Composition Forum 15, Spring 2006

The Regionalization of Cyberspace: Making Visible the Spatial Discourse of *Community* Online

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There are particular theories and concepts that teachers of writing use to inform pedagogical practice—outcomes and understandings that we hope students will carry with them into their academic and professional lives, as well as their civic involvements. Course readings, course projects and even how classroom space is organized are often constructed with these theories and values and mind. The importance of space for achieving and establishing pedagogical goals has been recognized and utilized by many teachers, what Roxanne Kent-Drury refers to as*pedagogic space*. At times, rows of desks may be [re]arranged into circles, encouraging and making visible the value that we place on peer discussion and the social construction of knowledge. In formal testing situations, when individual assessment is a desired outcome, teachers may ask students to "spread out." More recently, networked computers have been discussed in light of the networks ability to reconfigure traditional notions of classroom space, displacing the front of the classroom and, therefore, the teacher authority associated with it. At the same time, the spatial layout of many networked computer classrooms have been critiqued because of the ways in which the stable arrangement of computers may actually hinder classroom mobility, eliminating possibilities for alternative work or teaching practices. Recent discussions of the changing nature of the writing classroom as it becomes mobile, through the use of laptop computers and wireless networks, likewise focus on space—its deconstruction and reconstruction (Meeks 1).

Similar to the relationship between space and pedagogical goals, the relationship between language and space is worth considering, particularly as spatial metaphors like *community* are used to describe online social and academic writing and learning contexts. While the factor of shared geographic space is not usually associated with community online, the concept of community has a long social and political history that closely connects social interaction with spatial placement (Williams 75). In contrast to traditional concepts of community, the Internet and the new communicative contexts made possible because of online communication technologies are, in fact, often described as contexts existing beyond material space (Oldenburg; Healy). Therefore, as Susan Romano notes "[t]he metaphors of space and frontier frequently employed to describe online life contribute to the mystification of social arrangements in virtual environments" ("On Becoming" 252).

In general, the field of composition has theorized the term *community* in relation to the adjectives preceding it. These adjectives—interpretive, speech, discourse—situate the term in ways particularly relevant to our teaching contexts and research interests. As with many concepts in the field, understandings of interpretive community, speech community, and discourse community have been both widely accepted and often contested. Now, with millions of people corresponding online, traditional conceptions of how people meet, speak, and interact are being rethought. Included in this rethinking is the teaching of writing, as discussions of online writing classrooms and online writing groups are frequent among scholars in the field. Similar to how the adjective *online* has been joined with valued concepts in the teaching of writing such as *writing groups*, the increased popularity and use of communication technologies has led to *online* being coupled with the term *community* inside and outside the field of composition. Still, as Wysocki and Johnson-Eilola remind us about the term *literacy*, just because a term "slips off our tongues" and gets "put next to other terms" does not mean that it is necessarily appropriate for expressing relationships with technology (349). While the communicative contexts made possible through the use of online communication technologies are described as having the ability to transcend traditional understands of space, the conceptual framework surrounding *community* is situated within socio-political histories that closely connect social interaction with spatial placement.

The Changing Nature of the Writing Class[room]

As computers become part of writing classrooms, space has been an important factor in discussing the changing contexts of the writing class[room]. As far back as 1989, Cynthia Selfe provided writing teachers with strategies for planning computer supported writing contexts. In her book, *Creating a Computer-Supported Writing Facility—A Blueprint for Action*, Selfe discusses the planning, staffing and lab design for computer writing facilities and makes visible the importance of considering how space should be constructed in direct relationship with pedagogical and

classroom goals. Expanding on Selfe's careful consideration of lab design, Elizabeth Lopez argues how spatial configurations of computer and networked classrooms influence dynamics of power. Lopez argues that "physical and electronic spaces and their attendant ideologies are complexly related to power relations at play within them, even though space is not the sole determinant of the relationships" (117). Both Selfe and Lopez make clear the symbiotic relationship between pedagogy and the spatial configurations of classrooms, particularly in electronic or networked learning contexts. This point is further illustrated in Linda Myers' book, *Approaches to Computer Writing Classrooms —Learning from Practical Experience*, through the many drawings of academic computer facilities and Myer's discussion of how space encourages as well as discourages particular activities important to writing instruction.

In comparison, another popular claim instantiating the relationship between space and pedagogical practice, particularly as writing classrooms move online, is illuminated by Michael Spitzer in his discussion of computer conferencing and the ability for online communication technologies to "overcome limitations imposed by geography and make it possible for users to communicate easily with one another regardless of where they are located" (187). In Spitzer's report, overcoming the geographic limitations of the traditional writing classroom is thought to have advantages for students; students can use communication technologies as a means for breaking down barriers that might otherwise exclude them from particular learning environments. While teachers of writing have taken time to complicate general claims of democratic participation online, these inquiries focus on the effects of race, class and gender online and/or material access to technology (Selfe and Selfe; Gruber; Romano "Egalitarian Narrative").

Richard Riedl and Charles Moran have both reported on how access—material and ideological—is directly related to the reestablishment of the status quo online. Claims of egalitarian representation online are also challenged in Kristine Blair and Pamela Takayoshi's edited collection, *Feminist Cyberscapes: Mapping Gendered Academic Spaces*, which articulates instances of the marginalization of women's voices and women's bodies in online contexts. Within this collection, Joanne Addison and Susan Hilligoss (1999) specifically discuss their experiences as lesbians on a women's discussion group where the heterosexual norms of the discussion group and the absence of physical social cues led to the exclusion of the lesbian perspective (21-40). As Susan Herring notes, "the notion of democracy as it emerges through these claims has two essential components: access to a means of communication, and the right to communicate equally, free from status constraints" (476). While considerations of race, class, gender and material access are essential to any articulation of how communication technologies construct and deconstruct boundaries online, few inquiries in the field of composition consider how the concepts or frameworks teachers and students use to construct, describe or evaluate online experiences might also hold influence over online activities. Similar to Cynthia Selfe and Richards Selfe's articulation of the *desktop* as an organizing principle for online experiences, there are other concepts particularly relevant to the teaching of writing—concepts like 'community'—that warrant similar inquiry.

The Writing Class[room] Online and Community

A range of terms or concepts has been employed to discuss the pedagogical outcomes of the writing class[room] online and/or across networked spaces. In 1990, Carolyn Boiarsky introduced the spatial metaphor of the *newsroom*to describe how she saw the computer "alter the environment of the classroom, and with it the role of both teacher and student" (50). More specifically, Boiarsky writes,

> "Today, with the help of the computer, my freshman composition class is beginning to resemble the newsroom bullpen—I don't perceive those in my classroom as "students," but as young writers—Nor do I see myself as a teacher, but rather as an editor" (49).

By seeing her computer-mediated freshman composition class as a newsroom, Boiarsky claims that a transformation of her classroom occurred, commenting that the class had "truly become a community of writers" (67). The term community is used often to describe class dynamics associated with networked or online writing classrooms, particularly in response to the potential for these technologies to overcome material signifiers and geographic boundaries, creating potential for more democratic and sustained participation among class members online. In particular, the concept of ☐community' to describe online learning contexts is particularly popular in discourse surrounding distance education, where teachers sometimes approach their pedagogy from the perspective of being "community builders" (Cooper 1).

Associations between the classroom, technology and community are also observable in popular computer-based learning environments like *Blackboard*, used by teachers to facilitate file sharing, synchronous chat, and threaded discussions online. At the 2000 Computers and Writing conference, Shannon Carter presented a paper that discussed how she used *Blackboard* to enhance feminist practices in her computer-mediated composition classroom

by moving the locus of control away from the teacher and into the hands of the students. By reflecting upon how she adjusted course goals and teaching strategies, Carter defined the online learning space offered by*Blackboard* as a "new vista." David Yaskin and Stephen Gilfus—the product developer and product manager of the*Blackboard 5 Learning System* —defines the "new vista" embraced by Carter as an environment that unifies "course management," "academic portal systems," and "community building technologies" (7).

More specific to composition studies, Carolyn Handa's edited collection, *Computers and Community: Teaching Composition in the Twenty-First Century*, focuses on the importance that teachers of writing place on engaged social interaction among students. In particular, Mary J. Flores clearly establishes relationships between the writing classroom, technology and community by discussing the evolution of a "community" of writers that formed online through their use of computer conferencing. Elaborating on the claims made by Flores, Cynthia Selfe and Richard Selfe describe how teachers of English frequently, "turn to—computer-supported writing environments as places within which they and students can try to enact educational practices that are more democratic and less systematically oppressive" (483). Selfe and Selfe follow this statement by encouraging teachers of writing to understand the outcome of these online interactions as "communities" (483). Randall Donaldson and Markus Kottter's make a similar connection, reporting on the collaborative MOO experiences of two language classes—a group of German adults learning English and a group of American college students learning German. For the authors, the student-centered exchanges that occurred regularly in the MOO fostered a growing sense of "community" that would otherwise be absent from the classroom-learning environment. Likewise, James Zappen, Laura Gurak, and Stephen Doheny-Farina describe the outcome of their online graduate colloquium— *Rhetoric, Community, and Cyberspace* —as "a community unlike anything [they] had ever seen" (1).

Community as Metaphor

As the above summaries represent, the concept of community is well established for describing the pedagogical outcomes of writing classrooms as they take on online components. More specifically, discussions that associate online discourse with community frequently include related discussions about the role that online technologies play in the overcoming or shifting of geographic boundaries and the construction/ deconstruction of space. Concepts like community, when approached critically and rhetorically, provide teachers with opportunities for illuminating how online writing environments may actually (re)produce traditional constraints of space in our classrooms, simultaneously creating new opportunities for conceiving space. By approaching the concept of community online as metaphor, the diverse range of possibilities for [re]constructing space online can be formed in direct relationship with the production of space and its relationship to writing online.

When community is approached as metaphor, the dominant and silenced discourses about community reveal how online communication technologies connect some individuals while also constructing boundaries between other online groups. Cynthia Selfe and Richard Selfe remind teachers of writing to think about how borders "are represented and reproduced in so many commonplace ways, at so many levels, that they frequently remain invisible to us" (481). For Selfe and Selfe, one place where such borders can become visible is in the critical and rhetorical examination of technologies and the language used to describe their integration into social and classroom contexts.*Community* has cultural and ideological associations that are established and maintained through socio-cultural histories and uses of the term; these socio-cultural histories include characteristics that are valued as well as contested by teachers of writing. Because concepts like community are drawn upon to both design and define the use of online communication technologies in classroom contexts, the concept of community is worth exploring beyond its literal interpretation—metaphorically and heuristically.

Dominant Discourses Associated with Community Online

By looking at two of the more popular and often cited definitions of online community, the shared dominant discourses about community online become identifiable. Howard Rheingold, in his ethnographic telling of the online community *The Well*, defines virtual communities as "social aggregations that emerge from the Internet when enough people carry on . . . public discussions long enough, with sufficient human feeling, to form webs of personal relationships in cyberspace" (3). Constructing a definition around similar characteristics, Jan Fernback and Brad Thomson state that "community within cyberspace emphasizes a community of shared interests, usually bounded by the topic under discussion, that can lead to a communal spirit and apparent social bonding" ("Social Bonding" 8). While these are only two definitions of community online, these definitions do introduce terms and concepts used frequently to describe community online. While there have no doubt been other characteristics associated with

community online, the defining characteristics identified in Rheingold's and Fernback and Thompson's definitions—shared interests, across traditional understandings of space, with established rituals and norms, capable of sustaining meaningful, democratic discourse—are found frequently in popular and academic literature discussing community online and off, therefore, representing the dominant discourse associated with community online. (Baym; Cheney).

When the dominant discourses associated with community online are situated within the larger context of classical community literature—coming mostly from the field of sociology—how discourse is historically and culturally influenced becomes visible. A Foucauldian approach towards the discourse of community online illuminates how discourse is intertwined among many elements—institutions, social and architectural arrangements, history, knowledge, power, etc.—that govern characteristics associated with community over time. Such relations further define the discourses outlined above as dominant because they represent how, as Marshall McLuhan says about the introduction of the computer in contemporary life, "the advent of a new medium often reveals the lineaments and assumptions, as it were, of an old medium" (567).

The term community has been dated to the fourteenth century. Having grown out of the root word *communis*, it was used to refer to common relations or feelings. Over the course of four centuries, the term evolved and took on a variety of meanings. Raymond Williams classifies these as follows:

> (i) the commons or common people, as distinguished from those of rank (C14-C17); (ii) a state or organized society, in its later uses relatively small (C14-); (iii) the people of a district (C18-); (iv) the quality of holding something in common, as in community of interests, community of goods (C16-); (v) a sense of common identity and characteristics (C16-). (75)

Even these early definitions of community share characteristics with community as it is being used to describe classroom contexts. As William's definition quoted above shows, historically, discussions about the formation and sustainment of community include characteristics related to (i) constructed boundaries or social hierarchies; (ii) established histories and rituals; (iii) shared geographical space; (iv) mutual interests; and (v) shared values and norms. Of course, Williams's characteristics differ slightly in terminology, and, of these five characteristics, the characteristics of shared geographic space is least frequently associated with community online. In fact, as noted in Howard Rheingold's definition above, communities online are generally associated with ongoing, public discourse made possible because of communication technologies ability to overcome limitations or boundaries associated with geographic space (Gurak; Reidl; Turkle). However, the similarities between discourses related to community and more contemporary understandings of community online represent how dominant discourses about community have been established and sustained over time, across disciplines and even into new social contexts like those offered by online communication technologies.

In his call for an examination of the domination of space David Sibley asks his readers to "examine the assumptions about inclusion and exclusion which are implicit in the design of spaces" (*x*). While material access to technology begins to address the questions raised by Sibley, there are other ways too that boundaries are created and maintained online. For Michel Foucault, these questions can be approached through his genealogical method, which calls for considerations of how contexts and boundaries establish discourse and how [dominant] discourse maintains contexts and boundaries. After all, as David Benyon notes, "people play a role in producing space, through their activities and practice . . . there is a context to space, which needs to be communicated, negotiated, and understood by people (31). By paying attention to the relationships between discourse, space and boundary construction, new, complex and alternative understandings of the community metaphor online can be explored to encourage new ways of seeing, thinking and making meaning of the actions and involvements of online groups.

Marshall McLuhan and Bruce Powers's tetradic representation is a methodological tool, which considers the interplay between dominant characteristics associated with technological metaphors (like community online) and possibilities for more silenced characteristics of the concept to be called to attention (10). McLuhan and Powers refer to the dominant characteristics associated with cultural artifacts or technologies as *figure* and the more silenced characteristics as *ground*. McLuhan and Powers use the paintings of Van Gogh to explain the concepts of*figure* and *ground* ; as one part of the painting rises out to the viewers attention it becomes *figure*, which later, as alternative figures emerge, recedes back into *ground* —"each new figure alternately displacing the other into ground" (5). In the case of new technologies and related social processes, the area of attention or *figure* focuses on questions related to what a cultural artifact or technology enlarges or enhances or what it retrieves that had been earlier obsolesced. In the case of community online, these questions are answered through dominant discourses like those found in Howard Rheingold's or Jan Fernback's and Brad Thompson's definitions cited earlier or in Nancy Baym's ethnographic telling of an online fan-based community (*Tune In*). The dominant discourse about the use of communication technologies in the teaching of writing also answer Powers and McLuhan's questions through claims

of renewed classroom community through discourse, democratic classroom participation, decentered teacher authority and transcended space (Barker and Kemp; Batson “Teaching In”).

In the case of *ground*, McLuhan and Powers encourage users of technology to question the tendency for new technologies and the subsequent mechanical age to “obscure the ground subliminally” (9). In the case of new technologies, the area of *ground* becomes visible by exploring questions related to what a cultural artifact or technology erodes or obsolesces, as well as what it reverses and flips into when pushed to the limits of its potential (9). For McLuhan and Powers, the tetradic representation articulates the *figure* and *ground* of an artifact or technology in “spiraling repetition” with one another and not as two separate outcomes or identities. Therefore, the tetradic representation provides a method for seeing how the dominant discourses about community online [the*figure*] when reversed also make visible the more silence discourses [the *ground*]. The value of making visible the*ground* of a given cultural artifact or technology is, for McLuhan and Powers, to create a tension that allows for interpretation and manipulation (130). Clifford Stoll, involved in the creation of the ARPANET (now known as the Internet) writes in his book *Silicon Snake Oil* that the dominant claims about the Internet’s ability to house community are actually incorrect. Rather, the Internet, to Stoll, merely provides participants with the *illusion* of community. In contrast to the dominant discourses associated with social relations and communication technologies, Stoll writes that “[c]omputer networks isolate us from one another, rather than bring us together” (58). If “also” were replaced with “rather than” in Stoll’s quote, it would be a representative example of how McLuhan and Powers’s tetradic representation functions by encouraging the figure and ground of an artifact or technology to be viewed simultaneously, as two parts coexisting to make up the cultural context in which the artifact or technology exists.

The dominant discourse about community online simultaneously creates areas of attention and inattention that are both necessary for developing rhetorical understandings of how the term community functions as a defining and, therefore, constructing principle. For example, through the tetradic representation, the dominant discourses about community online—shared interest, unconfined by space, with established group hist ories and ongoing discussions—are pushed to the limits of their potential. This method reveals how the concept of community online may actually reverse into a term associated with the construction of boundaries between members and nonmembers of online groups, as well the establishment of norms for acceptable discourse or silenced discourse. For example, if the dominant characteristics associated with community online are present and/or (re)created in online classroom contexts, these same discourses reverse into more silenced discourses related to the metaphor: homogeneity, boundary construction and discourse seemingly removed from its actual and complex material contexts.

The four parts of the tetradic representation are, for McLuhan and Powers, a “play of metaphors” (30). Because the tetrad representation preserves the figure-ground relation of a given technology, if such metaphorical expressions were not made possible then “all that remained would be synecdoche or simile or metonymy” (30). When metaphor is approached as synecdoche, simile or metonymy, the new relationships that technological metaphors like community set up for users in online groups become naturalized, and the play between *figure* and *ground* is obscured. By considering the simultaneous effects of the dominant and silenced discourses about community online, the tetradic method articulates how, when pushed to its limits, the metaphor of community online may actually become an organizing principle for making sense of and initiating online experiences.

Metaphors function by taking a word or concept from one context and using it to create meaning in another. Through such action, the metaphor will provide a perspective on the concept or action, or it may actually replace the concept or action with a literal interpretation or meaning. This is an overlap well articulated by Kenneth Burke in his definition of metaphor as being one part of four master tropes: *metaphor*, *metonymy*, *synecdoche*, and *irony*. Burke associates each of these master tropes with what he refers to as “realistic” applications that shade into one another in “discovery and description”’ (*Grammar* 503). Burke writes that, “For *metaphor* we could substitute *perspective* ; For *metonymy* we could substitute *reduction* ; For *synecdoche* we could substitute *representation* ; For *irony* we could substitute *dialectic* ”(*Grammar* 503). *Metonymy* works as reduction in that “the original corporeal reference is forgotten, and only the incorporeal, metaphorical extension survives” (*Grammar* 506). In other words, the complexities of the former are reduced to the familiarities of the latter and vice-versa. It is at this point that Burke argues that *reduction* becomes *representation* ; in other words community becomes the sign for the thing signified (*Grammar* 507). As mentioned previously, the community metaphor is embedded in social and political histories that, when used to describe online contexts or groups, provides a *perspective* on them. For community to sustain itself as metaphor, the incongruities between prior understandings of community and the characteristics of online groups would be used heuristically to introduce one of a variety of perspectives for online groups. When community ceases to be viewed metaphorically, it takes on characteristics of *metonymy* and *synecdoche*, reducing opportunities for online groups to enact different forms of representation.

The fourth trope, *irony* or *dialectic* operates similar to Burke’s *dramatistic* function of language by complicating

possibilities for relativism (*Language*). Rather than settling for one perspective or one set of terms for conceptualizing something, *irony* or *dialectic* occurs within the interaction of terms or perspectives. Burke notes, "the dialectic of this participation produces . . . a 'resultant certainty' of a different quality, necessarily ironic, since it requires that all the sub-certainties be considered as neither true nor false, but contributory" (*Language* 513). When the study of metaphor is situated within the realm of rhetoric, it becomes not only a study of practical reasoning, but a study of persuasion as well. For many, community is a widely accepted term that creates a feeling of comfort; it is a persuasive word that, as Raymond Williams points out, "seems never to be used unfavorably, and never to be given any positive opposing or distinguishing term" (76). In comparison, technology and more specifically online communication technologies are generally not as widely accepted. When a generally widely accepted and familiar term such as community is used to describe online contexts, the community metaphor can be seen as acting both practically and persuasively.

Metaphors are persuasive in that terms, concepts or activities are chosen to describe other terms, concepts or activities and these choices have influence. Bonnie Nardi and Vicki O'Day make a similar point:

> Metaphors matter. People who see technology as a tool see themselves controlling it. People who see technology as a system, see themselves caught up inside it. . . . Each of these metaphors is "right," in some sense; each captures some important characteristics of technology in society. Each suggests different possibilities for action and change. (27)

Likewise, the use of the term community to describe online contexts or groups has the ability to persuade because community provides a frame of reference through which online action may be take place. If online groups were commonly referred to as "gated enclaves," then participants would likely see their online activities very differently than the metaphor of community does. While the online group might still share interests, values, rituals, etc., the epistemology put forth by the metaphor of a "gated enclave" would be different. If we are interested in constructing online components in our writing classrooms that align themselves with our larger disciplinary or classroom goals and objectives, then we need to think critically and rhetorically about how we go about situating our uses of communication technologies not only within the dominant and silenced discourses about community online but within other concepts or metaphors that we have come to value or use to make sense of our pedagogies.

Pedagogical and Social Possibilities Articulated Through Metaphors

Michael Cole and Ygro Engestrom's expansion of activity theory articulates how a person's personal and professional interests and interactions are enmeshed in what they call *activity systems*. For Cole and Engestrom, each person is a member of various communities of practice, which extends the concept of community beyond a geographical construct to seeing it more as a set of relations. In activity theory, communities of practice inevitably intersect with other communities of practice. It is at these intersections that communities of practice learn, establish and promote group ideologies through exploration and problem-solving dialogue with other people, technologies, genres, artifacts, etc—what Lave and Wenger refer to as *situated learning*. The emphasis in Cole and Engestrom's understanding of activity systems is on the *interactions* among the various parts of the systems that are constantly in flux. As Ygro Engestrom notes, "[a]n activity system does not exist in a vacuum. It is a node in a multidimensional network of activity systems" (13). These systems establish a "set of relations among persons, activity, and world" (Lave and Wenger 98); members of particular groups do not act in isolation but rather among the various activity systems located in the shared space of members and even nonmembers (Winsor; Russell).

Bonnie Nardi in a preview of her book *Context and Consciousness: Activity Theory and Human-Computer Interactions* discusses how activity theory offers a perspective on human activity that could be useful to theorists and researchers interested in the design of systems for human-computer interaction [HCI], including computers in the classroom. According to Nardi, designers and users of technology interested in HCI have "recognized that technology is not a mechanical input-output relation between a person and a machine, that a much richer depiction of the user's situation is needed for design and evaluation" (4). She adds,

> [a]s we expand our horizons to think not only about usable systems but now useful systems, it is imperative that we have ways of finding out what would be useful . . . to understand the best ways to undertake major design projects such as . . . using computers in the classroom. (5)

For Nardi, looking at the activity systems that particular groups participate in and recognizing how they are interpenetrated with other people, communities, and artifacts can develop such understandings. For Nardi, "[a]ctivity

theory offers a set of perspectives on human activity and a set of concepts for describing that activity" useful to considering the design/use of technology in particular social contexts" (4).

Responding to the perceived isolation of the cognitive process model of writing, Marilyn Cooper proposes another model for perceiving writing and the social structures and processes that it involves, what she refers to as an*ecological model* of writing. The fundamental tenet of an ecological model of writing is that "writing is an activity through which a person is continually engaged with a variety of socially constituted systems" (367). Cooper makes clear the distinction that *ecological* is different than *contextual*. While a writing project may be contextual—taking into consideration the immediate context of the writer and the writing situation—it does not necessarily mean that it will be connected with situations outside of but relevant to or impacted by the writing situation. In an ecological model ideas and writing result from contact with interlocking systems of relationships relevant to particular topics or fields of discourse that are created, drawn upon and altered. An ecological view of writing asks writing teachers and students to locate themselves within these systems and, at the very least, to create an awareness of the various systems that make up the social world relevant to particular acts of writing.

Similar to Marilyn Cooper's use of the ecology metaphor to describe the social contexts surrounding writing, Bonnie Nardi and Vicki O'Day use the ecology metaphor to describe the social, economic, and political contexts in which technologies are invented and used. They define *information ecology* as "a system of people, practices, values, and technologies in a particular local environment" (49). According to Nardi and O'Day the metaphor of an ecology,

> suggests diversity in a way that community does not. Communities can be quite homogenous, or defined along a single dimension (the gay community, a community of scholars, a religious community). The parts of an information ecology are as different from one another as oak trees and scrub jays in a California woodland ecology. Ecology implies continual evolutions. The idea of community does not put the same emphasis on change. (56)

In ways similar to Nardi and O'Day, C.A. Bowers encourages users of technology to consider the importance of what he refers to as "ecological citizenship" when constructing relationships with technology. Ecological citizenship recognizes differences in cultural ways of knowing and encourages designers and users of technologies to establish processes that consider such differences (Bowers 189). Bowers considers metaphors used to make sense of relationships with technologies important because they form culturally specific ways of knowing and doing. Technological metaphors "provide moral codes that govern how relationships are to be understood and acted out" and "moral templates for our actions in regard to the other" (Bowers 37).

Teachers of writing have also used the concept of heteroglossia to theorize the social environments of communicating and writing online. The possibilities created by hypertext for replacing linear acts of reading and writing with nonlinear or fragmentary encounters with language has the ability to put writers and readers in touch with the culturally diverse situations, voices, information or narratives that inform acts of discourse. According to Johndan Johnson-Eilola, "rather than being a seemingly isolated object in which other voices can be discovered with much work and the proper academic credentials" hypertext is "clearly multivocal" (*Nostalgic* 193). Theories of hypertext also draw upon Claude Levi-Strauss's metaphor of *bricolage*, advanced in the field of computers and writing by Sherry Turkle and Seymour Papert to describe the heterogeneous forms of information that may be constructed in random ways to suggest knowledge associations within particular contexts. Turkle and Papert describe bricolage as a "relational, interactive, active, and connected approach to objects" (150). A hypertext can be thought of as bricolage because of the juxtaposition and linking of diverse information and contexts that may seem otherwise unrelated. The diversity of information sheds light and understanding upon each other and the larger context within which the discourse is situated through their juxtaposition and links.

The interlinking and seemingly random nature attributed to hypertext has also been theorized by teachers of writing using the metaphor of the *rhizome*, advanced by Gilles Deleuze and Felix Guattari in *A Thousand Plateaus* to describe non-hierarchical networks in comparison to hierarchical structures of Power: "A rhizome as a subterranean stem is absolutely different from roots and radicals. . . . The rhizome itself assumes very diverse forms, from ramified surface extension in all directions to concretion into bulbs and tubers. . . . The rhizome includes the best and the worst: potato and couchgrass, or the weed" (Deleuze & Guattari 6- 7). The dominant characteristics that Deleuze and Guattari associates with the rhizome is its reliance on connection, its heterogeneity and its nomadic tendencies, in comparison to a tree which stands alone at a single and unified point. A distinction similar to that made between the rhizome and the tree is used in the field of Information Architecture to distinguish between a *silo*and a *network*. The concept of a *silo* is used to describe the chief operating units under a corporation—finance, operations, human resources, upper management—and their inability to communicate with one another due to expert knowledge or geophysical boundaries. Online communication technologies are one means for enabling these units to communicate with one another more productively, what is commonly referred to as a *network*.

Similar to how networks are established to overcome *silo* tendencies in corporate contexts, Susan Hilligoss notes that "networked computers change the way that writers write, readers read, and learners interact with each other and the teacher" in ways that support active and interactive learning (2). By using technologies that facilitate email, real-time conferencing, and electronic publishing, writing projects can "have actual audiences and carry the potential to build a community of writers and readers" (Hilligoss 3). While Hilligoss provides teachers of writing with examples of writing projects that utilize the benefits of a networked classroom, these writing projects focus primarily on members of the class writing to other members of the class or to a wider unknown audience. While some teachers do discuss the possibilities for networked technologies to connect their students to readers and writers outside of their traditional classroom contexts, in order to facilitate cross cultural understandings and collaborations (Bateman and Benson; Gooch; Caswell; Donaldson and Kotter), most discussions of networked or online writing contexts continue to focus on alternative forms of communication among students and the teachers already in the same classroom contexts, revealing how concepts of classroom community online actually recreates already established spatial boundaries.

As the above concepts or metaphors represent, community is but one of many concepts that teachers of writing have used and developed to describe the social situations that they would like to encourage and value in their classrooms, with and without technology. What all of these concepts and metaphors—activity systems, ecologies, bricolages, rhizomes and networks—have in common with the metaphor of community is that they each relate to social relationships. Concepts and metaphors like activity systems, ecologies, bricolages, rhizomes and networks, when used heuristically to think about how online communication technologies are being implemented into writing pedagogies, encourage relationships with technology different than the dominant and silenced discourses that construct understandings and enactments of community online. Rather than encouraging shared interests, histories and bounded group discussions, these concepts and metaphors emphasize difference, fluctuating norms and shifting discussions that include awareness and inclusion of not only the speaker and the audience but also the socio-cultural contexts and artifacts relevant to the discussion.

Online Space as a Social and Rhetorical Construct

Edward Soja makes a distinction between the physical concept of space and the social process of space. The physical concept of space focuses on what Soja calls "the physical phenomena on the earth's surface" while the social process of space focuses on the "process-oriented production of space" within social contexts ("Different Spaces" 3-4). For Soja, there is a dialectical relationship between space and social relations, what he refers to as the *socio-spatial dialectic*. To exhibit this, Soja associates fragmentary and homogenous space and its symbiotic relationship with social behavior within dominant capitalism that contains and confines social relations based upon physical parameters and spatial design. Because for Soja "no social revolution can succeed without being at the same time a consciously spatial revolution" (*Postmodern* 92) the production, translation, transformation and experience of space should not be taken lightly (*Postmodern* 80). Teachers of writing should approach communication technologies as means for the social production of space in ways that align themselves with pedagogical values, rather than the spatial [re]production of social contexts. As Stephen Jones notes, computer mediated communication "allows us to customize our social contexts . . . to plan, organize, and make efficient our social contexts" (11).

The context of the writing class is inextricably tied to the construction and deconstruction of boundaries. Boundaries are present and valuable because the writing classroom is a space for reflective discourse about writing and learning that creates what might be referred to as a community of learners. Simultaneously, however, the writing class is also a physical or conceptual space that can productively be deconstructed, through service learning initiatives, inter-disciplinary/classroom collaborations, client-based projects, field trips, guest speakers, etc. and certainly through the use of online communication technologies. While community is a useful metaphor for thinking about the social relations facilitated by online communication technologies other concepts and metaphors like those discussed in this article also inform relationships between personal and disciplinary values and the dominant and silenced discourses about community online. While the dominant discourses surrounding the metaphor of community online are appropriate for describing some characteristics of some online groups, these discourses alongside the simultaneous silenced discourse also reveal opportunities for considering the online groups and their social interactions online otherwise. As Henrietta Nickels Shirk writes, commenting on the changing nature of the field of Technical Communications, "the possibilities of new technologies require new deliberations and choices" (357).

While the metaphor of community is valuable for conceptualizing online learning and social contexts (as are activity systems, ecologies, bricolages and networks), it is important for teachers and students to experiment with more idiomatic possibilities when we use online communication technologies. Through use and communication, we have the potential to become architects of our learning and social spaces. For example, students and teachers should combine their experiences online with questions related to these: who is speaking online (as a member or a

representative of a group) and why; how can the absent discourse of particular social groups be made available online and should it; how does the "real life" interactions within and between social groups compare with online discourse; how do online classroom contexts construct and/or deconstruct understandings of the classroom as bounded space; and how might online communication technologies establish social learning contexts otherwise? To begin to answer these questions, students and teachers might consider the concept and practice of information architecture, which draws upon the metaphor of architecture to emphasize the importance of planning and structuring in web site design (Wurman).

In essence, information architecture involves defining informational structures important to the overall purpose of a web site and constructing well-designed informational paths to or between structures. While the field of information architecture has been developed mostly around web site design, it is a useful metaphor for conceptualizing online learning spaces and the writing and reading that occurs in these contexts. Similar to the metaphor of community, the concept of architectural design is rooted in spatial experiences that could serve as useful heuristic for students and teachers communicating online. In particular, the concept of information architecture raises questions regarding the informational paths that a particular online group has with other groups or resources related to or relevant to the learning context, online or off. This kind of writing is defined by James Porter as internetworked writing—"computer-based electronic writing that makes synchronous or asynchronous links to remote participants or databases" in more public sites than the classroom (2). As Margaret McLaughlin, Kerry Osborne, and Christine Smith note, "[a]s CMC continues to evolve—the use of the "community" metaphor in characterizing network discussion forums may prove to be only a starting point in analysis" (107).

Works Cited

Addison, Joanne and Susan Hilligoss. "Technological Fronts: Lesbian Lives 'On the Line.'" In *Feminist Cyberscapes: Mapping Gendered Academic Spaces*. Eds. Kristine Blair and Pamela Takayoshi. Norwood, NJ: Ablex, 1999. 21-40.

Bakhtin, M[ikhail] M. "Discourse in the Novel." In *The Dialogic Imagination: Four Essays*. Ed. Michael Holquist, trans. Caryl Emerson and Michael Holquist. University of Texas Press Slavic Series, No. 1. Austin: University of Texas Press, 1981. 259-422.

Batson, Trent. "Teaching in Networked Classrooms." In *Computers in English and the Language Arts: The Challenge of Teacher Education*. Eds. Cynthia L. Selfe, Dawn Rodrigues, William R. Oates. Urbana: National Council of Teachers of English, 1989. 247-255.

Bateman, Claire and Chris Benson. "Using Computer Conferencing to Extend the Bounds of the Writing Curriculum: Or, how I Quite the Symphony and Joined a Jazz Band." In *Electronic networks: Crossing boundaries/creating communities*. Eds. Tharon Howard and Chris Benson with Rocky Gooch and Dixie Goswami. Portsmouth, NH: Boynton/Cooke Publ. Heinemann, 1999. 160-180.

Baym, Nancy. *Tune in, Log on: Soaps, Fandom, and Online Community, New Media Cultures*. Thousand Oaks, CA: Sage Publications, 2000.

Benyon, David. "Beyond Navigation as Metaphor." *Towards a Framework for Design and Evaluation of Navigation in Electronic Spaces.* Document presented to European Commission. 10 November 2005 <http://www.sics.se/humle/projects/persona/web/littsurvey/abstracts.html>.

Blair, Kristine and Pamela Takayoshi. Eds. *Feminist Cyberspaces: Mapping Gendered Academic Space*. Stamford, Conn.: Ablex, 1999.

Bowers, C.A. *Let Them Eat Data: How Computers Affect Education, Cultural Diversity and The Prospects of Ecological Sustainability*. Athens, GA: U of Georgia Press, 2000.

Burke, Kenneth. *Language as Symbolic Action: Essays on Life, Literature, and Method*. Berkeley, CA: U of Berkeley P. 1968.

Burke, Kenneth. *A Grammar of Motives*. Berkeley: University of California Press, 1969.

Carter, Shannon, & Sandi Reynolds. "Electing the Electronic: Blackboard, E-zines, and our Fight for Control in the Technology-Based, Student-Centered Classroom with Feminist Leanings." Computers and Writing 2k Conference. Ft Worth, TX, 2000.

Caswell, Kurt. “Reflective Voices Constructing Meaning in the USApanLINK project.” In *Electronic Networks: Crossing Boundaries/Creating Communities*. Eds. Tharon Howard and Chris Benson with Rocky Gooch and Dixie Goswami. Portsmouth, NH: Boynton/Cooke Publ. Heinemann, 1997. 151-159.

Cole, Michael. & Yrjo Engestrom. “A Cultural-Historical Approach to Distributed Cognition.” In *Distributed cognitions: Psychological and Educational Considerations*. Ed. G. Salomon. New York: Cambridge University Press, 1993. 1-46.

Cooper, Jeff. “Building 21st Century Collaborative Learning Communities.” Spring 2004. *NETC Circuit*. 10 November 2005 <http://www.netc.org/circuit/2004/spring/build.html>.

Cooper, Marilyn. “The Ecology of Writing.” *College English*, 48 (1986): 364-375.

———. “Postmodern Pedagogy in Electronic Conversations.” In *Passions, Pedagogies and 21 st Century Technologies* . Eds. Gail E. Hawisher and Cynthia Selfe. Logan/Urbana: Utah State U P and NCTE, 1999. 140-160.

Deleuze, Gilles, and Felix Guattari. *A Thousand Plateaus: Capitalism & Schizophrenia*. U of Minnesota Press, 1987.

Donaldson, R.P. & M. Kötter (1998). “Language Learning in a MOO: Creating a Transoceanic Bilingual Virtual Community.” *Literary and Linguistic Computing*, 14 (1999): 67-76.

Engestrom, Ygro. Interactive Expertise: Studies in Distributed Working Intelligence. Helsinski, Finland: University of Helsinki, 1992. Etzioni, Amit74ai. The Spirit of Community: Rights, Responsibilities, and the Communitarian Agenda. New York: Crown, 1993.

Faigley, Lester. Fragments of Rationality: Postmodernity and The Subject of Composition. Pittsburgh, PA: U of Pittsburgh P, 1992.

Fernback, Jan & Brad Thompson. “Virtual Communities: Abort, Retry, Failure?” 28 December 1997. The Well. 10 November 2005. <http://www.well.com/user/hlr/texts/VCcivil.html>.

Flores, Mary J. “Computer Conferencing: Composing a Feminist Community of Writers.” In *Computers and Community: Teaching Composition in the Twenty-First Century*. Ed. Carolyn Handa. Portsmouth, NH: Boynton/Cook, 1990. 106-17.

Foucault, Michel. *The Archaeology of Knowledge & the Discourse on Language* (A.M Sheridan Smith, Trans.). New York: Pantheon Books, 1972.

Flower, Linda. The Construction of Negotiated Meaning: A Social Cognitive Theory of Writing. Carbondale: Southern Illinois U P, 1994.

Gooch, Rocky. Rural Teachers and Students: Connecting and Communicating. In *Electronic Networks: Crossing Boundaries/Creating Communities*. Eds. Tharon and Chris Benson with Rocky Gooch and Dixie Goswami. Portsmouth, NH: Boynton/Cooke, 1997. 186-192.

Gruber, Sibylle. “Re: Ways We Contribute: Students, Instructors, and Pedagogies in the Computer-Mediated Writing Classroom.” Computers and Composition 12 (1995): 61-78.

Gurak, Laura J. *Persuasion and Privacy in Cyberspace: The Online Protests over Lotus Marketplace and the Clipper Chip*. New Haven, Conn.: Yale Univ. Press, 1997.

Handa, Carolyn, ed. *Computers and Community: Teaching Composition in the Twenty-First Century*. Portsmouth, N.H.: Boynton/Cook, 1990.

Healy, Dave. “Cyberspace and Place: The Internet as Middle Landscape on the Electronic Frontier.” In *Internet culture*. Ed. David Porter. New York: Routledge, 1997.

Herring, Susan. “Gender and Democracy in Computer-Mediated Communication.” *Electronic Journal of Communication*, 3 (1993): 1-17.

Hilligoss, Susan. “Getting Started in a Networked Writing Classroom Projects and Resources.” In *Electronic networks: Crossing boundaries/creating communities.* Eds. Tharon Howard and Chris Benson with Rocky Gooch and Dixie Goswami. Portsmouth, NH: Boynton/Cooke, 1999. 1-21.

Johnson-Eilola, Johndan. *Nostalgic Angels: Rearticulating Hypertext Writing*. Norwood, NJ: Ablex, 1997.

Jones, Steven G. Understanding Community in the Information Age. In *Cybersociety: Computer-Mediated Communication and Community*. Ed. S. G. Jones. London: Sage, 1995. 10-35.

Kent-Drury, Roxanne M. "Finding a Place to Stand: Negotiating the Spatial Configuration of the Networked Computer Classroom." *Computers and Composition*, 15 (1997): 387—408.

Lave Jean and Etienne Wenger. (1991). *Situated Learning: Legitimate Peripheral Participation*. Cambridge, UK: Cambridge University Press.

Lopez, Elizabeth. *The Geography of Computer Writing Spaces: A Critical Postmodern Analysis*. Unpublished Doctoral Dissertation, Department of English, Purdue University, 1994.

McLaughlin, M., K. Osborn, and C. Smith. Standards of Conduct on Usenet. In Computer-Mediated Communication and Community. Ed. S.G. Jones. Thousands Oaks, CA: Sage, 1995. 90-111.

McLuhan, Marshall. *Understanding Media: The Extensions of Man.* New York : McGraw-Hill. 1964.

McLuhan, Marshall, & Bruce Powers. *The Global Village: Transformations in World Life and Media in the 21 st Century*. New York : Oxford University Press, 1989.

Meeks, Melissa Graham. "Wireless Laptop Classrooms: Sketching Social and Material Spaces." Fall 2004. Negotiating Space in a Laptop Classroom. *Kairos*. 10 November 2005 <http://english.ttu.edu/kairos/9.1/binder2.html?coverweb/meeks/index.html>.

Moulthrop, Stuart. Rhizome and Resistance: Hypertext and the Dreams of a New Culture. In *Hyper/text/theory*. Ed. George P. Landow. Baltimore : Johns Hopkins UP, 1995. 199-320.

Moran, Charles. "Access: The A Word in Technology Studies." In *Passions, Pedagogies and 21 st Century Technologies*. Eds. Gail E. Hawisher and Cynthia L. Selfe. Logan : Utah State University Press, 1999. 205-220.

Myers, Linda. *Approaches to Computer Writing Classrooms: Learning from Practical Experience*. Albany : State University of New York Press, 1993.

Nardi, Bonnie A. "Context and Consciousness: Activity Theory and Human- Computer Interactions." 26 April 1999.*Interactions*. The First Society of Computing. 10 November 2005. <http://www.acm.org/interactions/vol2no4/depts/book.htm>.

Nardi, A. Bonnie, & Vicki O'Day, L. *Information Ecologies: Using Technology with Heart*. Cambridge, MA : MIT Press, 1999.

Oldenburg, Ray. *The Great Good Places: Cafes, Coffee Shops, Community Centers, Beauty Parlors, General Stores, Bars, Hangouts, and How they Get You Through the Day*. New York : Paragon House, 1989.

Phelps, Louise Wetherbee. Composition as a Human Science: Contributions to the Self-Understanding of a Discipline. New York : Oxford UP, 1989.

Porter, James. *Rhetorical Ethics and Internetworked Writing*. Greenwich, CT : Ablex, 1998.

Rheingold, Howard. *The Virtual Community: Homesteading on the Electronic Frontier*. Reading : Addison Wesley, 1993.

Riedl, Richard. "Patterns in Computer-Mediated Discussions." In *Mindweave: Communication, Computers and Distance Education*. Eds. Robin Mason and Anthony Kaye. New York, NY : Pergamon Press, 1989. 215-220.

Romano, Susan. "The Egalitarian Narrative: Whose Story? Which Yardstick?." *Computers and Composition*, 10 (1993): 5-28.

Romano, Susan. "On Becoming a Woman: Pedagogies of the Self." In *Passions, Pedagogies and 21 st Century Technologies.* Eds. Gail Hawisher and Cynthia Selfe. Logan Utah : Utah State UP, 1999. 249-267.

Russell, D. "Activity Theory and its Implications for Writing Instruction." In *Reconceiving Writing, Rethinking Writing*

Instruction. Ed. J. Petraglia. Mahwah, NJ : Lawrence Elbaum Associates, 1995. 51-77.

Schuster, Charles I. "Mikhail Bakhtin as Rhetorical Theorist." *College English*, 47.6 (1985): 594-607.

Scime, Roger. "<cyberville> and the spirit of community: Howard Rheingold meet Amitai Etzioni." 1994. The Well. 10 November 2005. <http://www.well.com:70/0/Community/cyberville.>

Selfe, Cynthia, & Richard J. Jr. Selfe. "The Politics of the Interface: Power and its Exercise in The Electronic Contact Zone." *College Composition and Communication*, 45 (1994): 480-504.

Selfe, Cynthia. *Creating a Computer Supported Writing Facility—A Blueprint for Action*. Houghton, MI: Michigan Technological University, 1989.

Shirk, Henrietta Nickels. "New Roles for Technical Communicators in the Computer Age." In *Computers and Technical Communication: Pedagogical and Programmatic Perspectives*. Ed. Stuart Selber. Greenwich, CT : Ablex, 1997.

Sibley, David. *Geographies of Exclusion: Society and Difference in the West*. New York : Routledge, 1995.

Soja, Edward W. *Postmodern Geographies: The Reassertion of Space in Critical Social theory*. London : Verso, 1989.

Soja, Edward. "In different spaces: Interpreting the spatial organization of societies." 2001. *Proceedings 3rd International Space Syntax Symposium Atlanta*. 10 November 2005. <http://undertow.arch.gatech.edu/homepages/3sss/papers_pdf/s1_Soja.pdf >.

Spitzer, Michael. "Local and Global Networking: Implications for the Future." In *Computers and Writing: Theory, Research, Practice*. Eds. Deborah Holdstein and Cynthia L. Selfe. New York : MLA, 1990. 58-70.

Stoll, Clifford. *Silicon Snake Oil: Second Thoughts on the Information Highway*. New York : Anchor Books, 1995.

Turkle, Sherry. *Lives on the Screen: Identity in the Age of the Internet*. New York : Simon and Schuster, 1995.

Turkle, Sherry, and Seymour Papert. "Epistemological Pluralism: Styles and Voices within the Computer Culture."*Signs*, 16 (1990): 128-57.

Williams, Raymond. Keywords: *A Vocabulary of Culture and Society*. London : Oxford University Press, 1986.

Winsor, Dorothy. "Genre and Activity Systems: The Role of Documentation in Maintaining and Changing Engineering Activity Systems." *Written Communication*,16.2 (1999): 200-24.

Wurman, Richard Saul. *Information Architects*. Zurich, Switzerland. Graphis Press Corporation. 1996.

Wysocki, Anne Frances, & Johnson-Eilola, Johndan. "Blinded by the Letter: Why are we Using Literacy as a Metaphor for Everything Else?" In *Passions, Pedagogies and 21 st Century Technologies*. Eds. Gail E. Hawisher and Cynthia L. Selfe. Logan : Utah State University Press, 1999. 349-368.

Yaskin, David, & Stephen Gilfus. Blackboard 5: Release 5.5 platform overview white paper. Washington DC : Blackboard, Inc, 2002.

Zappen, James P., Laura J. Gurak, & Stephen Doheny-Farina. "Rhetoric, Community, and Cyberspace." *Rhetoric Review*, 15.2 (1997): 400-419.

"The Regionalization of Cyberspace" from *Composition Forum* 15 (Spring 2006)