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Computer Mediated Rhetoric: 
Philosophical Issues and Pedagogical Implications

Patricia K. Tompkins

Introduction

Directions of rhetorical study

Over the past millennium, philosophers and scholars have attempted to define and often augment the scope of rhetoric. Rhetoric has notably "generated not only an elaborate system for investigating languages practices but also a set of far-reaching, theoretical questions about the relationship of language to knowledge" (Bizzell, 1990, p. 2). Currently "all forms of discourse and symbolic communication can be included within its scope" (Bizzell, 1990, p. 2). For scholars and philosophers such as Foucault and Nietzsche, it includes all language. If this approach is taken, then the possible future directions of the study of rhetoric are unlimited.

One of the directions of past research is to study the rhetoric of narrow discourse groups, such as the rhetoric of women Native American poets, or a variety of ethnic groups, with focuses on age, gender, ethnic background and multi-cultural issues. Cultural literacy, pluralism and difference are at issue. Major questions are the "one voice" dilemma, and issues of representation of these groups. Bizzell notes that in order to teach about difference, "we must deconstruct ideologies the students hold as foundational, a very painful process that students often oppose no matter how egalitarian and nonauthoritarian the teacher tries to be" (Bizzell, 1992, p. 289). Unfortunately, deconstructing a student's ideology by whatever means is probably doomed to failure for a number of reasons, and it may not be necessary. The Internet may do it for them by offering multitudes of diverse approaches and positions. The question is, is it the instructor's job to alter ideology? How one answers this question determines what course of action the students and the instructor will take. Bizzell asks for alternative schemes for cultural
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literacy. The Internet model may be one such alternative.

**Text centered rhetoric**

One approach to the pedagogy of rhetoric is the separation of oral from written. Oral is *human-centered*, delivered orally, replete with the emotions, tones, feelings, pauses, and non-verbal behaviors inherent in an oral delivery. This includes all oral events, live or taped, and all oral discourse occurring daily and globally. One hears, not sees, this rhetoric.

The other type of rhetoric is written, which is *text-centered* and includes all written text including semiotics, all written languages and even speeches that have been set to print. If you can *look* at the words/symbols rather than hear them, it is in the written category. Most of the web and its manifestations belong in this latter category of text-centered rhetoric.

A focus on text-centered rhetoric, rather than human discourse-centered rhetoric, does not deny that humans are integral to the text. The core issue is that the writing is a unit of completed text, which can be reproduced in its exactness in perpetuity, and that this text can be re-examined, interpreted and even deconstructed by scholars.

One way that this text-centered communication is manifest is in the Internet. With increased communication globally, CMC, or computer-mediated communication is already defining the rhetorical landscape of the present and future. The implications for the future of rhetoric are enormous, especially if one were to take the Nietzschean view that all language is rhetoric, which would include the language manifestations of the net.

That which I will call CMR, computer mediated rhetoric, may exert the greatest influence in determining what this rhetoric, or more accurately “Netoric,” will look like. Computer mediated communications will define the arena, and will eventually involve most, if not all, five billion of us. On the surface one can claim that it is indeed individuals or even groups of individuals that write the rhetoric into the web, but it has become much more than that. “Over time, people will both shape and be shaped by electronic communication” (Eldred & Hawisher, p. 346).

**Thesis**

Marshall McLuhan said “We shape our tools and afterwards our tools shape us” (Press, p. 16). As we sit hunched over our keyboards, some of us seemingly in perpetuity, we have to wonder at this simple statement: “Clearly cyberspace is shaping us, but do we really understand how much?”
My thesis is that the pre-existing systems, data, knowledge, information, and design of the web and its intricacies, predispose all of us to conform to that system in order to access and be granted admission to the universe of CMC, computer mediated communication. I will maintain that it is the web or cyberspace itself—its system, demands and execution—that defines a specific rhetorical domain. It is systematized, with individuals and groups more often bending to its design, not necessarily to their own. Its methodology is binary and we often conform to it, not it to us. Wittgenstein talks of language rules and practices, all of which have relevance to CMR, computer mediated rhetoric. “If you don’t know the rules, you can’t play the game” (Garver, p. 89). The name of this game is global communication.

Cyberspace

Cyberspace is a human-made construct, as are the different languages and dialects of the world. In a Chomskian first language model, we have innate grammatical principles in place at birth, but cultures produce a language of their own construct following these inherent, and innate principles. We may speak different languages, but have the same universal and innate grammatical principles. Much like the brain, the web is a system with inherent principles that we develop in order to communicate and form knowledge.

When author input anything into the web, such as email, websites, documents, discussion groups, Usenet, chat groups, etc., they need not, and indeed many prefer not to, reveal their gender, race, creed, name, rank, serial number, I.D., or country of origin. One can, and many do, as a routine, seek not to advertise this information in any form. In a sense, it is pure thought without bodily form that is going out on the net. Anonymity and incorporeality is an attractive feature for many.

If one were to use an email address such as: x2ld9dsk@yahoo.com, who might be at the receiving end of such a communication? That address site could be a Buddhist monk in Korea or a 10-year-old student in the U.S. When these individuals “speak” on the web, their physical and group identity is unknown. So then, can one say that these disembodied entities “belong” to a particular group and that one can study that group? They do belong, but what they belong to is a virtual community in addition to their physical community.

The web is the entity to which all users belong irrespective of race, creed, national origin, etc. It is in fact the virtual community. It is one organism made up of many “cells”, and in this case, there are potentially 5 billion of us cells.
Community: Virtual or Real?

One of the Bakhtinian presuppositions in rhetoric is that one exists in a community. Definitions of community abound. In the early 70's Bell and Newby wrote that: “the concept of community has been the concern of sociologists for more than two hundred years, yet a satisfactory definition of it in sociological terms appears as remote as ever” (Jones, p. 4).

As elusive as the definition of community is, one structural process that is associated with community is communication. For people to share language, they must share knowledge (Bizzell, 1992, p. 258). Indeed this is the focus of the concept of discourse community.

According to Rheingold, “virtual communities are social aggregations that emerge from the Net when enough people carry on those public discussions long enough, with sufficient human feeling, to form webs of personal relationships in cyberspace” (Jones, p. 3). Hagel and Armstrong (1997) in “Net Gain” define virtual communities as computer mediated space where there is an integration of content and communication with an emphasis on member-generated content (Jones, p. 3).

Ideologically, community within cyberspace appears to emphasize a shared belief in the principles of free speech, individualism, equality, and open access. Experientially, community within cyberspace emphasizes a community of interests, usually bounded by the topic under discussion, that can lead to a communal spirit and apparent social bonding (Fernback & Thompson, p.5). This ability to network, gain knowledge, or find communion within cyberspace is, according to Rheingold (1994), the social glue that binds formerly isolate individuals into the community (Fernback & Thompson, pp. 7-8).

Some claim that virtual communities do just about everything real communities do, but do it with a non-physical presence. A case in point: There was a virtual funeral on the net in real time, when one of the most active members committed suicide. The virtual group “eulogized him with an exchange of hundreds of messages documenting their virtual experiences with him” (Fernback & Thompson, p.8). Clearly all members felt their social closeness to each other and shared their pain together. Is this not a suitable definition of a real community?

If we accept that virtual communities are just like real communities, the exponential growth of these communities coupled with advancing technological developments may result in the “creation of a new class of the information-elite that constitutes a tribal community that is committed to knowledge-based technological development” (Fernback & Thompson, p. 4). Soon, most of the world will be a part of this new community.

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Rupturing Traditional Linguistic Experience

In an atmosphere where knowledge about the social world is indirectly transmitted from one person to another through the mediation of electronic devices, i.e., computer mediated communication, critical theory must account for spoken language, writing, the telegraph, radio, film, television, computers and other new linguistic technologies. According to Poster, "these new phenomena constitute a rupture with traditional linguistic experience, and they make possible new forms of communicative relationships" (Poster, p.110).

Just how is electronically mediated communication different from "normal" communicative events? CMC intensifies the distance between interacting individuals. "The enormous temporal and spatial distances by which senders and receivers of written messages may be separated introduce the possibility for structural changes in language and in the way individuals are constituted by language" (Poster, p. 128). Poster claims language is a structure that defines the limits of communication and shapes the subjects who speak. Bakhtin says that "all linguistic phenomena are dialogic, part of an infinitely continuous web of communications whose meanings are now determined by the individual but are always open to redetermination by others" (Poster, p. 129). The continual and relentless redetermination of meanings in the web tends to support Bakhtin's view.

When users post messages to electronic discussion groups, the rhetorical dynamic is further complicated. Sometimes writers address a group as if they were speaking to an assembly or in other situations they respond to an individual personally, although the posting may be distributed to all members. Various postings may resemble spontaneous conversation, or at other times formal academic discourse. Since there are no authoritative conventions for this type of discourse, rhetor-audience roles need to be clear in order to avoid miscommunications. Studies in hypertext and hypermedia often point out how users actively contribute to textual construction in making their own navigational decisions (Porter, p. 49).

The conventions that allow for efficient communication within a discourse community such as shared values, common vocabulary, and a method for establishing and evaluating claims may not work within another discourse community. One must first negotiate meaning in order to establish commonality (Burnham, p. 463).

In his book on critical theory and poststructuralism, Poster says that "The social formation has been altered by electronic systems of communication (Poster, p.3). In this postmodern world the line between words, objects and ideas is becoming blurred. In its place there arises a
new relationship between language and electronic communication, involving new communities and even newer technology. These new developments have a bearing on one of the oldest philosophical issues in human discourse: the nature of truth.

**Truth and Antifoundationalism**

Antifoundationalism can call the Internet home. As Bizzell describes it, antifoundationalism is a “philosophical position which holds that there are no absolute grounds of truth, or if there are, we cannot know them— that all truth is contingent, provisional, subject to establishment and change by rhetorical means” (Bizzell, 1992, p. 26). One of the principles of the knowledge base of the web is that there are no fixed truths or values placed on the information. We as participants in that knowledge apparently decide this for ourselves.

We continually search for “truth” but can’t effectively define or even identify it. The Internet has circumvented that dilemma. It does not search for “truth” but for information, with the “buyer beware” caveat. It says...Here is all the knowledge and those who profess it...take it or leave it, download this or not. Universal truth seems not to be at issue in this poststructuralist cyberspace.

Nietzsche says, “what we are pleased to call Truth (echoing the Sophists) is a social arrangement, not a glimpse of ultimate reality” (Bizzell 1990, p. 13). According to Nietzsche, language can never be objective, and without social construction. Foucault as well notes that truth is determined by the discursive practices of a community. In this case the community is the net users. The Internet is a social construct, and truth seems to be in the beholder’s eye.

Clearly, referentiality in the Internet is difficult if not impossible to determine, but at the same time, “the majority of postings claim factual referentiality as their main source of legitimacy” (Aycock, p. 5). “Ironically, in the case of computers and composition, postmodern critics and hard-line empiricists make finally the same truth claims: namely, that power structures are erased by the new technology that somehow undermines or escapes discursive limits” (Eldred & Hawisher, p. 332).

There are many “truth” issues exposed by the net, and positionality is just one. “Who produced this knowledge? How do they present it? What is at stake? What is their orientation to the academy, to industry, to the public?” (Hobbs, p.7). Another issue is just what is left out, or impossible to locate even if one “knows” it is somewhere in the web. Who is in charge of seeing that specific information is on the web for all of us? What if we don’t even know it exists? Or that it has been accidentally omitted or deleted. “We do not ask questions about what is
invisible or imperceptible, closing off our possibilities” (Hobbs, p.8).

In addition, “Communication in cyberspace fosters little of the gate keeping needed to assure accuracy of the information. Anyone who has tried to stop a false rumor flying over e-mail appreciates the problem” (Kaufer, p. 78). Considering just how much of our present and future we have entrusted to cyberspace and how miniscule is our understanding of the rhetorical implications of our commitment, it is clear that we need to seriously address the pedagogical implications of this new arena.

**Pedagogical Implications**

“What happens when machines, teachers, and students are all 'spliced' into one grand system?” (LeGrandeur, p. 1). What indeed.

Starting with the individual, Poster posits that the computer illuminates the fact that individuals are constituted subjects and that the subject's self-constitution becomes the discourse/practice of communication in everyday life. Linguistic experience in the computer age concerns self-constitution, and all point to the self as constructed or constituted, rather than as a stable centered entity (Poster, p.130). In a sense, self is re-constituted almost daily thanks to the net, and the communication produced by such a self is constantly under construction.

Romano in 1993 looked at the online behavior of her first-year composition class, many of whom had Spanish surnames. The class read a text that she believed would lead to a discussion of what it means to be a Chicano or Chicana in America. However, only one individual saw themselves as Mexican American. The others viewed themselves as “mainstream, middle-class, first-year college students” (Eldred & Hawisher, p. 341).

Moreover, the whole idea of CMC’s variable orientation — toward the self, the social, and the task — seems a crucial one for electronic writing classes. And there are “values and dangers involved in changing the focus from self, to social, or task” (Eldred & Hawisher, p. 341).

In a critical study with enormous implications, Carnegie Mellon researchers found that CMC users were “absorbed by the machine”; they behaved in ways less regulated by self or social norms because cues reminding users of another social presence were absent (Eldred & Hawisher, p. 336). The Carnegie Mellon group attributed the loss of both self- and social awareness to a focus on the text or task as a primary consideration. This was a brand new kind of deindividuation. The individual was actually absorbed by a machine rather than by a group (Eldred & Hawisher, p. 336).

Other studies found that in CMC groups, fewer participants altered their initial decisions.
They were not even necessarily led in the direction of the norm; they seemed influenced by neither majority, nor persuasive arguments. What seemed to determine the direction of CMC was the idea or position first advanced (Eldred & Hawisher, p. 339). Clearly this is at odds with what usually is the case in face-to-face group discussions.

In another study, Spears et al. (1990) found that the direction was determined not by tasks, nor majority, nor by the first advocated position. It was predicted by whether people felt group identification (Eldred & Hawisher, p. 340).

In the Kiesler study, using face-to-face interaction, it was determined that high-status speakers exhibited influence regardless of the topic. In the computer-mediated interaction, a different pattern emerged. High-status individuals retained some influence in discussing tasks in which their expertise was clear, but their influence diminished when the topic was out of their realm of expertise (Eldred & Hawisher, p. 347). Clearly there are going to be differences between physical presence conversations and those delivered within computer interfaces.

In addition, the computer does not filter comments, as a teacher would, by linearly choosing one student at a time to talk. The computer simply orders comments according to when they were sent, and since they tend to be sent in clusters, there are time distortions that disrupt any sense of the comments' linear flow. All of these sorting and transmission anomalies are important because, “taken together, they signify that the computer is rearranging discursive flow: it is replacing the linear, temporally related set of interactions characteristic of an oral class-discussion with a non-linear, topically-related one” (LeGrandeur, p. 16). With the computer often replacing the teacher and the classroom as the focus and the locus of community, we have a “natural dissemination of authority and what systems theory would describe as an instance of an emergent system that may evolve in unpredictable and highly complex ways” (LeGrandeur, p. 17).

In practical terms, this means that teachers must modify their pedagogical approach in order to facilitate student learning. The traditional, teacher-centered approach to learning does not fit well into the classroom of the cyberspace era. Instructors must adopt more student-centered teaching styles that encourage creative, divergent thinking rather than analytical, convergent thinking. The computer can be a means to help students to discover their own learning path.

The role of the instructor then becomes that of a technologically aware facilitator who gives students the means to explore knowledge on their own, pointing out the pitfalls of the Internet as well as its resources. Students are then encouraged to develop into critical thinkers when con-
fronted with a wealth of knowledge of variable validity.

**Distance Learning and Software “Graders”**

Another critical issue concerning both computer mediated communication and the future of education is distance learning. At the present time, distance learning involves downloading lecture notes, posting questions and assignments, participating in group discussions or viewing a video of a lecture. There are both glowing testimonials about how education will be enhanced and apocalyptic nightmares about the possible digital diploma mills of the future.

Universities view this expansion as a boon to increasing revenues, awareness of their university and as a way to cut costs while ostensibly delivering quality education. The market for the software to deliver this promise is currently estimated to be in the billions of dollars. But as a consequence, many expect “massive structural change in the higher-education industry” (Alder, p. 20).

Another very current development that has implications for both CMR and composition instructors is a computer program called “Intelligent Essay Assessor.” In essence, a computer program grades essays with such comments as “this is off topic” or “trivial section.” The method and theory is “latent semantic analysis.” The claim of the program is that it is just as “reliable as human graders and much more consistent, not to mention faster” (Marcus, p. 14).

If these are but a few of the most current developments, what lies ahead? With many software developers constantly in search of newer or better programs and the web growing exponentially, any future state of technological stability is very unlikely. The educator and student of the future need to be comfortable with massive and probably continual changes in their virtual world and hence in their “real” world as well.

In addition to the massive pedagogical implications of CMR, the complexity of issues surrounding computer-mediated communication is also having an impact on the nature of scholarship itself.

**Impact on Scholarship**

Since the advent of the printing press, scholarly journals, books, and conference proceedings have become the “primary media for recording the products of scholarship as what Popper (1968) terms ‘world 3’ objects, the expressed products of the human mind that continue to exist independently of their originators” (Gaines et al., p. 987). The key word is “independently”, which sets up a text-centered process.
Now and in the future, through finding common positions, strategies and new arenas, scholars can and will connect and communicate interpersonally, interdisciplinarily and interculturally. And with the speed of hypertext, "specialized ideas travel through disciplinary tunnels and out into a wide, but linked expanse of communication channels aimed at a universal audience" (Moring, p.3). If not yet, the validity and quality of scholarly computer mediated communication "may someday be measured by the breadth and depth of these connections and communications" (Moring, p.3).

The promise of future scholarly research using computer technologies seems unlimited. Yet, in the web, information and knowledge is fluid and often fleeting. In some cases it is eternally "under construction" and with no finished text, only the continually evolving product. Moreover, concepts of textual authority and originality are becoming destabilized and are continually evolving, forcing redefinition of just what tangible, original text really means.

The question is, if documents are continually in a state of flux and under construction, which version should be cited or indexed? Some like Treloar, cited in Moring (1996), try to distinguish between "fixed documents, ACSII versions that are archived, and continuously updated documents in HTML" (Moring, p.7). But again, finding consensus on issues like these often proves problematical.

Now and in the future, every web writing author and web using reader needs to be acutely aware of the changing nature and conventions of textual communication. It will force "reconceptualizations of authors, audiences, authority and ownership of texts, literatures, and writing processes" (Clark, p. 134). In addition, computer technologies may and do influence all the professional duties of rhetoricians and writing teachers by "changing views of literacy training, writing-tool capabilities, effective writing instruction, and academic professionalism" (Clark, p. 134).

**Conclusion and Future Directions**

In summary, with the exponential growth of global communications, the Internet has expanded and redefined the bounds of rhetoric. The new rhetorical domain of cyberspace, in which individuals interact within virtual communities, raises numerous philosophical and pedagogical issues which were discussed in this paper. Some of these issues were "real" vs. "virtual" communities of the net, human centered vs. text centered discourse, how we teach and learn, the rupturing of linguistic experience by internet use, and the net's poststructuralist approach to the concept of "truth."
The Internet has already and will continue to revolutionize pedagogy by offering such alternatives as non-linear discourse, hypertext opportunities, distance learning and myriad software possibilities, while changing the views of literacy training and effective writing instruction. Scholarship will continue to change as specialized ideas reach global audiences, and textual authority and originality are reconceptualized. The power of CMR to both create experience and redefine reality will continue to necessitate a critical examination of the philosophical and pedagogical forces in rhetoric. Scholars now need to be encouraged to develop both short and longer term reflective projects to identify and illuminate the issues, theories, structures and potential future directions of this revolutionary approach to human communication.

References


