

Sociocultural Theory and the Genesis of Second Language Development 社会文化理论 与二语发展的起源

James P. Lantolf
Steven L. Thorne



用语言学儿士

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图书在版编目(CIP)数据

社会文化理论与二语发展的起源/(美) 兰道尔夫(Lantolf, J.P.), (美) 索恩(Thorne, S.L.) 著。

一上海: 上海外语教育出版社, 2012

(生津应用语言学从书)

ISBN 978-7-5446-2910-2

I. ①社··· Ⅱ. ①兰··· ②索··· Ⅲ. ①外语教学—教学理论—英文IV. ①H09

中国版本图书馆CIP数据核字(2012)第235227号

图字: 409-2011-691号

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was originally published in English in 2006. This bilingual edition is published by arrangement with Oxford University Press.

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出版发行:上海外语教育出版社

(上海外国语大学内) 邮编: 200083

电 话: 021-65425300 (总机)

电子邮箱: bookinfo@sflep.com.cn

网 址: http://www.sflep.com.cn http://www.sflep.com

责任编辑: 张亚东

印 刷: 上海叶大印务发展有限公司

开 本: 890×1240 1/32 印张 13 字数 557千字

版 次: 2013年3月第1版 2013年3月第1次印刷

印 数: 2000 册

书 号: ISBN 978-7-5446-2910-2 / H · 1420

定 价: 41.00 元

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J. P. Lantolf S. L. Thorne

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本世纪初,外教社先后引进"牛津应用语言学丛书" (19种)和"牛津应用语言学丛书(续编)"(10种)。这 些图书由于内容权威、选择精当而受到了外语界的好评,在 科研论文中被广泛引用,对推动我国外语教学和研究的发展 起到了重大作用。

近年来,随着研究的不断扩展和深入,国内学界对研究资料有了新的需求,像"任务型教学法"、"英语作为国际通用语"、"二语习得的跨学科研究"等逐渐成为了热门的话题。有鉴于此,我们又从牛津大学出版社出版的应用语言学图书中精选了10本,以更好地满足广大教师和科研人员的需求。希望这次出版的这10本图书,能够和以前的29本一起,反映出国际应用语言学重要领域研究的前沿,为全面、深入推动我国外语科研起到新的作用。做出新的贡献。

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JPL—For Gabi

SLT-For Cecilia, Isabella, and Benicio

Acknowledgments

We would like to thank all of our colleagues working within cultural historical approaches to research (cultural psychology, activity theory, and sociocultural theory) who, over the years, have helped us organize and crystallize our thinking about the theory and its relevance for second language learning. In particular, we would like to thank the individuals who have participated in the annual meeting of the Sociocultural Theory and Second Language Learning Working Group, which has been providing us with stimulating and provocative issues to consider for the past eleven years. We owe a great debt to this group's passionate capacity for contestation and congruent prolepsis. We would also like to thank the students who have participated in our seminars and who have written doctoral dissertations on various aspects of Vygotsky-inspired theory, much of which we have drawn upon directly and indirectly in producing this book. We thank Steve McCafferty, in particular, for the many conversations and e-mail exchanges we have had over the years on SCT and L2 learning that have contributed to this work. We also thank Rod Ellis, whose enduring interest, skepticism, and probing questions about SCT and L2 learning helped us immeasurably as we wrote many of the chapters that follow. We owe a special debt of gratitude to Merrill Swain for her insightful comments on various versions of the manuscript and for her encouragement as we struggled to produce this volume. A word of thanks goes to Simon Murison-Bowie for his careful reading and feedback on the manuscript and for what he has called 'niggling' questions. Because of his 'niggles' the manuscript is greatly improved.

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SOURCES

Cognitive Development: Its Cultural and Social Foundations by A. R. Luria, Harvard University Press.

The Cultural-Historical Development of Verbal Thinking by P. Tulviste, Nova Science Publishers(NY).

Language and Gesture, ed. D McNeill, Cambridge University Press (NY). Vygotsky and the Social Formation of the Mind by J. V. Wertsch, Harvard University Press.

Human Memory and Cognitive Capabilities: Mechanisms and Performance ed. F. Klix and H. Hagendorf, Elsevier Amsterdam.

'Computers in mediated human activity' by S. Bødker, Mind, Culture and Activity: An International Journal.

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1 Introduction

Our purpose in writing this book is to describe the history and continuing development of Vygotsky-inspired research and its application to secondand foreign-language developmental processes and pedagogies. Vygotskian cultural-historical psychology, often called sociocultural theory in applied linguistics and SLA research (see discussion below), offers a framework through which cognition can be systematically investigated without isolating it from social context. As Lantolf (2004: 30–1) explains, 'despite the label "sociocultural" the theory is not a theory of the social or of the cultural aspects of human existence....it is, rather,...a theory of mind...that recognizes the central role that social relationships and culturally constructed artifacts play in organizing uniquely human forms of thinking'.

The relationships between human mental functioning and the activities of everyday life are both many and highly consequential. Participation in culturally organized practices, life-long involvement in a variety of institutions, and humans' ubiquitous use of tools and artifacts (including language) strongly and qualitatively impact cognitive development and functioning. Within the Vygotskian tradition, culture is understood as an objective force that infuses social relationships and the historically developed uses of artifacts in concrete activity. An understanding of culture as objective implies that human activity structures, and is structured by, enduring conceptual properties of the social and material world. In this sense, culture is (1) supraindividual and independent of any single person, and (2) rooted in the historical production of value and significance as realized in shared social practice'.1 (See Bakhurst 1991; Cole 1996 for discussions.) Language use and development are at the core of this objective characterization of culture both at the level of local interaction (actual communicative activity) as well as that of society and the nation state in arenas such as language policy and ideology, and public education as mass social intervention (to name but a few). As we will discuss briefly below and in greater detail in the chapters dealing with mediation, culturally constructed meaning is the primary means that humans use to organize and control their mental functioning, and for this reason, language development and use plays a central role in Vygotsky's theory of mind.

Sociocultural theory is a theory of the development of higher mental functions that has its roots in eighteenth- and nineteenth-century German

philosophy (particularly that of Kant and Hegel), the sociological and economic writings of Marx and Engels (specifically Theses on Feuerbach and The German Ideology), and which emerges most directly from the research of the Russian psychologist L. S. Vygotsky and his colleagues. While research establishing the relevance of culture to the formation of human mental life has been carried out within the social sciences for over a century, contemporary neuroscience research also demonstrates that phylogenetically recent cortical areas of the brain (specifically the prefrontal cortex) are hyper-adaptive to use and experience. (See Ledoux 2002.) A growing mass of evidence from a variety of disciplines has established strong connections between culture, language, and cognition, and this is nowhere more relevant than in application to organized education, where environment, information, and behavioral processes are (ostensibly) engineered to create optimal conditions for learning and development.

Sociocultural terminologies—what's in a name?

Before we proceed further, we believe that a terminological clarification is necessary. In part due to its use by multiple research communities, there has been considerable and understandable debate about the label 'sociocultural theory'—what it means, whom it belongs to, and what its intellectual lineage is. (A colloquium at the American Association for Applied Linguistics organized by Zuengler and Cole (2004) addressed this very issue.) There exists a general use of the term 'sociocultural', sometimes hyphenated as 'socio-cultural', in general reference to social and cultural contexts of human activity (for example, Heath 1983; Ochs 1987; Ochs and Schieffelin 1984). L2 researchers, most especially Norton (2000) and her colleagues (Norton and Toohev 2004), have also situated their research within the broader sociocultural domain. This research is concerned primarily with socialization and the discursive construction of identities (for example, gender, foreigner, native, worker, child, etc.) and is certainly theoretically commensurate with the intellectual project we develop with this volume. However, the term 'sociocultural theory' as we use it is meant to invoke a much more specific association with the work of Vygotsky² and the tradition of Russian cultural-historical psychology, especially within applied linguistics research. (See Donato 1994; Frawley and Lantolf 1985; Lantolf 2000; Lantolf and Appel 1994; Swain 2000; Thorne 2000b; 2005.) Moreover, it is heavily focused on the impact of culturally organized and socially enacted meanings on the formation and functioning of mental activity. Our adoption of the term 'sociocultural theory' in this second and more constrained sense presents a paradox in that it is unlikely that Vygotsky himself ever used the term. James Wertsch, in particular, has encouraged the adoption of 'sociocultural' over 'cultural-historical' to intentionally differentiate the appropriation of Vygotskian theory into the West from certain

negative entailments found in the Russian tradition. (See Wertsch, del Río, and Alvarez 1995.) The critique is that the term 'cultural-historical' brings with it colonialist and evolutionist overtones that position industrialized societies as superior to developing societies and those without Western scientific cultures and literacies. While we agree that this is a serious problem in much of the post-Enlightenment and early twentieth-century research in psychology, education, linguistics, and anthropology, in our estimation a simple name change does not rectify the situation. Another common usage problem is that the choice of 'sociocultural' provokes confusion in that this term is used in a wide array of current as well as historical research that is in no way linked to the Marxist psychology that emerged in the writings of Vygotsky, Luria, and A. N. Leont'ev.

In sum, and despite our preference for the label 'cultural-historical psychology', due to the inertia and name recognition of 'sociocultural theory' (hereafter SCT) for the multiple lineages of Vygotsky-inspired research in applied linguistics, we continue with this convention (and have been urged by our publisher to do so). While current SCT approaches include numerous and somewhat divergent emphases, all would agree with Wertsch (1995: 56) that 'the goal of [such] research is to understand the relationship between human mental functioning, on the one hand, and cultural, historical, and institutional setting, on the other'.

The remainder of this introductory chapter has two primary goals: to present an overview of the organization of the book, and to outline an orientation to language and communicative activity that is compatible with the theory of mind and mental development that informs our discussion of L2 learning. We address the second of these topics first.

Developing a sociocultural orientation to language and communicative activity

A challenge to many approaches to SLA is that, while aspects of any given model and/or theory may be well-defined, an explicit statement about what language is and how language operates in thinking and communicative activity is frequently underspecified. SCT is no exception, though both historical and recent studies specifically oriented toward this problem exist (for example, R. Engeström 1995; Thorne and Lantolf 2006; Vološinov 1973; Vygotsky 1987; Wells 1999; 2002). In their critical review of SCT, Mitchell and Myles (1998: 161) suggest that SCT researchers 'do not offer any very thorough or detailed view of the nature of language as formal system'. They ask if the theory sees language as a rule-governed system, or 'a patchwork of prefabricated chunks and routines, available in varying degrees for recombination?' (p. 161). Motivated in part by this substantive critique, we will describe a perspective on language as communicative activity that is commensurate with SCT's essential tenets. To

foreshadow the discussion, we want to stress that we are not going to propose a formal theory of language, but we are going to argue that because SCT is a theory of mediated mental development, it is most compatible with theories of language that focus on communication, cognition, and meaning rather than on formalist positions that privilege structure.

As Fauconnier and Turner (2002: 3) note, 'we live in the age of the triumph of form. In mathematics, physics, music, the arts, and the social sciences, human knowledge and its progress seem to have been reduced in startling and powerful ways to a matter of essential formal structures and their transformations'. Indeed, nearly a century of linguistic research has revealed language to be an 'astonishingly complex' phenomenon (Fauconnier and Turner 2002: 4). On the other hand, they caution that scientific knowledge of language entails more than uncovering 'deep hidden forms', because there is also the matter of substance to be dealt with: 'the blueprint is not the house, the recipe is not the dish, the computer simulation of weather does not rain on us' (p. 4), and to cite their most forceful example, it is not his armor that made Achilles 'so formidable' (p. 5). Meaning, for far too long the overlooked component of formalist approaches to language study, needs to be brought back to its proper place alongside form. The suggestion to recover meaning in language research may sound surprising given the vibrancy of the literature on communicative language teaching and negotiation of meaning. The kinds of meaning we are referring to, however, are conceptual (not referential) ones that mediate thinking. Examples are conceptual metaphor theory, lexical networks, construal, usage-based models of language acquisition, and linguistic relativism. Discussion of this research is distributed throughout the volume.

Saussure, in his attempt to construct a scientific linguistics on a par with the physical sciences, made two critical moves that had a profound and enduring impact on the way linguistics is practiced in the West. The first was to background the importance of time (i.e. history) and the second was to assign language the ontological status of thing on a par with other things, although of course not a material thing (Crowley 1996: 18). Once language was reified into a more or less stable object,3 it could be studied through the lens of science, which meant the study of its form, not the meanings that humans created through its use. The result was that meaning (primarily referential) was considered to reside in the signs themselves rather than in the interaction between human beings engaged in concrete goal-directed material activity. According to Agar (1994: 37), the effect of Saussure's bifurcation of language into langue and parole and the subsequent snubbing of the latter was to build a 'circle around language' whereby language comprises an 'inventory of symbols with a system that ties them together' and as such it becomes 'pure, clean, a steel skyscraper arising from the chaos in the streets' (ibid.).

This stance calls into question both 'the ontological distinction between language and the world and the epistemological one between knowledge of

language and knowledge of the world' (Hanks 1996: 119). This position blurs the distinction between linguistic type and linguistic token, or what for Saussure is the langue/parole distinction and for Chomsky the competence/ performance separation. (NB: we are not suggesting that langue/parole and competence/performance are co-equivalent.) According to Hanks, accepting the Saussurian/Chomskvan distinction 'we are led inevitably to search for underlying signification lodged within language, by which it corresponds to an external reality' (ibid.). If on the other hand, we assume a co-dependence between the two, 'we are led to search for the common elements and pathways by which they communicate' (p. 120) and to situate meaning not in language per se but in concrete human activity in the world of social interaction.

Bloomfield, in Agar's view, drew the Saussurian circle around language even tighter when he proposed that the scientific study of language was to focus exclusively on the sound system and the grammar and consequently banished the study of meaning to psychology (Agar 1994: 56). In effect, the Bloomfieldian circle, even more than the Saussurian circle, hermetically sealed language off from all contact with culture. Agar proposes bringing language and culture (i.e. the activity of people making sense of the world) back together, as they were intended to be in the early work of cultural anthropologists such as Boas, Malinowski, and Sapir. Agar refers to the organic union of language and culture with the functional, if unwieldy, neologism 'languaculture' (p. 60). The concept of languaculture penetrates, if not tears down completely, the circle around language and in so doing re-establishes the unity between people and their fundamental symbolic artifact. The sense of meaning expressed by languaculture is not of the referential sort (signifier-signified) described by Saussure; rather, it is comprised of conceptual meanings created by communities of speakers as they carry out goal-directed activity mediated by language. All of this is not to argue that form does not matter—it does. It is to argue, however, that meaning and form are dialectically dependent upon one another and that one without the other presents a distorted picture of language, or more precisely, of languaculture.

In particular, as will become apparent in the chapters dealing with mediation and L2 learning, cognitive linguistics is an especially attractive partner for SCT: it brings culturally organized meaning (i.e. conceptual metaphors) to center stage. From the perspective of languaculture and cognitive linguistics, learning a new language is about much more than acquiring new signifiers for already given signifieds (for example, the Spanish word for 'fork' is tenedor). It is about acquiring new conceptual knowledge and/or modifying already existing knowledge as a way of re-mediating one's interaction with the world and with one's own psychological functioning. Once the circle is opened up, relevant forms of communicative activity are no longer limited to verbal language. Gestures, as theorized by David McNeill and his colleagues (see McNeill 1992; McNeill and Duncan 2000), also take on significance for L2 learners—a topic that we address in the chapters on mediation.

We reserve discussion of the relevance of cognitive linguistics for Chapters 4 and 5 where we address concept-based mediation. In the section which now follows, we elaborate on the connections between language and culture by offering the reader a general sense of what a linguistics of communicative activity (hereafter, LCA) can provide. We illustrate how this approach to language analysis can inform L2 learning and use in Chapters 3 and 4 where we consider Frawley's (1997) model of private speech and in Chapters 6 and 7 where we address Tomasello's (2003) usage-based model of language acquisition. Given the incipient nature of LCA research, this discussion, for the time being, will be limited. We begin the discussion of the LCA approach by drawing upon models of language within which the segregation of language from culture never occurred, in particular the view of language represented in the Russian cultural-historical tradition.

Developing a linguistics of communicative activity

A. A. Leontiev (1981) describes the field of psycholinguistics as having three stages since its inception in the 1950s. The first generation, represented in the work of researchers such as Charles Osgood and Thomas Sebeok, was based on descriptive linguistics and behaviorist psychology. Its goal was to understand how individuals acquire and master discrete linguistic elements. The problem with the assumptions of the first generation, according to Leontiev, is that 'it is a speech theory about the behaviour of the individual, isolated not only from society but also from any real process of communication, as such communication is reduced to the most elementary model of information transfer from speaker to listener' (p. 92).

The second generation, under the influence of Chomsky's early linguistic theory (i.e. Syntactic Structures (1957) and Aspects of the Theory of Syntax (1965)) and George Miller's model of linguistic processing (Miller 1951; 1962), overcame the atomism of the first generation in its claim that what is acquired and what underlies linguistic performance is a system of rules. However, the second generation, in Leontiev's view, continued to maintain the individualism of the first generation, with the social environment serving only to trigger innately specified linguistic principles (p. 93). Moreover, Leontiev contends that the second generation is primarily linguistic rather than psychological in scope, despite claims to the contrary; that is, psychological processes are reduced 'to mere speech manifestation of linguistic structures' (p. 93). Finally, the unit of analysis of the second generation is the sentence, a unit that within the LCA perspective has no concrete reality and is studied 'outside the real communication circuit' (p. 94), where the appropriate unit of analysis is the utterance. (See below.) Thus, in acquisition and in experimental research of the second generation, what is acquired and what is processed is the abstract system of principles, parameters, and rules that are assumed to underlie human linguistic performance.

The third generation of psycholinguistics is the generation characterized by its concern with the interaction between communicative activity and psychological processes, such as voluntary memory, planning, learning and development, attention, and thinking. The third generation eschews interest in the psycholinguistics of the sentence and focuses instead on the utterance as its basic unit of analysis. From this perspective, language teaching and learning is not focused on rule-governed a priori grammar systems that must be acquired before people can engage in communication, but is instead concerned with enhancing learners' communicative resources that are formed and reformed in the very activity in which they are used—concrete, linguistically mediated social and intellectual activity (p. 99).

Dialogism and contextual meaning potential

Wittgenstein (1958), in his Philosophical Investigations, 4 introduced the idea of 'language game' to underscore that language is 'inextricably bound up with the non-linguistic behaviour which constitutes its natural environment' (McGinn 1997: 43). This is in opposition to 'the idea of language as a system of meaningful signs that can be considered in abstraction from its actual employment. Instead of approaching language as a system of signs with meaning, we are prompted to think about it in situ, embedded in the lives of those who speak it' (McGinn 1997: 44). Wittgenstein recognizes the biological substrate on which human consciousness is built, but like Vygotsky, he insists that human life is fundamentally cultural and as such is mediated by languaging activity (i.e. language games) that is implicated in the non-linguistic activities of human agents.

To illustrate his idea of language game, Wittgenstein presents the frequently cited example of a stone mason and his assistant building a wall. The mason calls out to his assistant the utterance 'Slab!' to which the assistant responds by picking up the appropriate stone and passing it to the mason. At issue is how is it that the assistant knows precisely how to respond to the mason's utterance? In a linguistics of a priori meanings and forms, a likely explanation would be that both the mason and his assistant understand the utterance 'Slab' to mean 'Bring me a slab'; hence, the single word utterance represents a reduction of the full underlying imperative sentence. Wittgenstein then asks how it is that when the stone mason produces 'Slab' he really means 'Bring me a slab'. Does the speaker say to himself the full sentence before uttering the shortened version and does the assistant then expand the single-word utterance into the full imperative before fetching an appropriate piece of stone? For Wittgenstein, the answer to both questions is decidedly 'No'. Furthermore, he asks, why can't things be the other way around—when someone says 'Bring me a slab' the person really means the extended form of the sentence 'Slab'? For Wittgenstein, meaning does not reside in some abstract underlying sentence