

**Cultural-Historical Activity Theory as Practical Theory:
Illuminating the Development of a Conflict Monitoring Network**

Published in *Communication Theory*, Vol. 11, No. 1, February 2001, pp. 56-83

Kirsten A. Foot

University of Washington

Kirsten.foot@helsinki.fi

Abstract

As the number and intensity of conflicts increased around the world during the latter part of the twentieth century, scholars, policymakers, and practitioners of nonviolent conflict management strategies created conflict monitoring networks to track the escalation of tensions in conflict-prone regions. This essay demonstrates how cultural-historical activity theory (CHAT), as developed from the work of Vygotsky (1978) and Leont'ev (1978; 1981) by Engestrom (1987; 1990) and others, was employed in the service of a conflict monitoring network on the territory of the former Soviet Union. Based upon historical and participant observation research on the development of the Network for Ethnological Monitoring and Early Warning between 1990-1999, a CHAT-based analysis of the Network's systemic contradictions illuminates its development through one expansive cycle and into a second. Summaries of findings are presented on relations within the Network, the evolution of the Network's complex object, and the Network's development of tools for monitoring ethnic relations and building an epistemic community. The essay concludes with an analysis of the correspondence between the CHAT framework and the five features of practical theory laid out by Cronen (1995).

Key words: activity theory, network analysis, discourse analysis, organizational studies.

Introduction

As the number and intensity of conflicts increased around the world during the latter part of the twentieth century, scholars, policymakers, and practitioners of nonviolent conflict management strategies created conflict monitoring networks to track the escalation of tensions in conflict-prone regions. Foundational to these network-building activities were the ideals of fostering democratic discourse, strengthening civil society, and preventing violence by providing early warning of conflicts. In this paper I demonstrate how cultural-historical activity theory, (CHAT), which I argue below to be

a “practical theory” as conceptualized by Cronen (1995), was employed in the service of a conflict monitoring network on the territory of the former Soviet Union.

The Network for Ethnological Monitoring and Early Warning, referred to hereafter as the Network or by its self-chosen acronym, the EAWARN, has been engaged in (re)building an epistemic community in the post-Soviet sphere since 1990. As part of a larger study upon which this article draws, (see Foot, 1999b), I conducted historical and participant observation research to analyze the development of the EAWARN from 1990-1999 through the framework of CHAT, as it has been developed from the work of Russian¹ psychologists Lev Vygotsky (1978) and A.N. Leont’ev (1978; 1981) by Yrjö Engeström (1987; 1990), and others. I chose to employ CHAT with the hope that this multi-perspectival, practice-based and grounded approach to academic inquiry would enable the members of the EAWARN to reflect upon and understand more fully their collaborative work, and together develop the Network toward greater effectiveness. I demonstrate in this paper how CHAT as a form of practical theory enabled me to both analyze and participate in the development of the EAWARN as a community of conflict monitors, shaping public discussion of conflicts in the post-Soviet sphere.

The participants in the EAWARN live and work at great distance from one another-- within the Russian Federation and others of the newly independent states of the post-Soviet sphere-- in vastly differing material conditions. Most Network participants work in a second language in order to collaborate with one another. Apart from a yearly face-to-face gathering, the EAWARN functions largely in a virtual form, its communication mediated through electronic and printed texts.

¹ “Rossia” and “Rossian” are more accurate renderings of the Cyrillic words commonly spelled in English as “Russia” and “Russian.” Moreover, as Tishkov (1997b) notes, Rossia/Rossian has a civic connotation, whereas in the Russian language, the word *ruskii*, on which the English “Russian” is based, connotes ethnicity. In this study I use Rossia/Rossian to refer to the multinational political state and its citizens, and Russian when referring to language or ethnicity. When quoting from other sources, I retain the spelling of the source.

The Network was created through a consortium of three organizational entities-- the Institute of Ethnology and Anthropology (IEA) in Moscow, part of the Russian Academy of Sciences; the Conflict Management Group in Cambridge, Massachusetts, and the VEGA International Laboratory in Moscow-- and was funded mainly by the Carnegie Corporation of New York. From its inception in 1990 and through the primary participant-observation period of this study, September, 1995 - December, 1996, the Network grew to approximately 30 participants, from roughly twenty different regions of the former Soviet Union. These figures are approximate due to varying indicators of membership, and a significant turnover rate.

Most of the participants in the Network had doctoral degrees from Soviet institutions. Many were trained in anthropology and ethnology, others in sociology, political science, and mathematics. A few had journalistic backgrounds. Some knew one another before joining the Network, but most did not. Most members of the Network were recruited to participate by the Russian directors of the EAWARN, who also hold executive positions at the IEA. The primary requirement for membership in the Network was the sending of regular reports on the sociopolitical and economic conditions affecting ethnic relations in each participant's region to the Moscow office. These reports were archived in a database at the Moscow office, and selections of them were edited and published quarterly in the Russian and English language versions of the Network's journal, called *The Bulletin*.

When I began my participant observation of the Network in the fall of 1995, members of the Network appeared to constitute a collective subject, working together toward the common object of monitoring ethnic relations in the former Soviet Union. One desired outcome of this activity, as expressed by the directors, was the ability to provide "early warning" of conflicts about to turn violent to policymakers (both within and beyond the post-Soviet sphere) and to international intergovernmental organizations such as the United Nations High Commission on Refugees (UNHCR), and the Organization for Security and Cooperation in Europe. During the period of this study, the

EAWARN was one of several non-governmental organizations of which I was aware that were attempting to track developments between social groups in regions perceived as prone to violence.

As my data collection proceeded it became apparent that such organizational processes as the conceptualization of the EAWARN, the negotiation of relations within the Network, the dialogical construction of a common object, and the creation of tools with which to engage in collective activity were open-ended and ongoing. Thus I decided to focus my analysis on the in-process development of the EAWARN, employing the theoretical framework of CHAT, or more simply, activity theory, because it facilitates the analysis of joint activity as it evolves over time.

My unit of analysis in this study was the EAWARN as an *activity system* and my focus of analysis was the *expansive cycles* of its development. While I explain these concepts and their larger theoretical framework of cultural-historical activity theory in detail in the next section, I provide here a brief definition of both, borrowed from Engeström:

An activity system is by definition a multivoiced formation. An expansive cycle is a reorchestration of those voices, of the different viewpoints and approaches of the various participants. Historicity in this perspective means identifying the past cycles of the activity system. The reorchestration of the multiple voices is dramatically facilitated when the different voices are seen against their historical background as layers in a pool of complementary competencies within the activity system. (Engeström, 1999a, p. 35)

Historical perspective is essential in the analysis of an activity system's expansive cycle. My study of the EAWARN accomplishes the challenging task of offering the kind of concrete analysis necessary for an historically-grounded account of activity. This type of analysis is rare, even in studies which employ activity theory, since, as von Cranach observes, such analyses "are difficult... because institutions and people in power often dislike concrete analyses of their activities and their histories" (von Cranach, 1988, p. 155; as cited in Engeström, 1999a, p. 23).

The structure of this paper is as follows. First I provide a brief overview of CHAT as an evolving tradition of practice. Next I illustrate the capabilities of CHAT as practical theory by presenting findings on the development of the Network that emerged through activity-theoretical

analysis. Focusing on the EAWARN as a multivoiced, object-oriented activity system, I demonstrate how CHAT-based analysis of the Network's systemic contradictions illuminates its development through an expansive cycle. Finally, I delineate how the activity-theoretical framework corresponds to the five features of practical theory laid out by Cronen (1995). In keeping with Cronen's mandate that practical theory be assessed by its consequences, I examine some of the outcomes for the EAWARN, and for myself as a researcher and participant-observer in the Network, that resulted at various points in the research process due to my employment of a CHAT framework in this study.

An Overview of Cultural-Historical Activity Theory

Activity theory is philosophically rooted in Karl Marx's concept of reality as "sensuous human activity, practice," explicated in his *Theses on Feuerbach* (1968, p. 659-660). Engeström and Miettinen (1999) argued that in the first and third theses, Marx showed that "the concept of activity opens up a new way to understand change... The key is 'revolutionary practice,' which is not to be understood in narrowly political terms but as joint 'practical-critical' activity" (p. 3). In contrast with the critical-cultural studies tradition which Cronen (1995, p. 229) critiqued for failing to connect "the patterns of practice in economic relationships or media texts with the lived experience of embodied persons," Marx's point as expounded upon by Cronen that "real materialism has to take into account how social relationships are manifest in the felt experience of embodied persons" (p. 229) is foundational to activity theory. As I explain in greater detail below, the favored methods of inquiry employed in activity theory research reflect the tradition's commitment to grounding analyses in culturally and historically situated action.

Kuutti (1996, p. 27) defined *activity* as "a form of doing directed to an object." The object-orientation of activity is critical, and an aspect not fully conveyed by the English term. Kuutti went on to argue that transforming the object into an outcome, by engaging it through mediating artifacts, motivates the existence of an activity. As an example of this, I argue that the EAWARN's existence

and development was motivated in part by its tool-mediated actions aimed at transforming the facet of its object that pertains to ethnological monitoring into desired outcomes of nonviolent conflict management and the reduction of casualties. Activity-centered theory is distinctive in three ways. As Engeström observed:

First, activity theory is deeply contextual and oriented at understanding historically specific local practices, their objects, mediating artifacts, and social organization (Cole & Engeström, 1993). Second, activity theory is based on a dialectical theory of knowledge and thinking, focused on the creative potential in human cognition (Davydov, 1988; and Ilyenkov, 1977). Third, activity theory is a developmental theory that seeks to explain and influence qualitative changes in human practices over time. (Engeström, 1999c, p. 377-378)

In these ways activity theory provides a framework for system-level analysis of culturally and historically situated, artifact-mediated sets of relations by which an organization such as the EAWARN is discursively enacted. Because activity theory has only recently begun to be employed in American social science, I offer the following overview of the aspects which are most relevant to this study. The notion of artifact-mediated action was first formalized by Lev Vygotsky (1978). According to Vygotsky, action consists of a subject (or actor), an object (either an entity or a goal), and mediational tools. In Vygotsky's analysis, tools can be either material or conceptual. Language, scientific methods and models, and other forms of cultural artifacts are just as much tools as are computers and telephones. (See Figure 1.)

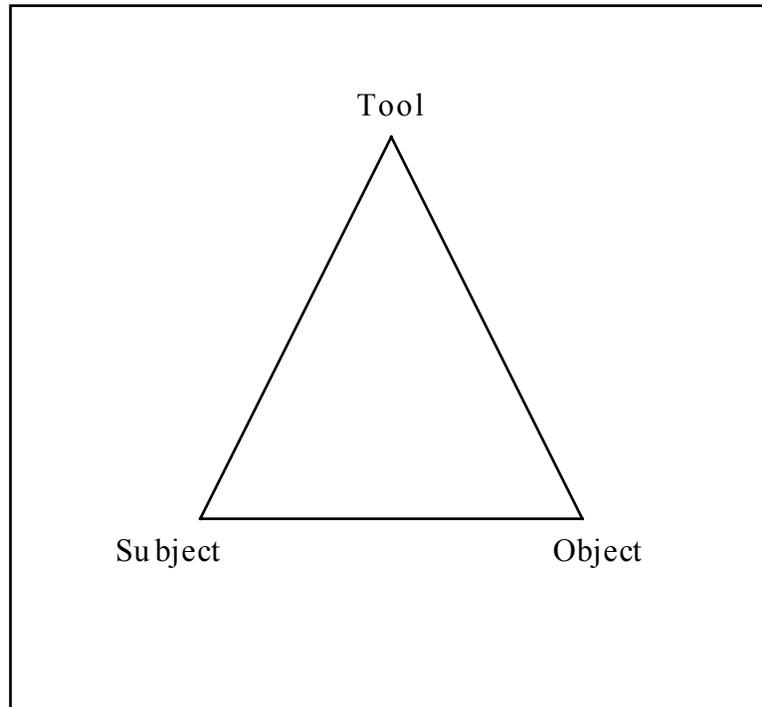


Figure 1: Vygotskian model of tool-mediated action.

The Activity Unit. Leont'ev (1978) developed Vygotsky's notions of mediated social processes into what is known as activity theory. He distinguished between actions, operations, and activity. Actions, he proposed, are conscious, tool-mediated, and goal-oriented, whereas operations are routinized and therefore unconscious components of actions subject to concrete conditions. Operations are "the methods for accomplishing actions" (Leont'ev, 1978, p. 65). An activity is a molar unit that manifests itself in actions. While operations and actions are discussed as the constituent characteristics of an activity, Leont'ev maintained that they must not be conceptualized as special "units" that are included in the structure of the activity, because "human activity does not exist except in the form of action or a chain of actions... If the actions that constitute activity are mentally subtracted from it, then absolutely nothing will be left of activity." (Leont'ev, 1978, p. 64)

To illustrate the distinction between activity, action and operation, I suggest that for most members of the EAWARN network there was a time when they sat at a computer and learned how to send and receive electronic mail. This process required many conscious, tool-mediated actions, since

most had never used a computer. With practice, sending e-mail became an operation comprised of actions that had become automatic, and thus condensed and unconscious.

Leont'ev also argued that an activity is identified and distinguished by its object or purpose. According to this formulation, activities are always specific, each one answering a definite need of the subject, directed toward an object of this need, extinguished as a result of its satisfaction, and produced again, perhaps in other, altogether changed conditions. The main thing that distinguishes activity systems from one another is the difference in their objects. The object of an activity gives it a determined direction, a horizon toward which it orients, but an object is not an "end" in the traditional sense. As Engeström explained,

An activity system constantly generates actions through which the object of the activity is enacted and reconstructed in specific forms and contents-- but being a horizon, the object is never fully reached or conquered. The creative potential of the activity is closely related to the search actions of object construction and redefinition. (Engeström, 1999c, p. 380-381)

Thus, activity systems are realized through interlinked, tool-mediated actions by which actors collectively engage, enact and pursue an evolving object. This understanding of object stems from the Vygotskian view of human development as an active social process rather than an individual, cognitive and largely passive one. I have elaborated in greater detail elsewhere the collaborative and multilayered process by which objects are formed over time-- and the resultant complex but rewarding tasks of identifying and analyzing them (see Foot, Under review).

An activity is a unit of analysis for understanding a larger flow of human life. In the analysis of a milieu of human life, separate, specific activities can be isolated according to the criteria of objects and the motives that elicit them. Once an activity has been singled out, actions-- the processes that are subordinated to conscious goals-- can be isolated and analyzed. Finally, the operations that directly depend on the conditions of attaining concrete goals can be foregrounded for careful study.

Engeström (1987; 1990) built upon Leont'ev's work in developing the concept of activity as a unit of analysis. Based on Vygotsky's requirements, Engeström elucidated a definition of activity as a unit of analysis that fulfills the following demands: it is representative of the complexity of the whole, it is analyzable in its contextuality, it is specific to human beings by being culturally mediated, and it is dynamic rather than static. Engeström critiqued Leont'ev on the basis that the instrumental and communicative aspects of activity were not brought into a unified complex model; that is, Leont'ev did not extend Vygotsky's basic triangular model (subject-object-mediator) to account for social relations. Engeström expanded the unit of activity to include three additional components that explicate the social structure of activity: 1.) rules that regulate the subject's actions toward an object, and relations with other participants in the activity; 2.) the community of people who share an interest in and involvement with the same object; and 3.) the division of labor-- what is being done by whom toward the object, including both the relatively horizontal division of tasks and the vertical division of power, positions, access to resources, and rewards. This expanded unit is referred to as an activity system by Engeström and his colleagues. (See Figure 2.)

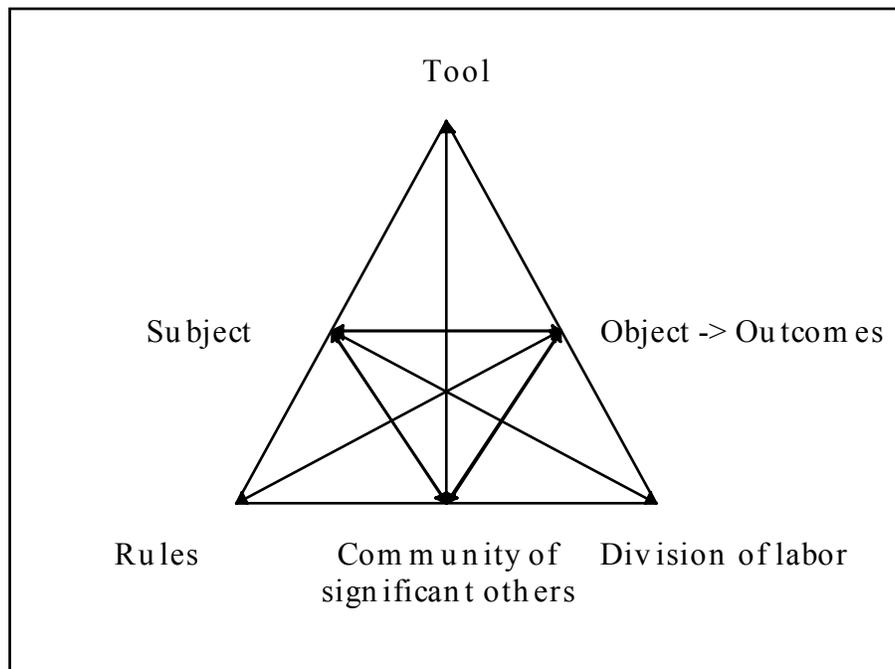


Figure 2: Model of activity system (Engeström, 1987 p. 78).

While the essential task of analysis is to grasp the systemic whole of an activity, not just its separate components, Engeström's model makes possible the analysis of a multitude of relations within the triangular structure of activity. In activity theory terms, one or more members of a group engaged in collective activity at any given moment may be viewed as a subject engaging the object of the activity through a particular action. Those who are part of the group oriented toward the same object, but are not engaging in that specific action are referred to as members of the "community of significant others." Thus throughout the course of an activity, the actual persons constituting the subject(s) and members of the community may interchange their "roles" frequently. As I elaborate below, the teasing apart of these relations in order to identify their dynamics is a complex analytical process requiring multiple kinds of data acquired over a relatively long period.

Contradictions. One central tenet of activity theory which is particularly important for this paper is that it acknowledges contradictions, conflict and discoordination as inevitable in the functioning of any system-- and identifies them as useful tools of analysis. Engeström and Mietinen (1999, p. 5) noted that while Marx's analyses of labor in capitalist systems were empirically weak and led therefore to a "somewhat abstract and exaggerated history of ever-increasing misery and exploitation," Marx's writings also yielded "invaluable analytical instruments, above all the concept of commodity as a contradictory unity of use value and exchange value." Kuutti (1996) explained how contradictions are used analytically within the CHAT framework.

Because activities are not isolated units but are more like nodes in crossing hierarchies and networks, they are influenced by other activities and other changes in their environment. External influences change some elements of activities, causing imbalances between between them. Activity theory uses the term contradiction to indicate a misfit within elements, between them, between different activities, or between different developmental phases of a single activity. Contradictions manifest themselves as problems, ruptures, breakdowns, and clashes. Activity theory sees contradiction as sources of development; activities are virtually always in the process of working through contradictions. (p. 34)

The internal contradictions within an activity system are the forces which precipitate its development. Contradictions reveal opportunities for creative innovations, for new ways of structuring and enacting the activity. To elaborate, Engeström (1987) argued that within any human activity, contradictions emerge and evolve within and between each of the six “corners” of the activity triangle: subject, tool/artifact, object, rules, community, and division of labor.

Contradictions are present in every collective activity and indicate emergent opportunities for the activity’s development. I envision them as *illuminative hinges* through which participants in an activity can reflect on their activity system’s developmental trajectory and understand its dynamics. Contradictions are a sign of richness in the activity system, not weakness, and of mobility and the capacity of an activity to develop rather than function in a fixed and static mode. Contradictions reveal the growing edges of the activity system-- the places where “growth buds” are able to form and expansive development takes place.

Contradictions are not points of failure or deficits in the activity system in which they occur. They are not obstacles to be overcome in order to achieve goals. Rather than ending points, contradictions are starting places. They are not “problems” to be “fixed,” and they cannot be quickly transcended through technical solutions. In other words, throwing more money at a contradiction, establishing a new division of labor, or creating new tools won’t make them go away. In fact, as the data on the EAWARN demonstrates, these interventions may very well result in the aggravation of existing contradictions or the emergence of new ones.

The analysis of contradictions as illuminative hinges can open new vistas of understanding into organizations such as the EAWARN. Although all analogies are limited, I suggest that contradictions resemble hinges in two ways. The kind of hinge known as a “concealed hinge” is affixed in such a way that on a closed door its two metal planes lie parallel to one another-- at first glance nearly indistinguishable from each other. When set in motion the planes of a concealed hinge move in

divergent directions, revealing their distinction from one another. The space between them increases, exposing not only their inner surfaces, but also whatever lies beyond the hinge plane in the now-expanded frame of sight. Similarly, a contradiction in an activity system consists of two figurative planes or forces which coexist, unnoticed most of the time, linked together in a single entity. Like hinges, the “planes” of a contradiction pressed into motion will move in diverging directions, exposing new facets and dynamics of the activity, and revealing possible directions for the future development and transformation of the activity.

The second way in which contradictions resemble hinges has to do with a hinge’s function in connecting a fixed entity, a door frame, with a mobile entity, a door. Similarly, contradictions link the “fixed” entity of an established activity system, with the mobile entities of its potential expansions and contractions. In this way contradictions link an historically formulated activity with what Vygotsky (1978) called a “zone of proximal development.” While Vygotsky envisioned the zone of proximal development as it pertains to individuals, Engeström expanded the notion to include the distance or area between an activity system’s present and foreseeable future, arguing that:

The zone of proximal development may be depicted as [an] ... area between actions embedded in the current activity with its historical roots and contradictions, the foreseeable activity in which the contradictions are expansively resolved, and the foreseeable activity in which the contradictions have led to contraction and destruction of opportunities. (Engeström, 1999b, p. 67)

By exposing new facets of an activity, and by linking the fixed, historically formed activity system with its mobile future structure, contradictions function as illuminative hinges in the analysis of organizations.

Holland and Reeves also highlighted the value of contradictions as sites of illumination:

Contradictions... are the key to understanding shifts in activity systems. The working out of multilevel contradictions, primarily stemming from the opposition between use value and exchange value in capitalist political economies, drives change. (Holland & Reeves, 1996, p. 272)

The activity theory concept of contradictions is related to the notion of “paradox” employed by organizational theorists Robert Quinn and Kim Cameron (1988). After observing that paradoxes are characterized by the simultaneous presence of contradictory elements, they propose analyzing organizations using a paradoxical frame:

The paradoxical frame suggests that organizations are dynamic. They exist within and are themselves dynamic streams of energy which are constantly transformed. These energy flows are constantly taking material forms which, from the human time perspective, may be seen as permanent. The change process, however, is continuous both inside and outside the organization. While the transformations can take the form of vicious circles, they can also take the form of virtuous circles. When both of these phenomena are simultaneously recognized, we have a dynamic, paradoxical frame that allows us to understand transformation. (Quinn & Cameron, 1988, p. 304)

Quinn and Cameron’s conceptualization of continuous organizational transformations that are understandable through a paradoxical frame was strikingly similar to the activity theory notion of the expansive or contractive development of an activity system as precipitated by contradictions.

According to Blackler (1992), this attention to the contradictions, conflicts and discoordinations within an activity system is the reason activity theory can be a helpful tool for social and institutional change. As Engeström (1990) has experienced in his intervention work, mapping the cycle of development in an activity system, and identifying the internal contradictions of the system which have catalyzed development, can provide a collective mirror for those involved in the activity, helping them to identify the sites or sources of the discoordination, and suggesting potential avenues for expansive change.

Collective Learning Actions and Expansive Cycles of Transformation. The concepts of epistemic actions and the cyclic transformation of an activity system are the final notions I introduce as integral parts of this theoretical framework. In my analysis of the development of the EAWARN, I employ Engeström’s (1987) conceptual tool of expansive cycles. Drawing upon Davydov’s (1988) analysis of individual’s learning actions, Engeström (1999c) elaborated the ways in which contradictions provoke collective epistemic actions, which lead an activity in what dialectical logic

terms the ascent from the abstract to the concrete. I paraphrase Engeström's descriptions of the "ideal-typical sequence of epistemic actions" in the following listing:

1. *questioning* criticizing some aspects of the accepted practice and existing wisdom;
2. *analyzing* the situation in order to find out causes or explanatory mechanisms. Analysis may either seek to explain the situation by tracing its origin and evolution (historical-genetic analysis), or by constructing a picture of its inner systemic relations (actual-empirical analysis);
3. *modelling* the newly found explanatory relationship in some publicly observable and transmittable medium;
4. *examining the model* in order to grasp its dynamics, potentials, and limitations;
5. *implementing the model* through practical applications and conceptual extensions;
6. *reflecting* on and evaluating the process;
7. *consolidating* its outcomes into a new, stable form of practice.

These seven epistemic actions are modelled by Engeström as phases of an outwardly expanding spiral, but multiple kinds of actions may take place at any time. The phasic model simply allows for the identification and analysis of the dominant action type during a particular period of time. For instance, the EAWARN's development up to and during the period of this study can be mapped in this "ideal-typical sequence" of epistemic actions. These epistemic actions occur in a cyclic pattern-- each cycle of development in an activity system is contingent upon, and somewhat overlapping of the previous cycle. The expansive cycle is an "ideal type" of an activity's development, as any process of development includes contractions as well as expansions. As I demonstrate later in this paper, the development of the EAWARN during the period of this study approximated one full expansive cycle and part of a second.

Methodology

The decision to employ an activity theory framework in the study of a largely virtual community such as the EAWARN has significant methodological implications. The identification of an activity system's object and the analysis of its developmental cycle are not simple tasks. As Christiansen noted, "the activity is not immediately accessible consciously, so you cannot interview people about their activity directly through rote questions but must interpret their actions and opinions

after some careful reflection.” (Christiansen, 1996, p. 178) Thus, Vygotsky (1978) and activity theorist Sylvia Scribner (1985) argued that the ideal primary data for an application of activity theory should be collected through ethnographic methods of participant observation, interviews, and discussions in real-life settings. Christiansen echoed their argument by explaining that:

Activity is a process that we can approach by unfolding the task as stated [in the behavior, verbally and in all other ways] by the actor, through historical inquiry, observation, and interviews. (Christiansen, 1996, p. 177)

I detail below the ways in which I engaged in each of these methods of data collection in relation to the EAWARN, as well as my strategies for processing and analyzing the mostly Russian-language data.

Between September, 1995, and December, 1996, I was a participant observer in the Network, collecting data through fieldnotes and by recording the oral reports on regional ethnic relations by the EAWARN participants, and the discussions of the Network during its weeklong annual meetings in 1995 and 1996. I have 23 hours of these recordings from the annual meeting held on Cyprus, in October, 1995, and 22 hours of reports and discussions recorded from the annual meeting held in London and Londonderry, UK, in October, 1996. In October, 1999, I attended a third annual meeting in Spain, during which I again recorded the Network’s discussions and wrote detailed fieldnotes.

In addition to recording Network discussions, I conducted unstructured and semi-structured interviews with all of the directors and members of the Network between October, 1995 and October, 1996, and again with a subset in October, 1999. These interviews ranged in length from 20-90 minutes, and audio recordings of them were transcribed and translated. I also archived and translated all of the electronic messages exchanged among Network participants on the EAWARN’s teleconference between January 1996 and October, 1998, at which point the teleconference was closed. During 1996, the primary period of this study, approximately 250 messages were exchanged on the teleconference. Finally, I collected texts written by the directors and members of the EAWARN project: reports that

were sent to the IEA database by Network members, *Bulletin* issues in Russian and English, and copies of funding proposals and progress reports made to the Carnegie Corporation.

Many of the Network participants and two of the five Network directors spoke Russian as their first language. The others spoke Russian fluently as a second language, although with discernible accents. Much of the data were Russian-language: all of the discussions at the annual meetings and on the teleconference, all of the written reports on ethnic relations produced by Network participants, and most of the interviews were in Russian. While I am conversational and literate in Russian, to transcribe and translate the data I worked extensively with two native Russian-speakers unaffiliated with the Network.

In analyzing the data for the study I first read them closely to piece together a chronology of the EAWARN. Next, I searched for evidence of deliberation and turning points in the Network's development. Contradictions became apparent in the data on the EAWARN through discursive, behavioral, organizational and/or material disturbances in the EAWARN's actions. Focusing on observable actions such as the publication and distribution of information products in both paper and electronic forms, patterns of tool appropriation, and discursive references to organizational developments, I paid attention to moments of discoordination or disruptions. In interview transcripts I looked for dilemmatic statements and patterns in participants' articulations of their satisfaction level with the Network, their likes and dislikes about the functioning of the EAWARN project, and their verbal representations of the Network's "effectiveness." While space does not allow me to present all of the findings of this study that emerged through these analytical methods, I present the following set of findings related to the development of the EAWARN to illustrate the functionality of CHAT in analysis of and service to the EAWARN community.

Analyzing the Development of the EAWARN in CHAT Perspective

The development of the EAWARN during the period of this study followed in broad contours a pattern which Engeström (1987) called an expansive cycle. In an expansive cycle, decisive actions of individuals within an activity system-- which emerge in reaction to and resolution of deep internal contradictions-- coalesce to form a qualitatively new mode of joint activity. An expansive cycle can be thought of as the reorchestration of an activity system that occurs when there are shifts within and between its six “corners.” In the case of the EAWARN, organizational development was primarily driven by tensions between two forces in the post-Soviet sphere: sociopolitical concerns surrounding the politicization of ethnicity, and economic imperatives created by the introduction of market relations.

I provide here a brief summary of the manifestations of these competing forces first in the relations among the EAWARN’s participants; secondly, within the Network’s object-concepts; and thirdly, in the development of its tools. The core contradiction within each of these “corners” of the EAWARN activity system is between its use value in addressing sociopolitical issues, and its exchange value in an emergent, and arguably primitive, capitalistic economy. To complete this sketch of the findings which I have presented in detail elsewhere (Foot, 1999b), I describe the expansive cycles through which the Network’s development proceeded, precipitated by contradictions.

The Constitution of Relationships within the Network. Relations between the EAWARN members and directors-- as they functioned intermittently as subjects and community members to one another in the Network’s activity-- were shaped by the dual forces of sociopolitical concerns and economic concerns. These forces manifested themselves in several ways in the communicative relations of the EAWARN. These included, first, the division of labor within the EAWARN, as members were asked to write monthly reports, and to trust that the quality of their work analyzing ethnic relations would be fairly rewarded in the size of their honoraria. Second, these two forces were visible in the rules which governed relations between the Network members and directors in that the

rules prescribed both the treatment of sociopolitical events and financial transactions within the Network. Third, these forces were manifested in the discursive dual construction of Network members as both “experts” and “stations.” This dual construction was shaped in part by re-inscriptions and re-enactments of center-periphery power relations by Network participants both within the former Soviet Union (FSU) and between the US and the FSU. However, the primary significance of this finding for this study was that “experts” connoted the participants’ use value to the Network directors, and “stations” connoted their exchange value.

How Network Participants Construct Their Object. I identified two primary object-conceptions around which the Network’s activity was oriented during this study-- the monitoring of ethnic relations for the purpose of providing early warning of conflict, and the building of epistemic communities. To summarize briefly here what I have elaborated elsewhere (Foot, Under review), the data on the development of the EAWARN’s object indicate that there was some chronological sequencing within and between the formation of the object-concepts. The object-concept facet of ethnological monitoring preceded the facet of early warning, and the object-concept facet of an epistemic community *within* the FSU preceded the facet of one that would extend beyond the FSU. Furthermore, the object-concept of epistemic community building through the Network may have been a later layer to the ethnological monitoring/early warning object-concept, as it was not referenced specifically in the earliest conceptualizations of the Network. On the other hand, this object-concept may have been constructed, at least by the Russian side of the Network, in the earliest stages of the Network, but simply not have been reflected in the data I was able to collect.

Returning to the opposing forces of sociopolitical concerns and economic concerns which drive the development of the EAWARN during the period of this study, I suggest that the data also demonstrate that as a result of these forces, a primary contradiction was manifested within the EAWARN’s object. First, both the object-concepts of ethnological monitoring/early warning, and

epistemic community-building have strong use values-- any degree of achievement of them as aims can lead to beneficial results in the sociopolitical realm. The pursuit of ethnological monitoring/early warning would ideally result in diminished violence and thus a decrease in casualties. The development of the EAWARN as an epistemic community provided many benefits to its members. In an interview, Tishkov explained that the creation of the EAWARN was:

... an effort to keep the best experts in the field of ethnic studies and conflict studies in the post-Soviet space as one community. I mean community as um, as people who cooperate, exchange material, educate each other, and who keep human contacts which had very drastically failed and which failed quite drastically after the collapse of the Soviet Union, and many intellectuals, and especially in the field of academia, feel unhappy about this situation. They do not have proper access to other academic, academia like Western, Anglo-American, academia, because of the language barrier and lack of context and many other..., so they, they still feel [bloc?] of attachment, interest, and sometimes [unintelligible] those interests to keep relations with the leading research institution centers of Russia. Ah, [unintelligible] of Russian Federation, I mean they publish [in] ah New Independent States. (Interview, 10/95)

The use values of the epistemic community concept of the EAWARN included a reduction in the sense of isolation experienced by many Russian-speaking social scientists after the dissolution of the USSR, and the potential for its members to develop their scholarship.

However, both object-concepts, developed in an activity system that was driven by economic as well as sociopolitical concerns, have potential exchange value as well. The Network directors and some members were well aware during the course of this study that engagement with ethnological monitoring/early warning could result in salable information products. Furthermore, the development of the EAWARN as epistemic community could be exchanged for increased visibility and prestige in the view of research, policymaking and funding organizations, and for greater loyalty to the EAWARN from Network members in the face of increasing competition between conflict monitoring organizations for skilled, experienced monitors of ethnic relations. Each of these “exchanges” would result eventually in greater material resources for the Network. Increased visibility and prestige of an epistemic community would translate into an increased demand for its knowledge products, whether

through sponsorship of research (grants) or outright purchase of its knowledge products (sales).

Likewise, increased loyalty among Network members to the EAWARN preserved and maintained the productive capacity of the EAWARN. Thus the dual nature of the EAWARN's object-- its use value and exchange value-- is apparent, manifesting a primary contradiction. The Network's object-concepts are permeated by this core contradiction between their use value pertaining to sociopolitical concerns, and their exchange value *vis a vis* economic concerns.

The Development of the Network's Tools. The artifacts, or tools, employed by the Network included the monthly reports members sent to the Moscow office, a model of conflict indicators which was developed to structure the reports for interlinkage with other conflict monitoring organizations, the Russian and English versions of the *Bulletin*, an email teleconference, weeklong annual seminars, and project websites. I analyze how Network members employed several different tools, in various ways, to engage the EAWARN's object-concepts. Some Network members constructed the monthly reports and the indicator model as administrative demands or rules with which they had to comply, rather than as artifacts which mediated their enactment of ethnological monitoring. The following Network member's comment exemplifies the perception of monthly reports as "compulsory" rules:

And specially, some form, I do not like form, do not like compulsiveness, because it seems to me, when a person does something compulsory, then his attitude to it is formal. There is little creativity in this, little thoughts, but more compulsiveness, that is should do something... I am against it. (Interview, 10/96)

Later in the same interview, this Network member equated the directors' attempts to standardize the reports and the model with a lack of trust in the Network members.

There is no inherent characteristic of an artifact which determines its function in an activity system. Artifacts, depending on how they are employed in an activity, can function as rules which mediate the subject's interaction with members of the community of significant others, as well as or instead of functioning as tools. This shift in the function of an artifact takes place typically when the artifact is constructed by the subject as an administrative demand which satisfies a requirement of one

or more constituent members of the subject's community-- rather than as an instrument useful for engaging the object of the activity.

The dual construction of the Network's tools as both tools and administrative demands is significant in another way: it reveals a primary contradiction between the use value and exchange value they held for the Network members. For example, the reports were the foundational tool through which ethnological monitoring was pursued by the Network members *and* the reports were the "currency" which Network participants exchanged for membership in the EAWARN.

Developmental Cycles of the EAWARN. The analysis of contradictions in an activity system accords understanding of its developmental trajectory. Contradictions can be seen as the "places" in an activity system from which innovations emerge. According to Engeström, (1990), developmental shifts in an activity system occur in a pattern which he terms an expansive cycle. In this process:

Development proceeds from initial individual actions to the formation of a qualitatively new mode of joint activity. The decisive actions that set the expansive cycle in motion are not arbitrary or accidental. As was pointed out, they emerge as a result of and a solution to deep internal contradictions in the old activity. (p. 270)

An example of individual actions emerging out of contradictions and resulting in a qualitatively new mode of joint activity occurred in the EAWARN activity system when Tishkov, the primary director of the EAWARN on the Russian side, introduced a model of conflict indicators during the 1995 meeting.

Tishkov's action of proposing the indicator model was precipitated in part by the oppositional tension between the Network members' inconsistently structured monthly reports, and the EAWARN's aim of monitoring ethnic relations in order to provide early warning of conflict. In other words, the introduction of the indicator model was an attempt to resolve a contradiction between the Network's tool of narrative reports, and aspects of its object-concept of ethnological monitoring/early warning. The introduction of the indicator model precipitated a new mode of joint activity between the EAWARN participants. While it contributed to the resolution of some systemic contradictions, it created others. Therefore, the introduction of the indicator model into the EAWARN is a focal point

for understanding how expansive development takes place-- through the “construction and resolution of successively evolving tensions or contradictions in a complex system” (Engeström, 1999a, p. 384). The development of an activity system proceeds as participants act to resolve or transcend the system’s contradictions.

Analysis of the historical formation of the activity system is necessary in order to understand the preconditions and precipitating causes of the decisive actions which catalyze development. For this reason, I outline some steps in the formation of the EAWARN and events that occurred during the period of this study, analyzing them as evidence of the “epistemic actions” through which expansive learning or development occurs. I employ Engeström’s (1999a) typology of epistemic actions described earlier in this article to analyze the development of the Network from 1990-1996.

Initially, members on both the American and Russian sides of the “Joint Project on Ethnic Conflict Management in the Former Soviet Union” through which the EAWARN was organized were engaged in *questioning* and criticizing the accepted practices formed during the Soviet era for conceptualizing and researching ethnicity and ethnic relations, and “managing” tensions between ethnic groups. The first funding proposal for a “U.S.-Soviet Conflict Resolution Project,” which later developed into the EAWARN, was submitted to the Carnegie Corporation in May, 1990, and contained many statements criticizing the historical approach of the Soviet government of repressing ethnic conflicts, and problematizing the current situation.

During 1991 and 1992, members of the Joint Project began sharing some of their questions and engaged in *analyzing* the ethnic relations situation in the Soviet/post-Soviet sphere. Both historical and empirical analyses of relevant issues such as the Soviet “theory of nationalities,” the Russian Federation’s “nationality policy,” and current events in ethnic relations took place during several meetings and conferences organized by a “Joint Project,” the EAWARN’s forerunner.

These *analyzing* actions continued to dominate the activity of the Joint Project through September, 1992, when it organized a large conference in Moscow called “Nationality Policy in the Russian Federation.” Concurrent with this conference were a series of “working group” meetings, during which the Joint Project members began to *model* their analyses and proposed solutions for managing the ethnic conflict situation in Russia. While these modelling actions were not directly observable, they were evidenced in the Joint Project’s report on the proceedings of the working group meetings. The creation of an “information-gathering network” for monitors/managers of ethnic relations in Russia was first mentioned in this report as one “model” for addressing the problems the Joint Project had identified in their working group meetings.

The network-concept evolved through several formulations during the modelling phase. This evolution resulted from actions of *examining the model* of the network-concept. Examining actions took place through correspondence among the emerging directorate of what became the EAWARN during the end of 1992 and through the middle of 1993. In October 1993, the “inauguration” of the Network took place, beginning the phase of actions directed toward *implementing the model*-- making the network-concept concrete in the form of the EAWARN. The focus was on working out in practice in the EAWARN what had been agreed upon in principle between the co-coordinators of the Network. Participant selection and training, the assimilation of new members into the system, and operationalizing the actions of “ethnological monitoring” became the dominant actions within the activity system.

At the time I began the participant-observation phase of this study in the fall of 1995, the directors and some members of the EAWARN had already begun to engage in *reflecting* on and evaluating the activity in which they were engaged. For the directors at least, evaluation of the EAWARN took place in part through the pursuit of outside assessment, and in view of the EAWARN’s ongoing and increasing need for funding. The fact that the Network directors had

engaged in evaluative actions prior to the EAWARN's annual meeting in October, 1995 was evidenced by the textual materials they had prepared for each participant, and their introductory comments in which they laid out their hopes for the seminar.

During the course of the seminar, each of the five Network directors shared their evaluations of the Network's activity to date, focusing on developments of the previous year. Criticisms raised by the directors included the irregularity in both timing and content of many Network members' reports, issues of objectivity and impartiality in the reports, and the infrequency with which some members accessed their email accounts. At several points in these discussions various Network members raised their own concerns. These concerns varied widely: from the discomfort several felt as academics being asked to write brief "journalistic" reports for the EAWARN and their dissatisfaction with the truncated versions of their lengthy analytical reports in the *Bulletin*; malfunctioning computers and email connections; their desire for greater amounts of "honoraria;" and the suspicions some encountered from local authorities because of their work in the EAWARN.

The Russian director's introduction of a list of "conflict indicators"-- based upon a list compiled by the UNHCR-- to the EAWARN midway during this seminar represented, in one light, a decisive action of innovation that arose from the evaluations of the Network. The reflections of several Network members in interviews a year later, in October, 1996, conveyed their perception that the EAWARN coalesced as a collaborative activity after the 1995 annual meeting. While their comments revealed that *consolidation* of the EAWARN's activity occurred following the 1995 annual meeting, another expansive cycle-- distinct from the first-- began to emerge during this period as well.

The introduction of the indicator model, in retrospect, both catalyzed the *consolidation* of the existing activity of the EAWARN, and marked the emergence of a second cycle of expansive development which appears to have been initiated by the Network directors prior to the 1995 annual meeting. The data regarding the directors' reflections on the development of the EAWARN in mid-

1995 imply that these *evaluation* actions prompted them to engage in new epistemic actions of *questioning* and critiquing what had become “accepted practices” for engaging the ethnological monitoring/early warning object-concept in the EAWARN. In response to an outside assessment of the EAWARN in the spring of 1995, the directors engaged in a new round of *analyzing* actions which resulted in Tishkov’s introduction of an indicator model adapted to and contextualized for the post-Soviet context.

Comments that several directors made during the 1995 annual meeting regarding the introduction of the indicator model indicate that they viewed the new tool not just as an innovation for the existing activity of the EAWARN, but also as containing the potential for catalyzing a qualitatively new form of activity. As such, the indicator model functioned as what Engeström (1987) calls a *springboard*: an artifact that facilitates the transformation of an activity. The difference between the development of the indicator model as a springboard, and the epistemic action of modelling a new form of activity must be kept clear. While the indicator model is an artifactual springboard for actions of modelling the EAWARN’s newly emerging practice, it is not yet the full-blown “model” of the new practice.

Two full days of discussions followed Tishkov’s introduction of the indicator model, during which the EAWARN participants argued over the terminology and parameters of each category. In Engeström’s typology of expansive development, these discussions represent the epistemic actions of *analyzing* the new indicator model tool, and thus, the current practice of ethnological monitoring/early warning, as well as the beginning of actions *modelling* a new form of practice. This modelling became the dominant form of epistemic action up to and during the Network’s annual meeting 1996. The new model of the EAWARN which emerged from these actions was distinguishable by its orientation toward the Western “users” or consumers of the EAWARN’s information products, and its focus on commercializing the EAWARN’s activity.

In this section I have traced the development of the EAWARN from 1990-1996, employing Engeström's typology of seven epistemic actions. I summarize the Network's evolution through one cycle and into a second cycle during this period in Figure 3. Viewing the two cycles next to each other reveals that chronologically there is a partial overlap between them. As spiralling cycles, while the second is contingent upon the first, it is not strictly successive to it. The introduction of the indicator model occurred in the *evaluation* phase of the first cycle, and the *analyzing* phase of the second cycle. In other words, the introduction of the indicator model was an action with dual meaning. On one hand, it was an action of evaluation and consolidation. On the other hand, it was an action that led to the modelling of a new form of activity.

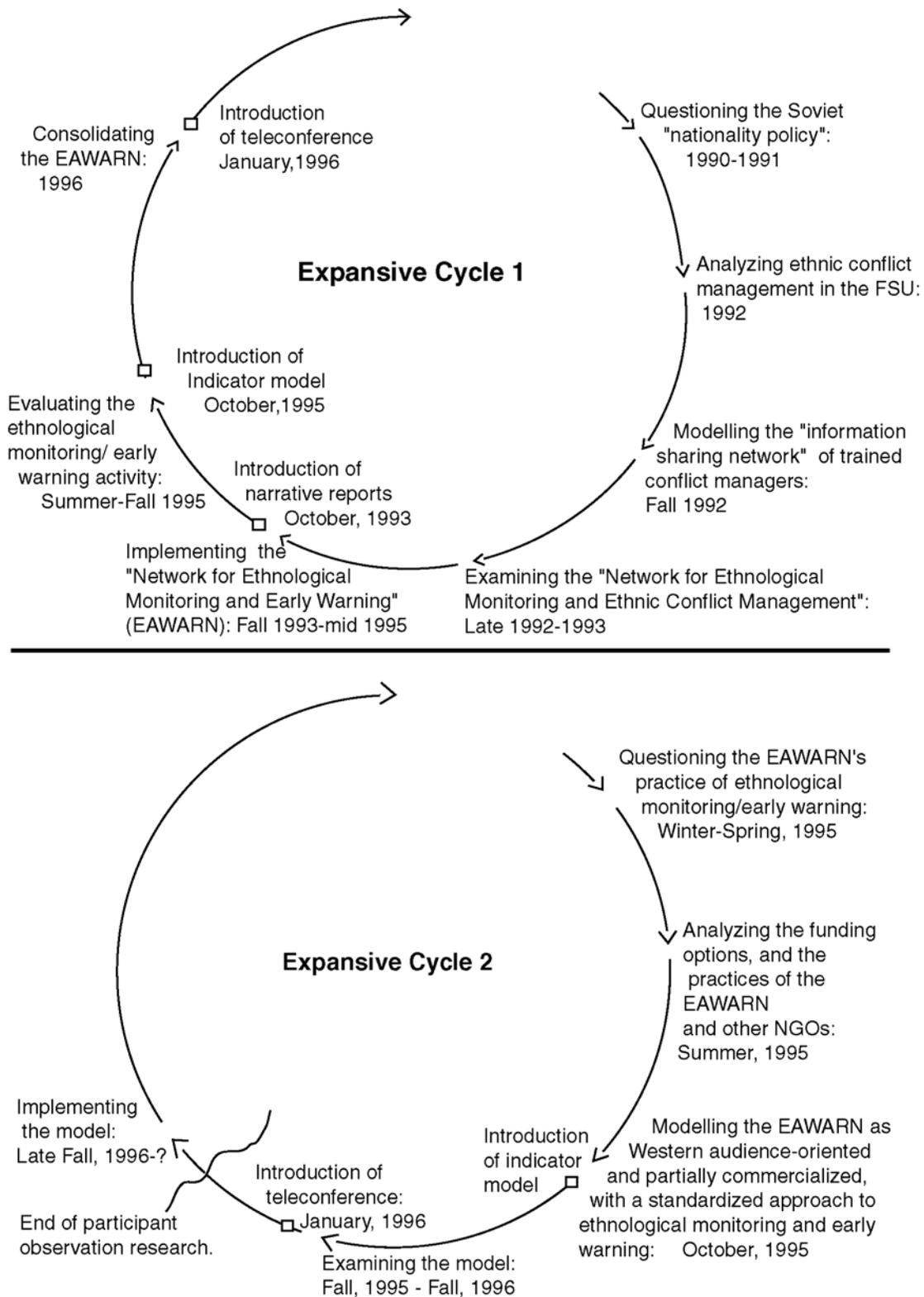


Figure 3 The Development of the EAWARN 1990-1996

What precipitated the introduction of the indicator model into the EAWARN at this particular point in these two cycles? I argue that the Network's ever-present core contradiction between

sociopolitical and economic concerns, modulating and manifesting itself in the mismatch between the object and the tools evident in the implementation phase of the first cycle, were the catalyzing forces for this innovation.

Illuminating the Future. Careful attention to emerging contradictions and an expanded conceptualization of Vygotsky's (1978) notion of the "zone of proximal development" (ZOPED) enables the CHAT researcher to anticipate possible future transformations of an activity system. In the case of the EAWARN, the ongoing and intensifying economic crises in the post-Soviet sphere make it unlikely that the tension for the Network between monitoring sociopolitical changes and ensuring its financial survival will abate. Thus, the primary contradiction between the use value and exchange value of each member of the Network and each report it produces will continue to catalyze the EAWARN's development. In this regard, I envision the EAWARN's zone of proximal development as including the following potentialities.

The first option within the Network's ZOPED is for it to continue as a nonprofit, nongovernmental organization. However, I see little hope of the EAWARN being able to raise sufficient grant funds or generate enough revenue from sources within the former Soviet Union to sustain its current work. This means that in order to survive, the Network will continue to have to orient toward the agendas and informational appetites of grant-givers and/or "clients" in the U.S. and Western Europe. I expect that the drive toward commercialization of the EAWARN will continue and even increase in intensity, and that the current "hybrid" of partial grant funding and partial revenue generation will become harder to maintain. This will further aggravate the primary contradiction of the Network and raise new contradictions. Despite the American directors' offers to broker the EAWARN's services and information products in the West, increased commercialization may result in a significant weakening of ties between the Conflict Management Group and the EAWARN, if not a complete withdrawal of the CMG from involvement in the Network.

Only a large, intergovernmental organization (IGO) such as the UNHCR could provide a sufficient level of consistent funding over the long term to sustain the EAWARN. An alliance with this type of IGO is a second potentiality in the Network's ZOPED. In that scenario, the tradeoff for financial security for the EAWARN may come in the form of reduced freedom to experiment and innovate, and less control over the Network's information products.

A third ZOPED option would be for the EAWARN to model itself after the RAND Center in California and become a fee-based research organization, supporting itself as a nonprofit by charging steep prices for its information products and services. While there is no way to "corner the market" on ethnic conflict monitoring in the post-Soviet sphere, the EAWARN potentially has the human resources and the technological infrastructure to position itself as a prime source of excellent web-based information products and research services. If it pursued this option, the Network would face the same kinds of strategic decisions that every organization engaging in electronic commerce faces, such as what kinds of information/services to provide potential clients for free on a website, in order to demonstrate the worth of the product/service and to win loyalty.

A fourth potentiality within the Network's ZOPED is that the increased financial orientation of the EAWARN toward the West could aggravate the political sensitivities it faces within the FSU, and especially within Russia. As tensions mount between Russia and the West, in part over NATO's war with Serbia, the "selling" of information on ethnic relations in the Russian Federation to the West may become even more of a lightning rod issue for Russian authorities. This may result in some degree of re-shaping the Network's object yet again, to include the concerns of state structures in the post-Soviet sphere-- which would result in a new set of contradictions.

The EAWARN's zone of proximal development thus includes at least four possible scenarios: 1.) continuing on grant funding as a nonprofit organization; 2.) turning into a for-profit organization that depends on sales revenue; 3.) becoming an organ of the UNCHR or a similar international body,

or 4.) becoming an organ of the Russian state. As I have demonstrated in greater detail elsewhere, (see Foot, 1999a), the development of the Network in any of these directions will occur as participants in the EAWARN attempt to jointly re-mediate the existing contradictions in their collective activity, manifested in disruptions and points of discoordination in their collaborative work.

CHAT as Practical Theory

Having demonstrated the kinds of findings and anticipatory conclusions that CHAT affords a researcher interested in the development of complex, collaborative human activities, I delineate in this section the correspondence between CHAT and what Cronen (1995) has conceptualized as practical theory. Cronen suggests that practical theory may be defined by the following five features:

1. Practical theory is concerned with the way embodied persons in a real world act together to create patterns of practice that constitute their forms of life.
2. A practical theory provides an evolving grammar for a family of discursive and conversational practices. The grammar of practical theory should be internally consistent and defensible in light of data.
3. These practices constitute a family of methods for the study of situated social action wherein professionals join with participants and clients. As such, practical theory respects the centrality of the grammatical abilities of persons in conjoint action.
4. Practical theories are assessed by their consequences. They are developed in order to make human life better. They provide ways of joining in social action so as to promote (a) socially useful description, explanation, critique, and change in situated human action; and (b) emergence of new abilities for all parties involved.
5. Practical theory coevolves with both the abilities of its practioners and the consequences of its use, thus forming a tradition of practice. (Cronen, 1995, p. 231-232)

In his explication of the first feature, Cronen highlights a tension in the social sciences between regarding the materiality of embodied persons in a real world, and “falling into the trap of some form of determinism” (p. 232). His concern that humans not be viewed as simply “texts or the points of textual intersection” (p. 232), is shared by activity theorists as well. In addition to regarding humans as embodied beings, CHAT emphasizes the material dimensions of cultural-historical and natural resources also. For example, in response to some forms of social constructivism, Engeström and Miettinen (1999) articulate their concern that:

Exclusive focus on text may lead to a belief that knowledge, artifacts, and institutions are modifiable at will by means of rhetoric used by an author. Activity theory sees construction more broadly. People construct their institutions and activities above all by means of material and discursive, object-oriented actions. (p. 10)

CHAT transcends the tension between social constructivism and determinism by regarding humans and human practices as simultaneously in relation to the natural/material realm through tools, and to the social realm through culturally and historically-shaped collective activity. Drawing on Marx and Engels, Leont'ev (1981) notes the interdependence of these two mediating aspects in human activity:

The first is the use and making of tools. 'Labour,' Engels, said, 'begins with the making of tools.' The second feature of the labour process is that it is performed in the conditions of joint, collective activity, so that man [sic] functions in this process not only in a certain relationship with nature but also to other people, members of a given society. Only through a relation with other people does man [sic] relate to nature itself, which means that labour appears from the very beginning as a process mediated by tools (in the broad sense) and at the same time mediated socially. (Leont'ev, 1981, p. 208)

Furthermore, in contrast to traditions of material or social determinism, CHAT regards individuals and collectives as having agency. In activity-theoretical perspective, and consistent with Vygotsky's view of learning, humans do not solely *internalize* or appropriate the cultural-historical and material resources available to them, but they also *externalize* or create new social and material forms, patterns of relations, and tools-- in expansive cycles of development (Vygotsky, 1978; Engeström, 1999a).

In his description of practical theory's first feature, Cronen appropriates Wittgenstein's conceptualization of forms of life in order to emphasize "the need to see human action in larger terms than the single episode or single relationship," (Cronen, 1995, p. 233). Again, activity theorists concur with Cronen-- and argue that "Wittgenstein's idea of language game as an aspect of form of life has a strong affinity to activity-theoretical conceptions of communication as an integral aspect of object-oriented practical activity" (Engeström & Miettinen, 1999, p. 7).

Cronen's second and third features of practical theory point to an evolving "grammar of practice" that is "internally consistent and defensible in light of data" and that "respects the centrality

of the grammatical abilities of persons in conjoint action.” The CHAT framework, itself an evolving grammar, not only enables researchers to respect other grammars, but also to catalyze and analyze dialogue among multiple “grammars of practice” within and between activity systems. CHAT researchers seek to highlight the dialogue, or better, *multilogue*, that takes place between multiple participants in an activity system such as the EAWARN, as each brings different perspectives and cultural resources to construct and engage a common object, as well as between participants in “neighboring” or interlinking activity systems. The CHAT framework also facilitates analysis of the interplay of researchers’ activity-theoretical grammars with the grammars of the “practitioners” of an activity.

Cronen’s concern that “professionals” respect the abilities and aims of the “clients” involved with them in conjoint action is also applied by activity theorists to relationships among researchers. For example, Michael Cole, who pioneered the use of computer-mediated communication as a medium for joint research between social scientists in the US and the USSR articulated this aspect of the activity theory grammar of practice in his description of the decade long collaboration between the researchers on the staffs of the Laboratory for Comparative Human Cognition in San Diego, and the VEGA International Laboratory in Moscow:

We placed a heavy emphasis on the need for *joint* activity; there could be no question of one group dictating to another how problems should be solved. Both identification of interesting concrete research goals and the possible means to their solution needed to be worked out in common. (Cole, 1996, p. 44, italics in original).

The model of the activity system facilitates reflexivity on the part of the researcher who employs it. Especially when researchers play a participant-observer role in their study of an activity system, they are impelled by the model to consider their own roles in the activity as alternately “subjects/actors” and members of the “community of significant others” co-engaging the activity’s object.

Cronen's argument for the defensibility of a grammar of practice is implicitly a stance against radical relativism. Cronen cites Taylor (1985) in elaborating this aspect of practical theory:

Whereas... we cannot often find a simple common yardstick to 'prove' one approach better than another, that does not mean good reasons cannot be offered for working one way instead of another. (pp. 235-236)

Again, Cronen's concern is consonant with that of activity theorists. However, in CHAT, relativism is linked with the absence of appropriate historicity in research. Engeström makes this argument forcefully:

Differences in cognition across cultures, social groups, and domains of practice are ... commonly explained without seriously analyzing the historical development that has led to those differences. The underlying relativistic notion is that we should not make value judgments concerning whose cognition is better or more advanced-- that all kinds of thinking and practice are equally valuable. Although this liberal stance may be a comfortable basis for academic discourse, it ignores the reality that in all domains of societal practice value judgments and decisions have to be made every day. People have to decide where they want to go, which way is up. If behavioral and social sciences want to avoid that issue, they will be unable to work out useful yet theoretically ambitious intellectual tools for practitioners making those crucial decisions." (Engeström, 1999a, p. 25-26)

Engeström's concluding sentence in the excerpt above demonstrates his concern that, as Cronen stipulates, practical theory should be assessed by its consequences.

In his articulation of the fourth feature of practical theory, Cronen names description, explanation, criticism, and improvement as desirable consequences. To illustrate the capacity of CHAT to evoke such consequences, I return to my case study of the EAWARN. Both the engaged methodology I employed while collecting data and the analysis of the findings that I provided to the Network had significant, constructive consequences.

The comments of Network members both to me and to one another in public discussions revealed that my actions of participant-observation and interviewing resulted in a sense of validation of their collaborative work of conflict monitoring and epistemic community building, and in greater reflection on their joint activity. For instance, on several occasions, during a one-on-one conversation a

Network member would respond to a question I posed about the EAWARN's work with the admission that he or she had never thought about that aspect before. Then within hours or days, the same EAWARN participant would articulate a comment in a Network discussion that reflected the question I'd asked.

Although my analysis of the Network's development contained some critical elements, the leaders of the EAWARN expressed great appreciation for my work. One Russian director wrote, "Your [study] serves as a guide for me to work with EAWARNers. I was deeply impressed to find those sides of our network, which are hidden from us, organizers. I am looking forward to discuss with you some aspects." (Ustinova, personal correspondence, 9/21/99) Tishkov himself affirmed:

I did not find any places in the text (data and observations) which met my objections or even serious reservations. Your analysis of internal dynamics and contradictions as well as research conclusions were very interesting for me to read. It is an invaluable outside scrutiny done by a representative of profession [sic] analysing human collectives and communication. My own self-reflections has [sic] never gone so far in details. That is why I found it also very useful and I shall use your study for the benefits of the EAWARN. I think that is the best possible reward for a scholar when his [sic] research is found to be relevant by those who are objects of the study." (Tishkov, personal correspondence, 7/6/99)

In October, 1999, at Tishkov's invitation, I had the opportunity to present the findings of this study to the EAWARN members in person during their annual meeting, and to engage in dialogue with them about the implications of my analysis. The comments above and the responses of the Network members evidence that although as a researcher I worked independently of the EAWARN, the Network directors viewed my study as a service to them and to the Network as a whole. Furthermore, the activity theory framework increased my abilities as a researcher by challenging me to view the Network from multiple perspectives, and to compare the unconscious preconceptions I had of the EAWARN's development with the descriptions and explanations that Network participants offered of it.

Cronen's fifth and final feature of practical theory is that it "coevolves with both the abilities of its practitioners and the consequences of its use, thus forming a tradition of practice." In keeping Cronen's stipulations, CHAT provides an identifiable tradition of work and exhibits dynamism. After reviewing a number of social approaches to communication inquiry that relate to CHAT, Engeström and Miettinen conclude their discussion with the argument that:

The coexistence of and dialogue between such different but closely related approaches as activity theory and the other theories mentioned in this [discussion] is a sign of vital development in the field. Novel hybrid concepts and research paradigms are emerging. Activity theory has deep historical roots and an accumulated record of theory and research that is still only fragmentarily known in the West. Although activity theorists should self-consciously examine and exploit this history, they also need to face the exciting new challenges and opportunities for collaboration." (Engeström & Miettinen, 1999, pp. 12-13)

Cultural-historical activity theory as a tradition of practice is both deeply rooted and evolving. As practical theory, it enables rich analysis of complex, changing forms of collaborative human activity. In the case I presented in this paper, CHAT illuminated the development of a transnational network of conflict monitors in ways that benefited both the researcher and the researched.

Author

Kirsten A. Foot is a postdoctoral fellow in the Information and Society program at the Annenberg Public Policy Center, University of Pennsylvania. The research reported in this article was undertaken through the Department of Communication at the University of California, San Diego, with support from the U.C. Board of Regents. The author thanks Yrjö Engeström and anonymous reviewers for their helpful feedback on this manuscript. Correspondence concerning this article should be addressed to Kirsten A. Foot, Annenberg Public Policy Center, 3620 Walnut St., Philadelphia, PA 19104; email: kfoot@asc.upenn.edu.

References

- Blackler, F. (1992). Formative contexts and activity systems: Postmodern approaches to the management of change. In M. Reed & Hughes (Eds.), *Rethinking the organization: New directions in organizational theory and analysis*. London: Sage.
- Christiansen, E. (1996). Tamed by a rose: Computers as tools in human activity. In B. A. Nardi (Ed.), *Context and consciousness: Activity theory and human-computer interaction* (pp. 175-198). Cambridge, MA: MIT Press.
- Cole, M. (1996). *An experiment in computer-mediated cooperation between nations in conflict: The Velikhov-Hamburg project 1985-1994*. La Jolla: The Laboratory of Comparative Human Cognition, University of California, San Diego.
- Cole, M., & Engeström, Y. (1993). A cultural-historical approach to distributed cognition. In G. Salomon (Ed.), *Distributed cognitions* (pp. 1-46). New York: Cambridge University Press.
- Cronen, V. E. (1995). Practical theory and the tasks ahead for social approaches to communication. In W. Leeds-Hurwitz (Ed.), *Social approaches to communication* (pp. 217-242). New York: Guilford Press.
- Davydov, V. V. (1988). Problems of developmental teaching. *Soviet education*, XXX(8-10), whole issue.
- Engeström, Y. (1987). *Learning by expanding: An activity-theoretical approach*. Helsinki: Orienta-Konsultit.
- Engeström, Y. (1990). *Learning, working and imagining: Twelve studies in activity theory*. Helsinki: Orienta-Konsultit.
- Engeström, Y. (1999a). Activity theory and individual and social transformation. In Y. Engeström, R. Miettinen, & R.-L. Punamäki (Eds.), *Perspectives on activity theory* (pp. 19-38). New York: Cambridge University Press.

Engeström, Y. (1999b). Expansive visibilization of work: An activity-theoretical perspective.

Computer supported cooperative work: The journal of collaborative computing, 8(1-2), 63-93.

Engeström, Y. (1999c). Innovative learning in work teams: Analyzing cycles of knowledge creation in practice. In Y. Engeström, R. Miettinen, & R.-L. Punamäki (Eds.), *Perspectives on activity theory*. New York: Cambridge University Press.

Engeström, Y., & Miettinen, R. (1999). Introduction. In Y. Engeström, R. Miettinen, & R.-L. Punamäki (Eds.), *Perspectives on activity theory* (pp. 1-18). New York: Cambridge University Press.

Foot, K. A. (1999a, May 27-31). *Contradictions as illuminative hinges: Activity theory and organizational development*. Paper presented at the International Communication Association, San Francisco.

Foot, K. A. (1999b). *Writing conflicts: An activity theory analysis of the development of the Network for Ethnological Monitoring and Early Warning*. Unpublished Dissertation, University of California, San Diego, La Jolla.

Foot, K. A. (Under review). Catching an evolving object: A case study in object formation and identification. *Mind, Culture and Activity*.

Holland, D., & Reeves, J. R. (1996). Activity theory and the view from somewhere. In B. A. Nardi (Ed.), *Context and consciousness: Activity theory and human-computer interaction* (pp. pp. 257-282). Cambridge, MA: The MIT Press.

Ilyenkov, E. V. (1977). *Dialectical logic: Essays in its history and theory*. Moscow: Progress.

Kuutti, K. (1996). Activity theory as a potential framework for human-computer interaction research. In B. A. Nardi (Ed.), *Context and consciousness* (pp. 17-44). Cambridge, MA: MIT Press.

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

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

- Marx, K., & Engels, F. (1968). *The German ideology*. Moscow: Progress.
- Quinn, R. E., & Cameron, K. S. (1988). Paradox and transformation: A dynamic theory of organization and development. In R. E. Quinn & K. S. Cameron (Eds.), *Paradox and transformation* (pp. 289-308). Cambridge, MA: Ballinger Publishing Company.
- Scribner, S. (1985). Vygotsky's uses of history. In J. Wertsch (Ed.), *Culture, communication and cognition: Vygotskian perspectives*. New York: Cambridge University Press.
- Taylor, C. (1985). *Philosophy and the human sciences: Philosophical papers*. (Vol. 1). Cambridge: Cambridge University Press.
- von Cranach, M. (1988). Panel discussion "Activity - Action - Operation". In M. Hildebrand-Nilshon & G. Rückriem (Eds.), *Activity theory in movement - discussions and controversies. Proceedings of the 1st International Congress on Activity Theory* (Vol. 4.1). West Berlin: System Druck.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge: Harvard University Press.