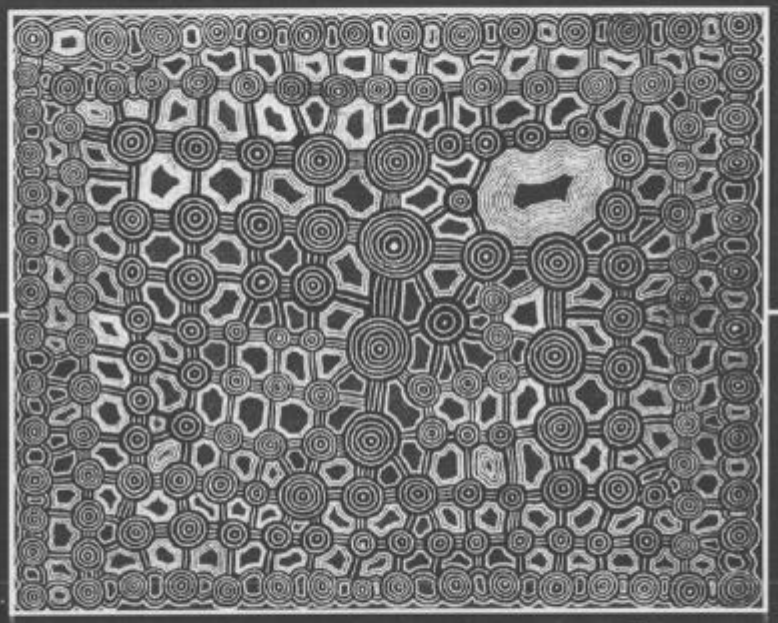
Culture, Technology, Communication



Towards an Intercultural Global Village

Charles Ess

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Culture, Technology, Communication

Towards an Intercultural Global Village

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Understanding Micropolis and Compunity

Steve Jones

In my book *CyberSociety: Computer-Mediated Communication and Community* (Jones 1995), I argued that terms commonly used in the US to describe the Internet such as "information highway" and "national information infrastructure" are unfortunate but telling metaphors. They bring with them much intellectual and social baggage, largely due to the startling parallels between the current project, this "information superhighway," and the one spurred on in the US by both World Wars, the interstate highway system—not the least of which is the reliance on the word "highway" and the romantic connotations of the open road. Another important parallel is the military origin of highway building [as established by Thomas Jefferson, among others (Patton 1986)] and the military origins of what is presently the most prominent information highway, the Internet, in Defense Department computer networks linked to university research centers. And yet another parallel is to the 1960s "space race" and our quest to lead in new technologies and science.

And race ahead we do. I think racing, to push the motoring metaphor, serves well to characterize a social bias based, in essence, on movement itself. We can acknowledge several things that compose it; competitive spirit perhaps, a modern need for mobility also, and curiosity as well. It is a movement based on speed, rooted in transportation, and oblivious in large part to that which is transported. To put it another way, loyalty is to the movement of something (often ourselves, but not always) from one place to another, to flow, and not to that which is being moved (the last word's *double-entendre* intended), to content.

I believe this quest for movement is well-illustrated by our early understanding of electricity, and can be most easily recognized in the work of Nikola Tesla (Cheney 1981). In the late 1890s Tesla envisioned a world linked by electricity. He proposed the development of

a global electrical network to facilitate communication. Tesla believed that anything could be coded into electrical impulses and transmitted via electricity. In that sense he presaged the current trend toward digitization. But one might say that he also foresaw the postmodern shift from meaning to Deleuze and Guattari's (1980) concept regarding flow, from a social space within which signs took shape, metamorphosed, disappeared and reappeared, to a space where meaning shifts while signs remain. Meaning itself is fluid, mobile, and nothing should have meaning for long.

Another reason I find our use of the highway metaphor unfortunate is that it leaves aside the issue of power: it focuses our attention on the road, the infrastructure, and away from the people and "vehicles" that traverse it, away from the road-side, away from the interaction of road and place. It focuses our attention away from the gaze of others, the sense that we are as surveilled as we are social (Foucault 1977). We are led to believe we are in power, we are the ones "surfing," or "using," and others cannot see us, just as we cannot be seen when we watch television. The seeming absence of the other focuses away from economic and political issues, and directs us toward ourselves.

But there is evidence of the "other" on-line. Perhaps a metaphor from boating would serve better than on based on automobile transport. As we travel along an information "path," we leave behind a wake, though we may not leave behind tangible and permanent markers. One of the earliest discoveries in electromagnetics was that as an electrical current flows in a wire a magnetic field is generated around that wire at a right angle. The forces not only interact, they are dependent on each other, and the wire's "content," the movement of electrons through it, creates a "field" of force around it. The creation of those fields is itself dependent on movement. Such may be the case with messages we send via Internet (or for that matter via other media as well); they travel from place to place but also create a "field" of influence and meaning around themselves.

Many others (McLuhan 1965; Carey 1989; Ong 1982; Eisenstein 1979; Goody 1986) have assayed this territory, but perhaps it is necessary to do so again, as we have become far more savvy media users and producers. McLuhan's once oft-repeated phrase "the medium is the message" contains a new twist. We are not interested in the message *per se*; we are interested in getting the message across. We have less interest in what we mean and more interest in how we mediate what we say. What medium shall I use, and what will the consequences be of my choice?

Carey (1989) links the study of communication to the study of social relations, noting two trajectories along which we think about communication. The first trajectory is along the lines of the "transportation" metaphor of communication. In this model communication is, in the main, the movement of messages from one place to another. This is the model I have thus far characterized, and the model on which the communication industry itself is built.

Carey contrasts the transportation model to the "ritual" model of communication, the latter intended to connote communication as the sharing of ideas and beliefs. Whether for a particular purpose or not, whether for transmission of information or participation in those activities that make us human, be they mundane or special, the ritual model points out that communication is the medium within which we exist, as much as is the air we breathe. Again we find a twist on McLuhan—the medium is the message because the medium is not one of communication *per se* but rather it is the ground in which human connectedness can grow and flourish.

But the ritual model does not enter into our public conversation about new media, and it does not fit industry models and methods of communication technology development. To put it another way, when one is asked "Did you hear?" these days, the question connotes something about whether we are connected, wired. Forster's admonition that we "only connect" has been taken too literally. Rarely does being connected anymore carry the connotations of community, gossip, storytelling. What is connoted is instead "compunity," a merger of computers with communities and our sense of community. We long for the community and communion that the ritual model holds dear as these are elements inseparable from communication, but we are given instead the ability to send messages to and fro as disconnected and disembodied texts. The ritual model emphasizes that communication is the means by which we build our understanding of the world and ourselves, and the transmission model's emphasis is on moving messages around as an end unto itself. The latter activity is more easily quantifiable and commodifiable and much better suited to the marketplace and to industry.

It is also a cynical activity, insofar as it reduces values to numbers, by valuing only numbers. Others have noted this development by examining the substitution of marketing for collectivity, or, as David Marc's (1984) wry comment on Walt Whitman tells us, we are in an age of "demographic vistas." The result is a fueling of our distrust of the myth of progress and modernity, and fear that though we may never again be out of touch, we will rarely again feel touched by what

someone communicates to us. That fear keeps us clinging to the communities within which we feel a sense of trust, of safety. In physical terms these are, increasingly, gated communities. In terms of computer-mediated communication these are "Gates-ed" communities, ones in which we hold keycards in the form of passwords, connectivity and access. In cyberspace these are what I believe is an analog of "metropolis": "Micropolis," namely, smaller and smaller groupings of people, fractal metropolii. I use the term "fractal" in this case both in the sense of a figure with self-similarity at all spatial scales, and as a play on words, a concatenation of "fractured" and "partial." Micropolis is a fragment, a fractured substitute in our lives for a polity. But it is also a fractal in the sense that social groupings in geographic, physical space, and ones in cyberspace, are gaining in self-similarity at and through all levels. Online, micropolii are gated in an oddly interlocking fashion [a gate opens into a community, but may also, like a cosmic wormhole, open into still another community seemingly very different and separate, though linked via interest (Jones 1995)]. Micropolii are, I believe, the result of what Marshall Berman (1982) identified as "The innate dynamism of the modern economy, and of the culture that grows from this economy, annihilat(ing) everything that it creates—physical environments, social institutions, metaphysical ideas, artistic visions, moral values—in order to create more, to go on endlessly creating the world anew" (288).

Interconnected though micropolii may be, they rarely form a collective via their interconnectivity, instead serving groups just slightly different one from the other. We experience a fragmentation of community just as we have on introduction and spread of cable television, magazines, and numerous other media. Our sense of others is very wide, our experience of others not very long. Perhaps this is due in some part to the approaching end of the millennium, a time when life seems to simultaneously speed up and slow down, the former feeling aroused by our sense of the length of time, the latter brought on by our sense (to borrow from Laurie Anderson's observations during her performances) of time's width. As we sit on the cusp of millennial change, we not only feel that time stretches very far back, that it has a retrograde trajectory, but that it stretches very far ahead, too, perhaps so far ahead that we cannot comprehend, and as we near the year 2000 the millenium becomes a handy marker for us, a time buoy if you will. It bobs along, always at a seemingly unchanging distance from now, though I wonder how that distance will affect us in 1999 when we can no longer use years a measure that keeps us distant from millenial change.

Perils and Parallels

A friend once remarked that "no one ever said that change had to make any kind of sense at all," a statement both true and revealing. Its truth is rooted in the randomness of change, in the inability to, god-like, will everything into place. It reveals that we nevertheless try to make sense of change, whether we try to will change into being or not. And perhaps we work even harder at sense-making as we become ever more sensitive to the ephemeral nature of meaning. The activity of sense-making has, in the case of life in compunities, made clear four areas that are common, forming a consistent narrative pattern illustrating where social concerns lie: privacy, property, protection, and privilege. That these themes are central to our discourse about new communication technologies is telling both because it makes our concerns clear and because it points out the mythic nature of technology's promise. The former is not difficult to discern, as these themes are easy to find in our conversations about the Internet and compunity. The latter is no more difficult to discern either, but requires the historicizing of these narrative patterns to help explain the role of new communication technology in social change.

Privacy

Much of the current discussion about the information superhighway revolves around privacy. It forms the core of many a government's concern that a "back-door" must be created for every computer and network (using the "Clipper chip" in the US, for instance) to allow access for the computer equivalent of continual surveillance and eavesdropping. In more commercial terms, one can ascertain corporate interests in gathering information electronically from us as well, and perhaps the most notable such attempt via computer-mediated communication was Microsoft's intention to include as part of its Windows 95 operating system a program element by which, upon electronically registering the software, information about a person's hardware is transmitted to Microsoft.

Privacy also forms the core of concerns about how information about ourselves will traverse the highway. Will anyone be able to "tap" into the data stream and fish out our credit or medical records? Will they be able to intercept credit card information as it zips from Internet site to Internet site? How will we prevent that from happening? What will happen to all the data that we send? Since data is

relatively easy to store, will every message we send and receive find a place in some great universal archive? In place of gossip and hearsay, features of community, we find control and manipulation, features of compunity. These issues have followed the development of each new communication technology, from the advent of writing and printing, through the invention of television, when we thought others would see into our living rooms via the picture tube, and are symptomatic of a larger social issue, namely the ebb and flow of the boundary between public and private. To borrow from Walter Ong, what drives our concerns is the seeming permanence of methods of communication beyond the oral. As regards the spoken word, once something is uttered, it is also lost to all but memory, and as we have become less trusting of our own memory (illustrated by brisk sales of Dayrunners, personal organizers, etc.) we also become inversely more trusting of our ability to deny that which was once spoken as having been misheard, misrepresented, misinterpreted or simply incorrectly remembered.

In essence, our privacy concerns are based on the need for externalizing (or commodifying), in a more or less permanent fashion, information about ourselves. It too needs to travel, to be transported, and it needs to do so independently of us. We cannot be in more than one place at a time, but social relations, particularly ones formed and maintained by bureaucracies, demand that we be. And once information about us is external to us, it is also out of our control, just as the picture once taken of us is no longer ours but the photographer's.

It is important to note that one perspective on privacy issues runs parallel to what Jean Baudrillard (1983) has written in regard to the hyperreal, the "realization of a living satellite," in which "each person sees himself at the controls of a hypothetical machine, isolated in a position of perfect and remote sovereignty, at an infinite distance from his universe of origin." Our privacy is to a large degree not based on the need to control what is "inside" us already, but to control what escapes us and enters domains other than our own "private," and to conversely control that which does enter our own private sphere. Internet technologies are the electronic component (and a natural evolution of the telephone) to the triumvirate of technologies of the Fordist project of suburbanization. The first component was the development of the modern house, removed from the street, fenced off (and in some cases within gated communities) from others. The second component was the automobile that allowed movement along a physical network of roads and highways that managed to provide access to places outside the house while maintaining minimal contact with others. The metaphor of the Internet as "information highway" thus has another parallel, to Fordism, particularly as it engages Fordist notions of efficiency, supplanting a mechanical system with an electronic one.

But to control information to the extent that we can manage not only its movement from our own selves into the public realm but its subsequent metamorphosis in and during public discourse is nearly impossible, and denies that we are public beings, denies our essential humanity. We can no more control information, once externalized, than we can control the propagation of waves from a raindrop that has fallen into a pool of water. Of particular concern, then, is that continuing emphases on privacy concerns, by engaging us in a frenzy of largely unproductive activity to ensure that we control our inner and outer worlds, do, to some extent, more than symbolically privatize us more than we may want or need.

Property

Relatedly, once information about us is made external to us, and subsequently made digital and available electronically, its dissemination is relatively not complex. Copying files on disks or sending them over networks is electronically and mechanically much, much easier than photocopying a book, for instance.

But more interesting than simply the ease with which we can accomplish copying is that ultimately, given that information in the digital domain is essentially string upon string of ones and zeros, we are beginning to redefine the term, and perhaps very nature of, "property." Who owns a numeral or a "bit"? We have some evidence of the nature of that question from experience with software and compact audio discs. When we can not only copy but clone things, how will we identify "originals"? And, more importantly in industrial (and again, Fordist) terms, how will we restrict production and acquisition to effectively control the marketplace? Copyright law from its very beginnings relied on adjudication, not enforcement, by the government. For enforcement it relied on technology. In the past copying a book was labor-intensive, and the process itself mitigated against copyright infringement. It was simply easier to buy a book than to copy it. The photocopying machine changed that equation of time and money, just as the cassette deck changed the relation between consumption and copying for music, the VCR changed it for films and TV shows, and the computer changed it for software.

The most often asked question in this regard is: What will authors and publishers do to ensure income from their work if it's available on an electronic network? The issue is not in the first

instance one of economics, but again one of control. Who will have the right to do something with a work is not a decision inherently connected to determining who will profit from it. As with aforementioned privacy issues, control is the root concern, for as soon as we have externalized (commodified) a work, it can migrate away from us in the same fashion that credit and medical (or any other) information can be passed around.

Moreover, control is the primary concern of entertainment and electronic industries that struggle with the structural overcapacity of production whose only traditional solution (one in name only, for each solution has begotten another problem) has been the evolution of distribution. Consequently, the development of distribution channels has outpaced the ability of the sociolegal complex to maintain a civil order that has traditionally offset the tension between publisher and author, the two sides of the production chain that coexist least easily. The Internet is thus a project alongside that of the opening of markets and borders, epitomized by the GATT and the NAFTA, trade agreements that provide the greatest freedom to movement of abstract commodities, or, namely, intellectual property. The development of the Internet has bumped up against legislative issues, and is only further evidence that the decentralization of distribution as an aid to mass production and consumption, is in fact inimical to control by legislative means.

Protection

If legislative means are unable to protect us from the flow of information, what might? To return to the concept of electromotive force, the lines of magnetic force created by a current flowing through a wire are directional, and move in the same direction as the current's flow. Moreover, these magnetic lines of force are elastic, and cannot be broken. One might imagine that the current is that which is created, distributed and consumed, and the magnetic force is the sociocultural change occurring external to such a Fordist system.

Historically, protection has been understood as the attempt to regulate the "current," in this case, namely, the content of what flows through the system. Consequently, authors have long sought protection for their work, but it has been producers, manufacturers, and distributors who seek ways to ensure income, and to do so requires some form of protection against copying. However, experience (particularly recently with Digital Audio Tape and its Serial Copy Management System) has shown that a technological anti-copying solution is rarely

a final solution. For many authors the concern over copyright has as much or more to do with having their work re- or de-contextualized than it does with financial gain (the US is one of the few countries that does not recognize an author's moral rights in a work).

There is another way to think about protection vis-à-vis content, as that which protects the integrity of a work. The technology that enables both new forms of creative activity (desktop publishing, collaborative writing, computer-aided design, digital audio and video, for instance) also enables its distribution via new media like the Internet, and enables its ready editing and recombination. What, if anything, can protect the integrity of a work that new technologies make so malleable?

In fact the sociolegal system has had less difficulty with these issues than it is now having, and is going to have, with issues related to the "magnetic fields" (to return to the metaphor of electromotive force) created by content. To put it another way, the technologies of content distribution also deliver meaning to us. We will likely want to avoid some of it, we will want to screen some of it, and some of it we may, for good or ill, feel a need to censor. We will seek protection in the same way some now seek it from violence, obscenity, and the like found in older, traditional forms of media. We may also seek protection from the equivalent of "crank" phone calls, and from the inability to verify identity of the senders of messages. These are the concerns of legislation such as that found in portions of the telecommunications bill passed in the US in 1996. What such forms of legislation seek to protect against is not content *per se*, but the consequences of content. We sought (and continue to seek) such protection from the telephone, television, radio, telegraph and virtually all other media, for they are not merely "media" in any kind of passive sense, delivering information and nothing more: they are active intruders into our mental processes, requiring our attention, which, whether freely given or not, is not returned.

Thus it is, I believe, that we seek protection from what we have termed "information overload" (no matter how much, on some level, perhaps only the commercial, we may wish to be the ones doing the overloading). The question here is: How do we attend to the social connections impinging on us, the connections we at once desire (e-mail, telephone, fax, etc.) and despise (for they take up more and more of our time and energy)? These are the lines of force created by the "current flow" of content. We couldn't be more in touch and yet the telecommunication industry promises us ever closer, faster and greater contact. It is necessary to think through the implications for

a society whose members face ever-greater demands on their time and thought. These demands make it more difficult than ever to engage with others by non-technological means, and shave away the time we allot to personal interaction. They are but one form of communication, perhaps neither better nor worse than any other, but they do carry with them their own structuring forces.

Privilege

Among the structuring forces is that of access and it will not be equal and uniform. To have it so would mean, in social terms for instance, not only provision of hardware and connectivity, but operating systems so sophisticated as to be stupid, that is, sophisticated enough to know when users are unsophisticated and then able to "dumb themselves down." It would mean the technological equivalent of "a chicken in every pot." It would mean the establishment of universal literacy, for, if nothing else, using computer networks requires good reading and writing skills. But, most importantly, it has already meant the definition of computing as a social necessity.

Will we have information "haves" and "have–nots"? Probably—we already do, with or without computers. What will be the consequences? That is more difficult to determine. We already have such a class separation—in some sense those reading this essay are likely to be "haves," and others, from different backgrounds, different experiences, different opportunities, may be destined to be "have nots." There are at least two important questions resulting. First, what will you do with what you have? Second, what will it be like to have it?

There is also the matter of privilege in its more mundane sense, and for those in education, publishing and related fields, this is critical to understand. Again, the latter sense of privilege is directly related to the initial lines of force created by the passage (movement, transportation) of content across new networks of communication. The more common sense of privilege I wish to invoke here is related to the lines of force created at right angles to that initial force, the "magnetic" instead of the "electrical" in terms of electromotion. We do not have information elites in the sense that the "haves" simply have more information than others, but in the sense that it is the "haves" that are organizing information for others, and by so doing they are undertaking a profoundly socio-epistemological act, generating the maps, indices, tables of contents, bibliographies, hypertext links, that others will use to organize not only their research and writing, but their thinking and knowledge as well. We have witnessed these past few years (at least) the eruption of critical scholarship that, for instance, critiques New World narratives and seeks to restore understanding of indigenous cultures and knowledge. May we be self-critical as we undertake an enterprise similar to that of New World explorers, who came, saw, and categorized?

Conclusion

It is by a very slow and gradual process that social change motivated by new technology, and new media technology in particular, occurs. We do not shift from one paradigm to another, from one process (mental or physical) to the next, at all quickly, and, I would argue, we often do not notice change when it does occur, because it does not happen in the expected social arena. So, for instance, the widespread use of the printing press and the spread of literacy lead to increased education and awareness, which we expect, but they also lead to isolation, which we expect less, even though we have greater awareness, for as we attend to our reading material we attend less to those around us at the time we are reading (which we often find useful when we sit next to strangers on an airplane, for example). Consequently, I am quite unsure about the potential to harness any technology for predictable social change. Our technologies are designed in anticipation of their effects, but the effects themselves are not ones that are informed by history, rather they are woven from our hopes. We seem to be taking a step toward privatization and polarization through use of new communication media like the Internet, but is that symptomatic, causal, or . . . ?

Irrespective of the answer to that question, we ultimately need to examine our assumptions about how new media technologies will affect our society. We seem to hold some common beliefs (Thornburg 1992), that they will:

benefit education and learning;

break down barriers and hierarchies (social and other kinds);

create new social formations, typically in opposition to dominant ones;

make participatory democracy feasible and easy;

make the interface between man and machine seamless; and

create new legal and ethical problems outside the parameters of existing policy and legislation.

Where do these assumptions originate? Have we tried to achieve these things already, by other means, and with what success? Or do they remain assumptions (or hopes), realizable or not? Our ethics must spring from our beliefs, and as yet our beliefs about technology are uncertain, just as the technologies we envision are not certain, and indeed are consistently in flux. But we do not need the technology to look inside ourselves, we need only to inspect our beliefs and reflect on them, for they, and not the technology, represent what we desire.

Other outcomes are just as possible, and to an extent are already making themselves present. Our use of an index, for instance, is being replaced by a point/click/search paradigm establishing itself through use of hypertext, electronic databases, the World Wide Web, and the like. In education the busywork that teachers once handed out via paper is often being supplanted by busywork via computer and touted as somehow more beneficial to students on account of its "interactivity," though in such cases interaction is so loosely defined as to mean anything from pushing a button on a mouse to attending to an audiovisual presentation. These are outcomes, to use the concept of electromotive force a final time, at "right angles" to the ones most visible. They affect our everyday lives in innumerable ways, remain elastic but not breakable, affect our thinking and very thought processes, but do not come at us in one fell swoop, and are often difficult to describe, much less to desire.

It is particularly important to note that, on reflection, each of the above beliefs is rooted in the transportation model of communication, which is itself based on the primacy of the movement of current through a wire and unreflective of the "right-angled" lines of force. Each belief in its way has as its premise that moving messages around more effectively will make these beliefs metamorphose to reality. Perhaps this is not surprising, for in Western societies, to a great extent, transportation has been a ritual activity. Unlike in our public social lives, in many ways one of the few activities over which we have a great deal of control is transportation. Our own bodily "technology" evolved toward mobility, and we have used technology to augment it. We are at the wheel of our car, our control panels in front of us, regulating our own private environment. And cars and driving are not the only area in which we increase control of transportation—we effectively increase it via the new technologies of communication, by using fax machines and e-mail, time- and date-stamping messages, and packages and memos, ensuring that our words and information get where we want them to go, and do so on time, through a variety of control mechanisms. In fact, one of the most touted aspects of the combination of telecommunication and computers is that it will somehow supplant transportation altogether and result in a great increase in telecommuting. That, so far, has not happened, but it presents an interesting, and heady, mix of metaphors that have driven (pardon the pun?) national conversations in Western countries, and continue to fire the futurist manifestos of many politicians, particularly ones in the US Congress (as well as marketing pundits).

We still lack control over what will happen to the messages we create and send when they get where they are going, because they are essentially out of (our) control. I do not believe any form of technology can assist us to better create and interpret messages—only we ourselves have the capacity to better those abilities. It is most disheartening, perhaps dangerous, to believe that since machines have replaced some forms of human labor they will replace human thought. Perhaps the greatest force mitigating against telecommuting, and ultimately against most technology, is that people like people, seek to be with other people, and seek to maximize interaction. Developers of tools like those associated with the Internet's use succeed best, it seems, when they recognize that, and put technology in service of conversation rather than communication, in service of connection between people rather than connection between machines, and in service of understanding rather than movement.

Note

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