb to include preterit as an option for description in the past.

With further discussion and analysis of Cortázar's story the students gradually began to gain in confidence in their use of aspect. One student produced a narrative describing the night her parents announced to the family that their mother had become seriously ill. An excerpt from the story is given below:

> *Pero esa noche, mi papá no nos molestaba con sus preguntas y mi mama ni siquiera levantaba la vista de su plato. Esa noche, el silencio no era cómodo; era pesado y fuerte. Llenaba el cuarto, hundiendo a mi familia, y mis hermanas y yo cruzábamos miradas preocupadas. Algo no estaba bien.*

When verbalizing her reasons for use of aspect, the student stated that "*Although a lot of my paper could have been written in either imperfect or preterit, I tried to use each tense strategically to convey different meanings*. For example, when I was talking about the moments when we were in the dining room in silence, *I used imperfect to depict everything as if*

the reader was there in the middle of the action, seeing everything as it was happening" (Yáñez Prieto, 2008) [italics in original]

Later the student went to her mother's room to talk with her about the sad announcement:

> *Descendí la escalera lentamente, sin sentir los escalones bajo los pies. Con cada paso hacia su cuarto mi corazón latió más alto. Cuando llegué a su cuarto, era oscuro y callado y mi mamá estaba en la cama, los ojos cerrados.*

When verbalizing her explanation for the shift to preterit, the student asserted that "*I used preterit for all the verbs. This time I wanted to show each action as a complete act*" (Yáñez Prieto, 2008); [italics in original]

According to Yáñez Prieto, the student's aspectual choices violate the traditional rule-of-thumb explanation. For instance her use of imperfect to describe completed actions on the powerfully emotional evening related in her story runs squarely counter to what the rule of thumb states requiring preterit to recount completed actions in the past. The student's intent was to emphasize how that particular evening was radically different from all other evenings for the family and "how the piece of news [on her mother's health] forever altered the family routine" (Yáñez Prieto, 2008). The student went on to say that her intent in using the imperfect was to "talk about **the middle of the moment** and, like, … like, **let the reader see-up close**" (Yáñez Prieto, 2008) [bold in original]

4. Conclusion

The importance of Vygotsky's integration of *praxis*in his theory of mind cannot be overemphasized. It is at the heart of the theory's dialectical orientation to mental development. As Roth (2008) points out in his recent editorial published in *Mind Culture and Activity: An International Journal*, the dialectical aspect of the theory that has not been taken up in Western scholarship. The other concepts of the theory, including mediation, the ZPD,

regulation, internalization, private speech, the genetic method, lose something of their significance if praxis and the dialectic nature of the theory are not kept on center stage.

The argument I've been making throughout the discussion is that learning a second language under properly organized instructional conditions is a different process from learning it under other circumstances. The key expression here is "properly organized". According to the theory, this means making the dialectical link between scientific knowledge and practical activity, as called for in praxis, the guiding principle of instruction. If we leave learners to their own devices to struggle to figure out the workings of a new language in the educational setting and reduce instruction to setting tasks or stimulating communicative interaction, it would not be surprising to find that the process of learning in the classroom parallels that of learning in other circumstances. The point that Vygotsky is making when he refers to education as the artificial development of the person is that this need not be the case. Educational praxis, not as the application of the findings of basic research and theorizing, but as a theory in its own right, has the imperative of overcoming the limitations of everyday spontaneous development, where the object of learning is usually not fully visible.

The research surveyed in the present article illustrates the effects of fleshing out Vygotsky's theory of educational praxis with regard to L2 development. As we have been the essential components of this activity are materialization and verbalization. The latter process is indispensable for the internalization process because in overtly explaining the relevant concept and one's use of the concept the understanding one has itself becomes visible and open to inspection and modification (see Swain & Lapkin, 2002). The challenge with regard to the former process is the formation of a SCOBA that depicts the concept as coherently and as succinctly as possible. In the survey, we considered three alternative approaches to SCOBA design: a flow-chart containing a fair amount of verbal information, a highly imagistic schema, and a self-created clay model that entails tactile activity.

An interesting area for future research is to compare the relative effectiveness of various approaches to SCOBA construction on learning. A particularly attractive area in this regard is the potential of gestures to create useable images of a concept (see Lantolf forthcoming). Some of the recent work of Goldin-Meadow and her colleagues has shown that gestures can have powerful pedagogical effects on learning among children with attention deficit disorder (see Goldin-Meadow et al, 2001; Wang et al, 2004). Educational praxis and L2 learning is a research domain that sociocultural scholars can no longer ignore.

References

Aljaafreh, A., & Lantolf, J. P. (1994). Negative feedback as regulation and second language learning in the zone of proximal development. *The Modern Language Journal, 78*, 465-483.

Bernstein, R. J. (1971). *Praxis and action*. Philadelphia: University of Pennsylvania Press.

Bull, W. E. (1965). *Spanish for teachers*. Malabar, FL: Robert E. Krieger Publishing Company.

Carpay, J. A. M. (1974). Foreign language teaching and meaningful learning. A Soviet Russian point of view. *I.T.L. Review of Applied Linguistics 25-26,* 161-187.

Chaiklin, S. (2003). The zone of proximal development in Vygotsky's analysis of learning and instruction. In A. Kozulin, B. Gindis, V. Ageyev 7, & S. Miller (Eds.), *Vygotsky's educational theory in cultural context* (pp. 39-64). Cambridge: Cambridge University Press.

Davydov, V. V. (2004). *Problems of developmental instruction. A theoretical and experimental psychological study* (translated by Peter Moxhay). Moscow: Akademiya Press.

DeKeyser, R. M. (1998). Beyond focus on form: Cognitive perspectives on learning and practicing second language grammar. In C. Doughty & J. Williams (Eds.), *Focus on form in second language acquisition* (pp. 42-66). Cambridge: Cambridge University Press.

Di Pietro, R. J. (1987). *Strategic interaction*. Cambridge: Cambridge University Press.

Ellis, N. (2007). The associative-cognitive CREED. In B. VanPatten & J. Williams (Eds.), *Theories in second language acquisition. An Introduction* (pp. 77-98). Mahwah, NJ: Erlbaum.

Ellis, R. (2006). Current issues in the teaching of grammar: An SLA perspective. *TESOL Quarterly, 40,* 83-07.

Ferreira, M. (2005). *A concept-based approach to writing instruction: From the abstract concept to the concrete performance*. Unpublished doctoral dissertation. The Pennsylvania State University. University Park, PA.

Ferreira, M., & Lantolf, J. (2008). A concept-based approach to teaching writing through genre analysis. In J. P. Lantolf & M. E. Poehner (Eds.), *Sociocultural theory and second language teaching* (pp. 285-320). London: Equinox.

Gal'perin, P. Ya. (1967). On the notion of internalization. *Soviet Psychology, 5,* 28-33.

Gal'perin, P. Ya. **(**1979). The role of orientation in thought. *Soviet Psychology*, *18,* 19-45.

Gass, S. M., & Mackey, A. (2007). Input, interaction, and output in second language acquisition. In B. VanPatten & J. Williams (Eds.), *Theories in second language acquisition. An introduction* (pp. 175-200). Mahwah, NJ: Erlbaum.

Goldin-Meadow, S., Nusbaum, H., Kelly, S. D., & Wagner, S. (2001). Explaining math: Gesturing lightens the load. *Psychological Science, 12*, 516-522.

Hammerly, H. (1982). *Synthesis in language teaching: An introduction to linguistics*. Blaine, WA: Second Language Publications.

Ilyenkov, E. V. (1974). Activity and knowledge. http://www.marxists.org/

archive/ilyenkov/works/activity/index.html

Karpov, Y. V. (2003). Vygotsky's doctrine of scientific concepts: Its role for contemporary education. In A. Kozulin, B. Gindis, V. S. Ageyev, & S.

Miller (Eds.), *Vygotsky's educational theory in cultural context* (pp. 65-83). Cambridge: Cambridge University Press.

Kozulin, A. (1995). The learning process: Vygotsky's theory in the mirror of its interpretations. *School Psychology International, 16,* 117-29.

Krashen, S. D. (1981). *Second language acquisition and second language learning*. Oxford: Pergamon.

Krashen, S. D. (1985). *The input hypothesis: Issues and implications*. New York: Longman.

Lantolf, J. P. (2000). Introducing sociocultural theory. In J. P. Lantolf (Ed.), *Sociocultural theory and second language learning* (pp. 1-26). Oxford: Oxford University Press.

Lantolf, J. P. (forthcoming). Minding your hands. In R. Batstone (Ed.). *Sociocognitive aspects of second language learning and teaching*. Oxford: Oxford University Press.

Lantolf, J. P., & Appel, G. (1994). Theoretical framework: an introduction to Vygotskian perspectives on second language research. In J. P. Lantolf & G. Appel (Eds.), *Vygotskian approaches to second language research* (pp. 1-32). Norwood, NJ: Ablex.

Lantolf, J. P., & Poehner, M. E. (2004). Dynamic assessment: Bringing the past into the future. *Journal of Applied Linguistics, 1*, 49-74.

Lantolf, J. P. & Poehner, M. E. (2007). *Dynamic assessment: A teacher's guide*. University Park, PA: CALPER Publications.

Lantolf, J. P., &. Poehner, M. E (Eds.). (2008). *Sociocultural theory and the teaching of second languages*. London: Equinox.

Lapkin, S., Swain, M., & Knouzi, I. (2008). French as a second language. University students learn the grammatical concept of voice: Study design, materials development, and pilot data. In J. P. Lantolf & M. E.

Poehner (Eds.), *Sociocultural theory and the teaching of second languages* (228-255). London: Equinox.

Larsen-Freeman, D., & Long, M. H. (1991). *Introduction to second language acquisition research*. London: Longman.

Long, M. (1998). SLA: Breaking the siege. *University of Hawai'i working papers in ESL, 17,* 79-129.

Negueruela, E. (2003). *A sociocultural approach to the teaching-learning of second languages: Systemic-theoretical instruction and L2 development*. Unpublished doctoral dissertation. The Pennsylvania State University. University Park, PA.

Oboukhova, L. F., Porshnev, A. V., Porshneva, E. R., & Gaponova, S. A. **(**2002). '*Konstruirovanie komp'uternoj obuchayushej programmy na osnove teorii P. I. Gal'pernina'*. [Constructing a computer-based instructional program on the basis of P. Y. Galperin's theory]. *Voprosy Psikhologii*, *5,* 103-114

Pienemann, M. (1998). *Language processing and second language development. Processability theory*. Amsterdam: John Benjamins.

Poehner, M. E. (2008). *Dynamic assessment: A Vygotskian approach to understanding and promoting L2 development*. Berlin: Springer.

Poehner, M. E., & Lantolf, J. P. (2005). Dynamic assessment in the language classroom. *Language Teaching Research. 9,* 233-265.

Roth, W. M. (2008). Realizing Marx's ontology of difference. *Mind, Culture, and Activity: An International Journal, 15,* 87-92.

Salaberry, M. R. (2000). *The development of past tense morphology in L2 Spanish*. Amsterdam: John Benjamins.

Sanchez Vazquez, A. (1977). *The philosophy of praxis*. London: Merlin Press.

Serrano-López, M., & Poehner, M. E. (2008). Materializing linguistic concepts through 3-D clay modeling: A tool-and-result approach to mediating L2 Spanish development. In J. P. Lantolf & M. E. Poehner (Eds.), *Sociocultural theory and the teaching of second languages* (pp. 321-350). London: Equinox Press.

Swain, M. & Lapkin, S. **(**2002). Talking it through: Two French immersion learners' response to reformulation. *International Journal of Educational Research, 37,* 285-304.

Talyzina, N. (1981). *The psychology of learning*. Moscow: Progress Press.

Tarone, E. (2007). Sociolinguistic approaches to second language acquisition research—1997-2007. *The Modern Language Journal, 91*, 837-348.

Thorne, S. L., Reinhardt, J., & Golombek, P. (2008). Mediation as objectification in the development of professional academic discourse: A corpus-informed curricular innovation. In J. P. Lantolf & M. E. Poehner (Eds.), *Sociocultural theory and the teaching of second languages* (pp. 256-284). London: Equinox.

van Parreren, J. (1975). Grammatical knowledge and grammatical skill. In A. J. Van Essen & J. P. Menting (Eds.), *The Context of Foreign Language Learning* (pp. 28-36). Assen, The Netherlands: van Gorcum & Company.

Vygotsky, L. S. (1987). *The collected works of L. S. Vygotsky. Volume 1. Problems of general psychology. Including the volume Thinking and speech. In* (Eds.), Robert W. Rieber and A. S. Carton). New York: Plenum.

Vygotsky, L. S. (1997). *The collected works of L.S. Vygotsky. Volume 3. Problems of the Theory and history of psychology* (R. W. Rieber & J. Wollock eds.) New York: Plenum.

Vygotsky. L. S. (2004). The historical meaning of the crisis in psychology: A methodological investigation. In R. W. Rieber & D. K. Robinson

(Eds.), *The essential Vygotsky* (pp. 227-344). New York: Kluwer/Plenum.

Wang, X-L., Bernas, R., & Eberhard, P. (2004). Engaging ADHD students in tasks with hand gestures: A pedagogical possibility for teachers. *Educational Studies, 30,* 217-229.

Whitley, M. S. (1986). *Spanish/English contrasts*. Washington, DC: Georgetown University Press.

Yáñez Prieto, C. M. (2008). *On literature and the secret art of invisible words: Teaching literature through language*. Unpublished doctoral dissertation. The Pennsylvania State University, PA.

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