Flat CHAT? Reassembling literate activity
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Introduction

   Since the 1980s, theories and research on genre, writing, and literacy have converged

on the need to locate writing within some kind of social context and some socially-

oriented account of learning. The field has seen several candidates for describing <u>social</u>

<u>context</u>: Discourses (a la Foucault) and discourse communities arriving in the early

1980s, communities of practice in the early 1990s, and by the mid-1990s the notion of

activity systems. To understand how writers *acquire* the specialized genre practices and

discourse values *of* particular groups or *for* particular settings, scholars have looked

mainly to some Vygotsky-flavored account of learning as the interiorization/

appropriation of social interaction or some anthropological account of people's

apprenticeship into cultural practices.

   In this talk, I am articulating a particular perspective on these questions of context

and learning, a perspective that integrates certain versions of cultural-historical activity

theory (CHAT) and Actor-Network Theory (ANT), an integration that could be signaled

by saying that I am interested in CHATing with ANT, ANTing CHAT or ANT CHAT,

but that I chose to refer to as Flat CHAT because flat versus vertical forms of social

association have recently emerged within CHAT itself from relatively endogenous

contradictions.

CHAT

   CHAT has, in one form or another, been widely taken up by writing studies scholars,

including Steve Witte, David Russell, Christina Haas, Linda Flower, Charles Bazerman, Sarah Freedman, Anne Dyson, Clay Spinuzzi, Carol Berkenkotter, Arnetha Ball, Peter Medway, Aviva Freedman, Christine Tardy, Elizabeth Wardle, Kevin Leander, Cheryl Geisler, Jody Shipka, Melanie Sperling, and Peter Smagorinsky. In her 2004 Chair's address at the Conference on College Composition and Communication, Kathleen Blake Yancey singled out activity theory at several points as a foundation for a new model of composing that would redefine the field of composition. CHAT has been attractive because it appears to offer both a way of defining context (as durable activity systems or mediated activity) and a rich, social notion of learning.

In a broad sense, CHAT refers to the synthesis that has brought together Vygotskyan psychology, Voloshinovian and Bakhtinian semiotics, and situated, phenomenological work in sociology and anthropology. The journal *Mind, Culture, and Activity* has illustrated the full range of such work. This field has been variously named and divided, as theory is paired with sociohistoric, sociocultural, activity, (neo)Vygotskyan, and practice. However, CHAT is sometimes used in a narrower sense. Today as I propose a Flat CHAT framework, I will often be focusing on work aligned with Leont'ev's activity theory as reworked by Engestrom and Cole and typically marked by use of Engestrom's expanded triangle visualization of activity systems. This line has been taken up in writing research, prominently by David Russell, Clay Spinuzzi, and Cheryl Geisler.

CHAT argues that activity is situated in concrete interactions that are simultaneously improvised locally and mediated by historically-provided tools and practices. Those

tools and practices—or mediational means—range from machines, made-objects, and semiotic means (like languages, genres, iconographies), to institutions, structured environments, domesticated animals and plants, and, indeed, people themselves. The key unit of analysis for CHAT then is mediated activity. It involves externalizations (speech, writing, the manipulation and construction of objects and devices) and co-action (with other people, artifacts, and elements of the social-material environment) as well as internalizations (perception, learning). As objects and environments register the consequences of human activity, they come to embody interested human projects and values in the form of affordances. Mediated activity also means that action and cognition are distributed over time and space and among people, artifacts, and environments. In activity, people are socialized as they appropriate cultural resources, but also individuated as their appropriations historically accumulate to form a particular individual. Methodologically, CHAT still looks back to the fundamental insight of Vygotsky and Luria, that mature human practices are difficult to study because they are so fast, fluent, dense, and condensed that much is not visible. To address this challenge, they identified two methodological strategies, study of practices in their early genesis (of early learning) and study of practices as they have been disrupted (of breakdowns and contradictions). Early genesis and breakdowns give observers an opportunity to see how a practice is composed (or how it decomposes). The somewhat narrower sense of CHAT I mentioned agrees with these basic precepts, but has focused on defining a particular understanding of *activity* and *activity systems* that emphasizes their collective rather than individual character. (It has, thus, been less

interested than Vygotsky or his colleagues in how mental functioning works.) The expanded triangle is a key index of this line of theorizing
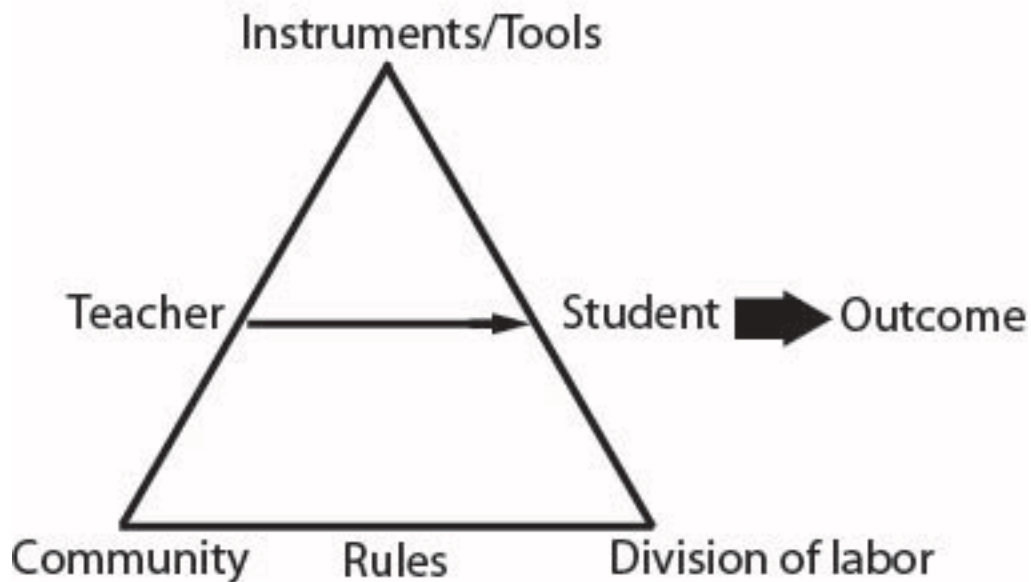
The expanded triangle takes the basic relation of a subject acting on an object through use of a mediated means and adds in a social dimension: of rules, a community, a division of labor. The aim of this triangle is to shift the unit of analysis from the level of the individual to the level of the social collective.

ANT

Bruno Latour has been at the center of Actor-Network Theory since his and Steve Woolgar's earliest work *Laboratory Life* (1979/1986), a book that documents their attempt to respecify the philosophy and sociology of knowledge and science in terms of the concrete practices of scientists. Taking up an ethnographic, phenomenological, and skeptical approach to laboratory science, Latour and Woolgar identified the importance of *translations*, of cascades of inscriptions as, for example, a series of laboratory bench

notes and various dispersed labels on samples and so forth were linked to a print-out from a measurement device, which was taken to an office where a scientist made a graph, where a series of graphs were worked through and described in prose, which eventually led to a published article, reference to which appears in a successful grant application that brings in money to support continued bench work. They also identified the critical role of *black boxes* whether material —as in measurement devices whose results assume a whole history of technical and theoretical givens—or semiotic—as in facts whose origins and status as claims have been stripped away. In *Science as Action* (1987), Latour began to articulate ANT as a theory of society as well as of science. In terms of science, he contrasted *science in the making* with *science made*. In terms of society, Latour began to consider how cascades of inscriptions (particularly those he identified as *immutable mobiles*) could come together in centres of calculation and how black boxes more broadly might give form and direction to wide networks of social associations (defined as associations of humans and nonhumans). Methodologically, and with no connection I can discern to Vygotsky and Luria, Latour <u>also</u> settled on genesis and disruption as key for researchers and participants to become aware of how things come together. Looking at things-as-they-are-made or things-as-they-are-disrupted allows for an understanding of how a network has been composed and hardened that is difficult, if not impossible, to attain when things are functioning as unproblematic black boxes in hardened networks.

In one of his recent works, *Reassembling the social*, Latour (2005) clarified his general critique of sociological thinking for its reliance on predetermined social groupings and

lays out the principles behind the flat rhizomatic ontology of actor-network theory. Latour notes that ANT begins with the notion that "there is nothing specific to social order, that there is no social dimension of any sort, no 'social context', no distinct domain of reality to which the label 'social' or 'society' could be attributed, that no 'social force' is available to explain the residual features other domains cannot account for…" (p. 4). Instead of pre-defined social things, Latour, invoking Gabriel Tarde and (with some qualifications) Harold Garfinkel, argues for sociology as a study of associations, how "heterogeneous elements might be assembled [and reassembled] in some given state of affairs" (p. 5). This focus on associations and links leads Latour to say "ANT has tried to render the social world as flat as possible in order to ensure that the establishment of any new link is clearly visible" (p. 16). He offers three moves as central to flattening out the 3-dimensional body politic of traditional sociology and pursuing a 2-D cartography:

- Localizing the global, see how it is *located in* specific sites and moments
- Redistributing the local, seeing how it *leads beyond* a site and moment
- Connecting sites, seeing the links in networks, the chains of localities, events, objects, people that are drawn together in trajectories.

FLAT CHAT

The notion of Flat CHAT is working to articulate Latour's call for a flat sociology with CHAT, whose durable activity systems have been anchored in well-established

institutions (school, work, organization). At the same time, it aims to add CHAT's attention to artifacts, mediated activity, and learning/development in humans to ANT.

First, let me to return to activity theory and the expanded triangle. Consider this abstract representation of an educational activity system. A teacher is in the subject position, students' learning is object, the rules, community, and division of labor would all be centered in schools. Leont'ev's (1978, 1981) account of social practice involved three analytic levels: *activity*—durable, social projects defined by collective motives and associated with collective subjects; *action*—conscious/intentional acts oriented to the goals of an individual; and *operation*—the dimensions of social practice conditioned by environments and artifacts that have crystallized traces of past activity and action within them as affordances.

Engestrom's work has centered on organizational interventions. It is a methodology for organizational change. For these interventions, the triangle becomes a shared tool for workers and researchers alike, a heuristic which is deployed, alongside ethnographic and situated data, in order to identify contradictions, contradictions being important because they represent not just points of breakdown, where practices become visible but also points where the system is in need of and particularly ripe for change. While the expanded triangle has been an effective tool for intervention, it has also tacitly encouraged the theory to take the organizational map as its theoretical map.

However, what if we add into the activity system its appearance from the perspective of the student (see Cole & Engestrom, 1993, who played with such visualizations in the SMO triangle, and the image below). Is every student captured by this diagram? Is a

teacher's object or the tools employed in a school purely a representation of schooling?

Contrast the clean lines of the triangle with Wortham's (2006) representation of situated

interactions in school, where he found that "subject matter, argument, evidence, and

academic learning intertwine with social identification, power relations, and

interpersonal struggles in classrooms" (p. 11), that they are blended not separate

domains. What is a powerful heuristic for organizational intervention may be a quite

problematic representation theoretically for activity.
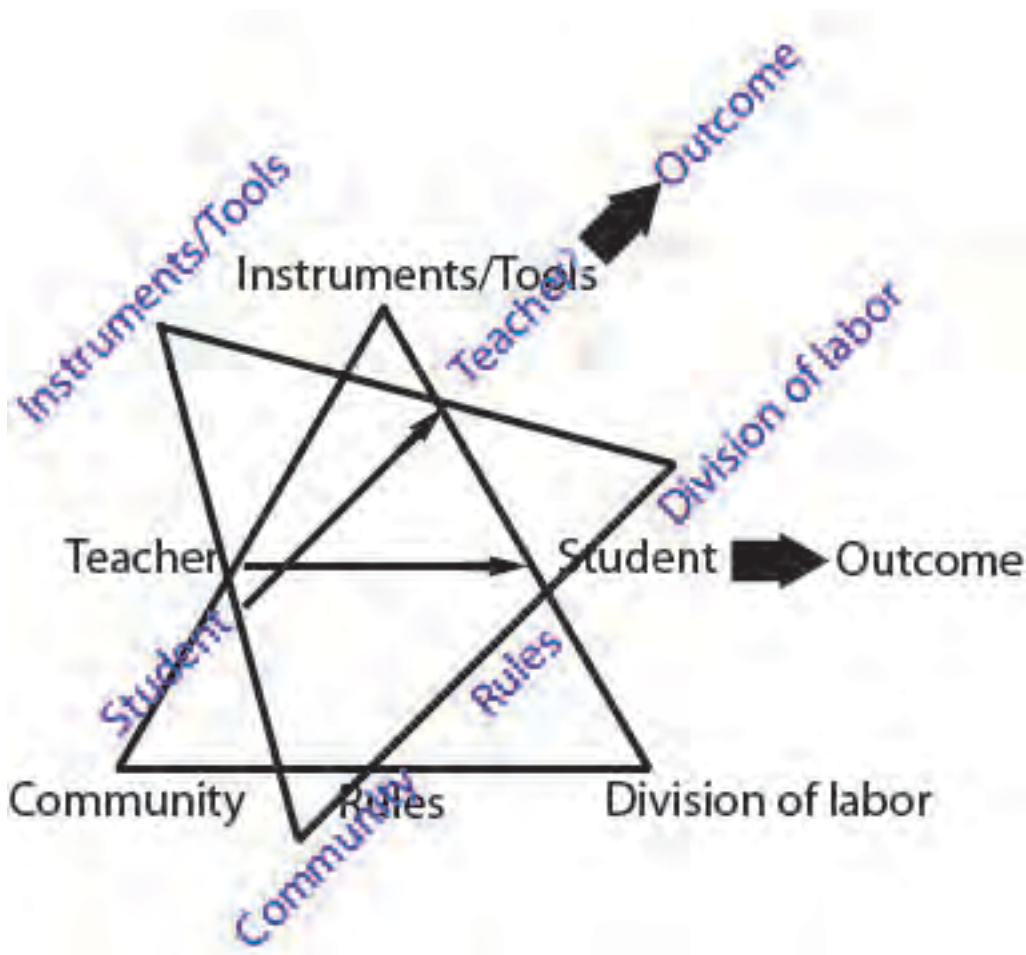
Leont'ev (1978) in fact in his final book made it clear that any specific act-in-context

would be multimotivational, i.e., that multiple *collective* activities (durable social

projects) co-exist at the point of any act. Engeström (1993) has elaborated on this perspective in noting:

> An activity system is not a homogeneous entity. To the contrary, it is composed of a multitude of often disparate elements, voices, and viewpoints. This multiplicity can be understood in terms of historical layers. An activity system always contains sediments of earlier historical modes, as well as buds or shoots of its possible futures. (p.68)

In his work on Finnish medical clinics, Engeström (1993) identified a key source of heterogeneity in the historical types of activity that sediment the activity system (embedded in people, institutions, artifacts, concepts, and so on), pointing both to general forms of workplace organization (e.g., craft activity, rationalized activity, humanized activity) and specific forms of medical practice (e.g., early 20th century general practitioner bedside medicine, late 20th century hospital medicine, psychosomatic vs. holistic approaches). Another source of heterogeneity arose from the specific *streams or trajectories of activity* that artifacts, discourses, and people trace. Such streams became visible as perspectival heterogeneity (for example, in the voices of the patients' lifeworlds within clinical interactions and in interactions across institutional activity systems—such as a psychotherapy clinic, general health clinic, and hospital— that become linked through trajectories that patients and professionals trace. Engeström, Engeström, and Vähäaho (1999) refer to the processes linking activity systems as *knotworking*—tying, untying and retying systems of activity.

Kangasoja and Engeström (2005; also Engeström, 2006) have begun to explore the idea of *wildfire activities*, types of activity that share such features as persistence without constant presence, fuzzy or informal membership, horizontal and multidirectional connectivity, cycles of quiescence and eruption, resistance to full commercialization, and fluid boundary crossing. They suggested several examples of such activity: birding, the International Red Cross, open source software development, organized and technologically-mediated cheating, graffiti, and skateboarding.

Attention to these kinds of activity is linked to a growing focus within activity theory on dispersed, loosely institutionalized, complexly networked, social activities (often associated with new information and communication technologies and globalization) that seem to lie at least partly outside of the more highly regulated and organized worlds of work, school, and government (see for example Engeström, Engeström, & Vähäaho, 1999). Engestrom (2006) argues that knotworking and wildfire activity calls for a more rhizomatic approach, but not the notion of rhizomes, suggesting instead the notion of mycorrhizae formations, the "symbiotic association between a fungus and the roots or rhizoids of a plant" (p. 11). Engestrom says:

> The model of activity systems (Engestrom, 1987, p. 78) is a functioning tool for the analysis of individuals and teams. But does it have any use when we step into the fluid world of mycorrhizae? The answer is that the horizontal and invisible mycorrhizae do not eliminate visible, erect, bounded and institutionalized activity systems…mycorrhizae depend on plant roots and generate mushrooms, both visible, vertical, and more or less durable (p. 13)

Engestrom concludes that these phenomena then make "careful analyses of the structures and dynamics of activity systems …more important than ever" (p. 13).

However, theorists and researchers (e.g., Deleuze & Guattari, 1987; Latour, 1987, 1999, 2005) have argued that horizontal (rhizomatic) modes of social formation and action are, in fact, fundamental to societies, not developments only recently afforded by new technologies of communication and information, that such modes are much more central to institutions than official representations would imply.

The strong gravity of the vertical, the official, is repeatedly revealed in statements that represent objects as singular and from an official perspective. The object of schooling is…**education**, the teacher's object is **student learning**. (Hutchins noted D'Andrade's comment that maybe auto factory workers are making relationships and cars are a byproduct. And, of course, workers may even be sabotaging the cars they manufacture). Is life ever so simple? A teacher may also be doing gender socialization, enacting religious and political projects, working to create a certain kind of social relationship, working to maintain a sense of selfhood in context, and so on. Students are likewise engaged in identity work, making social relations, and pursuing particular projects they bring from home, the street, the community, and so on. Once we see lamination as fundamental, the vertical does not disappear, but it also does not stand as it did. It emerges as shot through with otherness and multiplicity as multi-object, multi-actor, multi-community phenomena infiltrate the whole structure of the tree. They don't just lie at its roots, the horizontal and vertical are full entangled, as the vertical is fractured and cast out into the horizontal.

Offering *the sociology of associations* as an alternative to *the sociology of the social* (i.e., a sociology that depends on the *a priori* definition of some unit that inherently contains and presents sociality), Latour (2005) proposes precisely this kind of respecification of social structure as variously stabilized processes of tying and untying, associating and disassociating. Spatializing metaphors of social practice, particularly visible in notions of cultural entities as containers of activity and in the so-called micro-macro problem, are challenged by views that emphasize flows, the mutual enfolding of the "local" and the "global," and temporal-spatial scaling phenomena (e.g., Appadurai, 1996; Lemke 2000; Knorr-Cetina, 2005; Latour, 2005). Drawing on Goffman's (1974) work on framing, I and my colleagues have talked about these forms of situated heterogeneity rooted in weaving together (or unweaving) multiple historical streams of activity as *lamination* (see also Prior, 1998; Prior and Shipka, 2003) and their results as *laminated assemblages*. A laminated assemblage will never be so simple.

Conclusion: Reassembling literate activity

Extending my earlier work on the laminated, chronotopic character of literate activity (Prior, 1998; Prior & Shipka, 2003) and on semiotic remediation practices (Prior, Hengst, Roozen, & Shipka, 2006), I am suggesting Flat CHAT as a productive framework for writing research. Such an approach fits well with, but is also able to inform, recent turns to the multimodal/semiotic and recent developments in genre theory, particularly the emergence of genre system approaches (Bazerman 1994, 2004; Devitt, 1991; 2004; Swales, 2004). What then are the implications of Flat CHAT, of reassembling literate

activity along these lines for dominant constructions of writing and for disciplinary borders of writing research? There are a number, but let me suggest a few key points.

First, Flat CHAT argues for a more open unit of analysis than writing. Writing per se is a critical interest of writing studies, but paradoxically it is not a tenable unit of analysis. It represents a starting point on a flat map and writing studies should trace the literate activity that is associated with it. In 1998, I defined literate activity in terms of three characteristics: that it was situated, mediated, and dispersed:

> Writing does not stand alone as the discrete act of a writer, but emerges as a confluence of many streams of activity: reading, talking, observing, acting, making, thinking, and feeling as well as transcribing words on paper" [or other media]. p. xi
>
> Literate activity…is not located *in* acts of reading and writing, but *as* cultural forms of life saturated with textuality, that is strongly motivated and mediated by texts." p. 138

Dispersed, multimodal, even ambiguous, literate activity asks how what we call writing is tied together, untied, retied in laminated assemblage.

Second, Flat CHAT resists bounding and binding activity to a social context. Instead of beginning with a map, it calls for 3-D tracing in time and space and semiosis, for following the actors. It means not taking for granted some form of the social, not discourse communities, not communities of practice, not bounded activity systems, not accepting the official maps of the social world that our everyday language offers us as complete. It means deprivileging the face-to-face rendering of local context in favor of

dispersion, as in the heterochronicity that Hutchins identifies (for example, tracing the taking of a fix to the historical development of visualizations for mapping, even to Babylonian developments of number systems) or Agha's notion of semiotic encounters, where a global audience watching an event synchronously or asynchronously, separately, is understood as having participated in a semiotic encounter. Chronotopic lamination is a concept tied to the kinds of moves that Latour recommends, it localizes the global, redistributes the local and seeks connections. Chronotopic lamination resists the official representation of the context, school's own account of school, the workplace's own account of the workplace. It would link a school or workplace to everything else and it keeps open how associations are being tied and untied in practice. It considers multiple frames, multiple identities, to be imminent in any situation, connections, ties, that are close at hand as well as those that are focally active. A flat approach to genre systems would resist a priori bounding. The genres in a genre system may not all live within the officials spaces of the school or workplace or discipline, not be solely and exclusively the property of any community or institution.

Third, Flat CHAT is centrally focused on learning/development, on socialization/individuation. CHAT brings a focus on people. Latour has paid little attention to the formation of humans, directing his energy at undoing the overly large, overly exclusive place of humans in the sociology of the social. Latour focuses then on non-humans. Although CHAT has only occasionally addressed the development of artifacts (and sees them conceptually as central to culture and enculturation), it has paid less attention to artifact-o-genesis, whereas ANT has focused on that. Complementing

each other, ANT and CHAT suggest attention to learning and development in the broadest sense, to the development of people, social groups, artifacts, practices, and environments alike.

Methodologically, Flat CHAT would take up the two strategies that Vygotsky and Luria identified, genesis and disruption, or what Latour would identify as things in the making and things breaking down. Perhaps, more to the point, these strategies may be seen as two sides of the coin, every genesis is a disruption of functional systems, every disruption initiates a genesis as re-adaptations emerge, looking at points of change, whether in individuals, technologies, institutions, practices, and so on.

If we want to reassemble literate activity, take a Flat CHAT approach to writing studies, what does the field need to look like? As a research field, there needs to be a core where writing and literate activity is a focal object of concern, where theory and research in these areas stays front and center, and where there is an association of scholars, a somewhat centripetal formation, who attend to how developments in other disciplines (whether theoretical, methodological, or substantive) speak to writing research and theory. I would continue to call this field writing studies, even as I would continue to argue for a broader set of lenses attending to semiotic practices, literate activities, and chronotopic lamination. Flat CHAT, now using both flat and CHAT in the broad sense, seems to me a framework that will help keep our objects of study broad, our methodologies subtle, and our field both concentrated and open.

Selected references

Agha, Asif. (2007). *Language and social relations*, Cambridge: Cambridge University Press.

Appadurai, Arjun. (1996). *Modernity at large: Cultural dimensions of globalization*. Minneapolis: University of Minnesota Press.

Bazerman, Charles. (1994). Systems of genres and the enactment of social intentions. In Aviva Freedman and Peter Medway (Eds.), *Genre and the new rhetoric* (pp. 83-96). London: Taylor & Francis.

Bazerman, Charles. (2004). Speech acts, genres, and activity systems: How texts organize activity and people. In Charles Bazerman and Paul Prior (Eds.), *What writing does and how it does it: An introduction to analyzing texts and textual practices* (pp. 79-101). Mahwah: Lawrence Erlbaum.

Cole, Michael and Yrjö Engestrom. (1993). A cultural-historical approach to distributed cognition. In Gavriel Salomon (Ed.), *Distributed cognitions: Psychological and educational considerations* (pp. 1-46)*,* Cambridge, UK: Cambridge University Press.

Deleuze, Giles, and Felix Guattari. (1987). *A thousand plateaus: Capitalism and schizophrenia*. Brian Massumi, trans. Minneapolis: University of Minnesota Press.

Devitt, Amy. (1991). Intertextuality in tax accounting: Generic, referential, and functional. In Charles Bazerman and James Paradis, (Eds.), *Textual dynamics of the professions: Historical and contemporary studies of writing in professional communities* (pp. 336-357). Madison: University of Wisconsin Press.

Devitt, Amy. (2004). *Writing genres*. Carbondale: Southern Illinois University Press.

Engeström, Yrjö. (1993). Developmental studies of work as a testbench of activity theory: The case of primary care medical practice. In Seth Chaiklin and Jean Lave (Eds.), *Understanding practice: Perspectives on activity and contex*t (pp. 64-103). Cambridge: Cambridge University Press.

Engeström, Yrjö. (2006). Development, movement, and agency: Breaking away into ycorrhizae activities. In K. Yamazumi (Ed.), *Building activity theory in practice: Toward*

the next generation (pp. 1-430. (Technical Reports 1). Osaka: Center for Human Activity Theory, Kansai University.

Engeström, Yrjö, Ritva Engeström, and Tarja Vähäaho. (1999). When the center does not hold: The importance of knotworking. In Seth Chaiklin, Mariane Hedegaard, and Ulfe Jensen, (Eds.), *Activity theory and social practice: Cultural-historical approaches* (pp. 345-374). Aarhus: Aarhus University Press.

Foucault, Michel. (1970). *The order of things: Archaeology of the human sciences*. New York: Random House.

Foucault, Michel. (1972). *The archaeology of knowledge and the discourse on language*. A. M. Sheridan-Smith, trans. New York: Pantheon.

Goffman, Erving. (1974). *Frame analysis: An essay on the organization of experience*. Boston: Northeastern University Press.

Hutchins, Edwin. (1995). *Cognition in the wild*. Cambridge: MIT Press.

Kangasoja, Jonna, and Yrjö Engeström. (2005). The activities of skateboarding, birding, and the red cross: Commonalities and contrasts. Paper presented at the First International Society for Cultural and Activity Research (ISCAR) Congress. Seville, Spain.

Knorr-Cetina, Karin. (2005). How are global markets global? The architecture of a flow world. In Karin Knorr-Cetina and Alex Preda (Eds.), *The sociology of financial markets* (pp. 38-61). Oxford: Oxford University Press.

Latour, Bruno. 1987 *Science in action: How to follow scientists and ngineers through society*. Cambridge: Harvard University Press.

Latour, Bruno. 1999 *Pandora's hope: Essays on the reality of science studies*. Cambridge: Harvard University Press.

Latour, Bruno. 2005 *Reassembling the social: An introduction to actor-network theory*. Oxford: Oxford University Press.

Latour, Bruno, and Steve Woolgar. (1986). *Laboratory life: The construction of scientific facts*. Princeton: Princeton University Press.

Lemke, Jay. (2000). Across the scales of time: Artifacts, activities, and meanings in ecosocial systems. *Mind, Culture, and Activity* 7: 273-290

Leont'ev, A.N. (1981). *Problems of the development of the mind*. Moscow: Progress.

Leont'ev, A.N. (1978). *Activity, consciousness, and personality*. M. Hall, trans. Englewood Cliffs: Prentice-Hall.

Prior, Paul. (1998). *Writing/disciplinarity: A sociohistoric account of literate activity in the academy*. Mahwah: Lawrence Erlbaum.

Prior, Paul, and Jody Shipka. (2003). Chronotopic lamination: Tracing the contours of literate activity. In Charles Bazerman and David Russell (Eds.), *Writing selves, writing societies: Research from activity perspectives* (pp. 180-238). Fort Collins: The WAC Clearinghouse. http://wac.colostate.edu/books/selves_societies/

Prior, Paul, Julie Hengst, Kevin Roozen, and Jody Shipka. (2006). "'I'll be the sun': From reported speech to semiotic remediation practices." *Text and Talk 26*: 733-766.

Swales, John. (2004). *Research genres: Exploration and applications*. Cambridge: Cambridge University Press.

Vygotksy, Lev. (1987). *Problems of general psychology: The collected works of L.S. Vygotsky, Volume 1*. Norris Minick, trans. New York: Plenum.

Wertsch, James. (1991) *Voices of the mind: A sociocultural approach to mediated action*. Cambridge: Harvard University Press.

Wortham, Stanton. (2006). *Learning identity: The joint emergence of social identification and academic learning*. Cambridge. Cambridge University Press.