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Cyberlibertarian Myths And The Prospects For Community

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One of the changes in our world that characterizes the late twentieth century is the digital transformation of an astonishingly wide range of material artifacts interwoven with social practices. In one location after another, people are saying in effect: Let us take what exists nowand restructure or replace it in digital format. Let's take the bank teller, the person sitting behind the counter with little scraps of paper and an adding machine and replace it with an ATM accessible 24 hours a day. Let's take analog recording and the vinyl LP and replace it with the compact disc in which music is encoded as a stream of digital bits. Or let's take the classroom with the teacher, blackboard, books, and verbal interchange and replace it with materials presented in computer hardware and software and call it "interactive learning".

In case after case, the move to computerize and digitize means that many preexisting cultural forms have suddenly gone liquid, losing their former shape as they are retailored for computerized expression. As new patterns solidify, both useful artifacts and the texture of human relations that surrounds them are often much different from what existed previously. This process amounts to a vast, ongoing experiment whose long term ramifications no one fully comprehends.

As they ponder astonishing transformations associated with the new electronics, thoughtful people need to ask: What kinds of personal practices, social relations, legal and political norms, and lasting institutions will emerge from this upheaval? More importantly, what kinds of practices, relations, rules, and institutions do we want to emerge in these settings. As I understand it, one purpose of this conference is to examine philosophical issues of this kind.

But before we forge ahead with our inquiries, it is worth noting that, in fact, a philosophy of sorts has already taken shape in this domain, a widely popular ideology that dominates much of today's discussion on networked computing. A suitable name for this philosophy is cyberlibertarianism, a collection of ideas that links ecstatic enthusiasm for electronically mediated forms of living with radical, right wing libertarian ideas about the proper definition of freedom, social life, economics, and politics in the years to come. Any attempt to philosophize about computers and society must somehow come to terms with the wide appeal of this widespread perspective, its challenges and shortcomings.

The ideology is announced in a great many places these days. It is the coin of the realm in a great many popular computer magazines, Wired magazine most notably. It can also be found in countless books on cyberspace, the Internet, and interactive media; Nicolas Negroponte's *Being Digital* and George Gilder's *Microcosm* are especially vivid examples. Writers in this strand include Alvin Toffler, Esther Dyson, Stewart Brand, John Perry Barlow, Kevin Kelly, and a host of others that some have called the digerati. As a political ideology, the cyberlibertarian vision is perhaps most clearly enunciated in a publication first released by the Progress and Freedom Foundation in the summer of 1994, a manifesto entitled "Cyberspace and the American Dream: A Magna Carta for the Knowledge Age" by Esther Dyson, George Gilder, George Keyworth, and Alvin Toffler. For my purposes here I will referto this document as simply the "Magna Carta."

From such writings and the musings of countless on-line chat groups there emerges a set of shared themes and a vision of what the world of networked computing holds in store.

The first and most central characteristic of cyberlibertarian world view is what amounts to a whole hearted embrace of technological determinism. This is not the generalized determinism of earlier writings on technology and culture, but one specifically tailored to the arrival of the electronic technologies of the late twentieth century. In harmony with the earlier determinist theories, however, the cyberlibertarians hold that we are driven by necessities that emerge from the development of the new technology and from nowhere else.

One familiar expression is Alvin Toffler's openly determinist wavetheory of history. Having traversed the first wave of the agriculturalrevolution and a second wave of the industrial revolution, humankind is now in the midst of third wave upheavals produced by advanced computing and telecommunications. This is a period in human history in which information comes to dominate earlier ways of living that were based upon land, physical resources and heavy machinery.

To describe these changes, cyberlibertarians use familiar terms of inevitable, irresistible, world-transforming change. Writing of the impact of the Third Wave, the writers of the Magna Carta observe, "As it emerges, it shapes new codes of behavior that move each organism and institution — family, neighborhood, church group, company and nation..." (Magna Carta) As Stewart Brand explains to the readers of *Wired*, "Technology is rapidly accelerating and you have to keep up."

In this perspective, the dynamism of digital technology is our true destiny. There is no time to pause, reflect or ask for more influence in shaping these developments. Enormous feats

of quick adaptation are required of all of us just to respond to the requirements the new technology casts upon us each day. In the writings of cyberlibertarians those able to rise to the challenge are the champions of the coming millennium. The rest are fated to languish in the dust.

From the standpoint of contemporary social theory, there is a wonderful irony here. For the past twenty years sociologists and historians have been busily at work trying to defeat what they saw as an unwarranted determinism in earlier interpretations of the interactions between culture and technology. In one way or another most scholars believe in the social construction or social shaping of technology in which outcomes are negotiated among a variety of actors with complex motives. It is interesting to note how little such understanding enters libertarian writings on cyberspace. A similar raw boned determinism is prominent in today's literature on global communication and global business where the eager pursuit of technotrends is the order of the day.

In fact, increasingly popular among cyberlibertarians is the conclusion that rapid development of artificial things amounts to a kind of evolution that can be explained in quasi-biological terms. As Kevin Kelly explains in his book *Out of Control* "We should not be surprised that life, having subjugated the bulk of inert matter on Earth, would go on to subjugate technology, and bring it also under its reign of constant evolution, perpetual novelty, and an agenda out of our control. Even without the control we must surrender, a neo-biological technology is far more rewarding than a world of clocks, gears, and predictable simplicity." In Kelly's view, the effort to engage in deliberative social choice about technology can only be a destructive practice.

Another key theme in this emerging ideology is that of radical individualism. Writings of cyberlibertarians revel in prospects for ecstatic self-fulfillment in cyberspace and emphasize the need for individuals to disburden themselves of encumbrances that might hinder the pursuit of rational self-interest. The experiential realm of digital devices and networked computing offers endless opportunities for achieving wealth, power and sensual pleasure. Because inherited structures of social, political, and economic organization pose barriers to the exercise of personal power and self-realization, they simply must be removed.

Seeking intellectual grounding for this position, writers of the Magna Carta turn to prophetess of unblushing egoism, Ayn Rand. Rand's defense of individual rights without responsibilities and her attack upon altruism, social welfare and government intervention are upheld as dazzling insights by the team from the Progress and Freedom Foundation. Indeed, her portraits of heroic individuals struggling to realize their vision and creativity against the opposition of small minded bureaucrats and ignorant masses both foreshadow and inform the cyberlibertarian vision. Less apparent to Rand's new followers is the bleak misanthropy her writings express.

Yet another element in this vision of the world perhaps could well have been placed at the top of the list. Crucial to cyberlibertarian ideology are concepts of supply- side, free market capitalism, the school of thought reformulated by Milton Friedman and the Chicago school of economics. I will not summarize the features of this well-known persuasion here, only to notice that it is now fully incorporated within much of the thinking that focuses upon cyberspace as an interesting topic. George Gilder, one of the writers of the Magna Carta, provides a crucial bridge. His best seller *Wealth and Poverty* helped popularize and politicize the ideas of the Chicago school during the early days of the Reagan administration. His later book, *Microcosm*, develops the social gospel of electronics, focusing upon Moore's law, the law that says that computing power available on the most advanced microprocessors doubles every eighteen months. In Gilder's view, the wedding of free market economics with the overthrow of matter by digital technology is a development that will liberate humankind by generating unprecedented levels of wealth.

But cyberlibertarians do not argue that the wedding of digital technology and the free market will produce nothing more than a world of brass knuckled, and winner take all competition. Instead they anticipate the rise of social and political conditions that would realize the most extravagant ideals of classical communitarian anarchism. As Nicolas Negroponte writes in *Wired*, "I do believe that being digital is positive. It can flatten organizations, globalize society, decentralize control, and help harmonize people..." Just ahead is a time in which the new technology fosters sweeping structural change in which decentralization, diversity and harmony. "It is clear," the Magna Carta exclaims, "that cyberspace will play an important role knitting together the diverse communities of tomorrow, facilitating the creation of 'electronic neighborhoods' bound together not by geography but by shared interests." (Magna Carta)

By the same token, democracy will flourish as people use computer communication to debate issues, publicize positions, organize movements, participate in elections and perhaps eventually vote on line. In cyberlibertarian writings the prospect of many-to-many, interactive communication via computer networks are upheld as the source of a renewed "Jeffersonian Vision" of citizen and political society. When television is thoroughly linked to computing power, the universal access to cable television will finally eliminate "the gap between the knowledge rich and knowledge-poor." In this new sociotechnical setting, the authority of centralized government and entrenched bureaucracies will simply melt away. Cyberspace democracy will "empower those closest to the decision." (Magna Carta)

Although my sketch of the cyberlibertarian position has been an abbreviated one, the basic outlines should be clear. We see here the coalescence of an ideology that is already extremely in-

fluential, one likely to have substantial influence in years to come. Indeed, there seems to be no coherent, widely shared philosophy of cyberspace that offers much of an alternative. Woven together from available themes and arguments from earlier varieties of social thought, the cyberlibertarian position offers a vision that many middle and upper class professionals find coherent and appealing.

As is generally true of ideologies, this framework of thought serves to both illuminate and obscure. It certainly illuminates the desires and intentions of those who see themselves on the cutting edge of world-historical change in Silicon Valley, Seattle and other high tech centers. More specifically, it illuminates what are ultimately power fantasies that involve radical self-tranformation and the reinvention of society in directions assumed to be entirely favorable. But this ideology obfuscates a great many basic changes that underlie the creation of new practices, relations and institutions as digital technology and social life are increasingly woven together.

One especially foggy area in cyberlibertarian rhetoric is its depiction of matters of power and distribution. Who stands to gain and who will lose in the transformations now underway? Will existing sources of injustice be reduced or amplified? Will the promised democratization benefit the populace as a whole or just those who own the latest equipment? And who gets to decide? About these questions, the cyberlibertarians show little concern.

Characteristic of this way of thinking is a tendency to conflate the activities of freedom seeking individuals with the operations of enormous, profit seeking business firms. In the Magna Carta for the Knowledge Age, concepts of rights, freedoms, access, and ownership justified as appropriate to individuals are marshaled to support the machinations of enormous transnational firms. We must recognize, the manifesto argues, that "Government does not own cyberspace, the people do." One might read this as a suggestion that cyberspace is a commons in which people have shared rights and responsibilities. But that is definitely not where the writers carry their reasoning.

What "ownership by the people" means, the Magna Carta insists, is simply "private ownership." And it eventually becomes clear that the private entities they have in mind are actually large, transnational business firms, especially those in communications. Thus, after praising the market competition as the pathway to a better society, the authors announce that some forms of competition are distinctly unwelcome. In fact, the writers fear that the government will regulate in a way that requires cable companies and phone companies to compete. Needed instead, they argue, is the reduction of barriers to collaboration of already large firms, a step that will encourage the creation of a huge, commercial, interactive multimedia network as the formerly separate kinds of communication merge. They argue that "obstructing such collaboration—in the cause of forcing a competition between the cable and phone industries—is socially elitist."

From that standpoint, The Magna Carta moves on to advocate greater concentrations of power over the conduits of information which they are confident will create an abundance of cheap, socially available bandwidth. Today developments of this kind are visible in the corporate mergers that have produced a tremendous concentration of control over not only the conduits of cyberspace but the content it carries. We see elaborate weddings between Turner Broadcasting and Time Warner, ABC and Disney, and other media giants. What, one wonders, ever happened to the predicted collapse of large, centralized structures in the age of electronic media? And what happened to the movement of power closer to the realm of everyday actors and decisions?

Why this is problematic is suggested by the fact that during deliberations over telecommunications reform legislation in 1995, CNN refused to carry ads critical of legislation that would allow concentration of ownership and control. In a similar vein, The New York Times reported recently that Ted Turner's TNT quietly delayed production of "Strange Justice," a TV movie adaptation of the best selling book about the Clarence Thomas hearings. "The reason?" asks the Times editorialist. "Fear of offending Justice Thomas during the Supreme Court's ongoing deliberations over a cable-regulation case whose outcome could enrich Time Warner by zillions."

The larger issue concerns the problems for a democratic society created when a handful of organizations control all the major channels for news, entertainment, opinion, artistic expression, and the shaping of public taste. In the dewy-eyed vision cyberlibertarian thought, such issues are bracketed and placed out of sight. As long as we are getting rapid economic growth and increased access to broad bandwidth, all is well. To raise questions about emerging concentrations of wealth and power around the new technologies would only detract from the mood of celebration.

The combined emphasis upon radical individualism, enthusiasm for free market economy, disdain for the role of government, and enthusiasm for the power of business firms places the cyberlibertarian perspective strongly within the context of right wing political thought. Indeed, The Progress and Freedom Foundation that sponsored the Magna Carta for the Knowledge Age, is the creation of Newt Gingrich and his associates. It is no coincidence that a radical cyberlibertarian vision is to an increasing extent the position of persons who call themselves "conservatives." In Gingrich's view, the celebration of cyberspace is directly linked to the attempts repeal the New Deal and major social cyberlibertarianism one affirms a range of anti-government, anti-welfare, anti-labor, anti-environment, and anti-public education policies. One aspect of this thrust is the rejection of any

and all attempts to guide technological development in ways shaped by publicly debated, democratically determined social choice, a commitment made more than clear by the abolition of the Office of Technology Assessment of the U.S. Congress. In his most enthusiastic moments, Gingrich describes the computer as a powerful social solvent that can help dissolve existing institutions in education, medicine, law and the like, institutions that he associates with an outmoded welfare state As he asked a gathering at the Heritage Foundation in late 1996, "Why can't we have expert systems and advanced computers replace 80 percent of the legal system?" (Koprowski, quote)

It is interesting to speculate about how it happened that prominent views about computing and society have become associated with a political agenda of the far right. There are a number of explanations one might give, explanations about the rise of the electronics industry in the of the Cold War, or about the role of former hippies in Northern California's high tech industries who now affirm libertarianism as the spirit of Haight/ Ashbury finally realized. But such speculation is a project for another occasion. The pressing challenge now is, in my view, something entirely different: Offering a vision of an electronic future that specifies humane, democratic alternatives to the peculiar obsessions of the cyberlibertarian position.

An important first step, in my view, is to relocate the starting point for the whole discussion about society and networked computing. In one of his memorable epigrams, the American humorist Ashleigh Brilliant recommended the following procedure: "To be sure of hitting the target, shoot first, and call whatever you hit the target." Among cyberlibertarians and other enthusiasts of cyberspace, that procedure seem the touchstone of argument. First one observes what is presently happening in the realm of networked computing and in the development of a rapidly evolving global technosphere. Then one chooses an impressive term: community or democracy, or citizenship or equality or some other lovely concept to describe aspects of what one observes. Other contexts in which those terms have meaning, contexts in history, philosophy and contemporary experience, need not enter the picture. They are not the target. Let us take the topic of community, for example. Here one finds a tradition of social, religious and political speculation of more than two thousand years, a tradition that includes writings from Old and New Testaments, Socrates, Plato, Aristotle, St. Augustine, Locke, Montesquieu, Rousseau, Proudhon, Kropotkin, and a many other sources. For more recent points of reference, one can turn to a wealth of scholarly studies of historical and contemporary communities in Weber, Durkheim, Tonnies, and countless other modern sociologists about how living communities actually work. For the cyberlibertarians, of course, none of this matters. Visions of community found in the literature of philosophy, history and social science are not significant points of reference. If they were, the notions of "community" often used to discuss what is happening on the Net would likely have a much different complexion.

Among libertarian cyberspace enthusiasts what is important about human relations on the Internet are warm and fuzzy experiences of connection that arise in computer mediated forums. Along with feeling free and empowered by the new media, we can also be closely in touch with other people. Indeed, this is a crucial aspect of previous renderings of ideas about community, part of the story that always bears watching. It is, however, only one dimension of the experience of community and of theoretical concepts employed to focus inquiries into the matter. But along with a sense of belonging, historical communities have carried a strong sense of obligation, imposing demands, sometimes highly stringent ones, upon their members. You know you are in a community when the phone rings and someone informs you that it is your turn to assume the burden, devoting months of your time to a chore the group deems necessary, organizing this year's fund raiser, for example. Unfortunately, most writings about on-line relationships blithely ignore the obligations, responsibilities, constraints, and mounds of sheer work that real communities involve. Are there any Usenet Newsgroups with names like alt.politics.duty? I don't think so.

The hollowness of cyberlibertarian conceptions of community are also reflected in their frequent assertions that the goal is finding people in the world who are very much like you, enjoying them for their similarity. In the context of actual communities, of course, that is a highly problematic assumption. Even intentional communities that begin with fairly homogeneous populations and commitment to a core of shared ideals must eventually confront serious differences and conflicts among their members. Among political theorists who have written about the matter, the troubling question of how to balance the desires of the individual with the needs of the group is usually understood to be the key to any useful grasp of community life. In contrast, here is a description from a recent best seller about the promise of networked computing.

> "For a typical electronic community, the greater the number of people who join the more valuable it becomes to everybody. Eventually most of the world's skiing enthusiasts will participate in one electronic community or another....If you want to get yourself in better physical condition before you try a difficult slope, you might find training more fun if you're in close electronic touch with a dozen other people your size, weight, and age who share your specific goals for exercise and losing weight. Members of this community could get together to encourage each other and even work out at the same time. You'd have less to be self-conscious about yourself in an exercise program in which everybody is like you." (Gates, p. 242)

The quest, therefore, is to be connected to those who are like you and to void situations in which you would feel awkward. Some communities these will be! Although the above description makes this tendency seem innocent enough, within in the larger picture of social development there is a disturbing trend at work. The "Magna Carta," for example, looks forward to "the creation of 'ellectronic neighborhoods' boun together not by geography but by shared interests." Its authors believe that this holds out the promise of a rich diversity in social life. But what will be the exact content of this diversity? An important feature of life in cyberspace is that it will "allow people to live further away from crowded or dangerous urban areas, and expand family time." Exploring this idea, the Magna Carta quotes cyberspace guru Phil Salin who argues that "Contrary to naive views, ... cyberspaces [of the coming century] will not all be the same, and they will not all be open to the general public...Just as access to homes, offices, churches and department stores is controlled by their owners or managers, most virtual locations will exist as distinct places of private property." (Magna Carta) A wonderful aspect of this arrangement, in Salin's account, is that inexpensive innovations in software can create barriers so that "what happens in one cyberspace can be kept from affecting other cyberspaces."

As the picture clarifies, what appears is diversity achieved through segregation. Away from the racial and class conflicts that afflict the cities, sheltered in a comfortable cyberniche of one's social peers, the Third Wave society offers electronic equivalents of the gated communities and architectural barriers that offer the well-to-do freedom from troubles associated with urban underclass. Indeed, many proponents of the on-line world, openly celebrate the abandonment of older cities in favor of the "wired" exurban enclaves. For George Gilder the new promised land is to be found in such homogeneous and untroubled locations as Provo, Utah.

By comparison, the urban communities of the industrial past were laboratories of social diversity, seeking ways for people of vocations, ethnic backgrounds, income levels, and social interests to mediate their differences and to stake out some areas of shared commitment. There were successes and failures in these attempts. But the geographical confines of urban space and the needs of social organization required that an effort be made to find constructive ways of living together. Is the promise of networked computing that people (or at least the wealthy) will now be released from this task?

The shallowness evident in cyberlibertarian conceptions of community are echoed in their views of other key themes in social and political thought. Their imaginings of on-line democracy, for example, seldom taken note of even the most elementary findings of political scientists from Aristotle to Hannah Arendt. Were they to do so, they might acknowledge that only a mere sliver of a minority is likely to be involved in politics on the Internet for the foreseeable future, a fact that calls into question the supposedly "democratic" character of the new media. But again, the focus of these writings is never community, democracy, equality, or citizenship in the world at large sense, only faint echoes of these matters in the on-line realm.

My suggestion is, therefore, that in addressing the possibilities and propects of networked computing, we return to well known historical and theoretical contexts for discussing social and political life in a world that will now add networking to a vast complex of other significant features. In that light, many of the most interesting questions for speculation and research have to do with the boundaries between conventional practices and institutions and those being created on the Net. Rather than proclaim community, democracy, citizenship it would be better to study these boundaries, to think about how communities are likely to be affected by the arrival of networked computing and what a reasonable response would be.

Let us explore an example that concerns the prospects for community in years to come. At present there is great enthusiasm about the rise of a new sphere of economic transactions, the sphere of Internet commerce. In effect, a vast cyber-mall has recently moved into the neighborhood of every village, town and city on the planet, selling clothing, Cds, computers, automobiles, and other products to millions of potential customers. Digital entrepreneurs predict that people will relish the "convenience" of buying things on the Net and that they will flock to the digital stores (where parking is never a problem). Of course, to this point the hoped for bonanza of Internet commerce has not materialized, frustrated by sluggish sales and profits. But a few retailers have begun making strong inroads into domains of traditional business especially in the realm of book selling.

At first glance the electronic book vendors Amazon.com, Book Stacks Unlimited, and others have much to recommend them: enormous catalogs searchable by home computer, twenty-four-hour a day service, literary reviews on the Web, and other nifty services. Amazon.com, for example, carries 1.5 million English-language books, roughly ten times the number available in the largest conventional stores. Adding to their appeal, Internet sellers typically give impressive discounts of 10 to 40 percent on many titles.

Many people look at this development and find it cause for celebration. The low prices, wide selection and speedy service seem to make this new market the wave of the future. I find my colleagues recommending the Internet bookstores as the greatest technology since Pachelbel's canon.

But before we seize the advantage, shifting our purchases to Internet vendors, we need to recognize a hidden price we may end up paying: the demise of traditional shops. A bookstore, after all, is first and foremost a gathering spot for those who care about books and reading. In these places the purchase of a product item is only part of the experience. As we enter the stacks, we

often expect to talk with store clerks or other patrons about what's new or interesting in a particular genre. This aspect of browsing is especially important for children to learn as they approach a life with books. "I'm finished with all the Brian Jacques stories," my son recently announced to Muriel, proprietor of a bookshop in my town. The old woman raised her impressive eyebrows, smiled and led him up the stairs to a shelf of children's novels, enthusiastically describing each volume. The $9 we paid for the book cannot approach the real value of Muriel's gift, a child's heightened sense of the horizons between two covers.

Some will argue that fast search engines supplemented by and on-line help desk can replace the human depth that traditional stores have to offer. But this reflects an impoverished understanding of what the social life of books involves. Even if a Web site learns our names and buying habits, even if it automatically notifies us when "books you want to know about are published," can it connect us to the world living readers, the place where the pages come alive? Probably not.

The benefit bookstores and other local shops offer individuals is matched by the way the serve as anchors for the civic culture of our towns and cities. One sign that a community is flourishing is the presence of well-maintained, well-stocked shops in downtown and neighborhood centers. These are not only places where commodities are bought and sold, but also social gathering places. Writers like Jane Jacobs and Kevin Lynch among others have articulated the relationship of the form of towns and cities to the social practices that sustain community life. In that context it is possible to offer moral arguments about the relationship of design to the good life. As Lynch summarizes his lengthy argument, "That settlement is good which enhances the continuity of a culture and the survival of its people, increases a sense of connection in time and space, and permits or spurs individual growth: development, within continuity, via openness and connection." (Lynch,116-117) Similar kinds of reflection, I believe, are crucial to our understanding of choices about relationships between the interweaving of technological patterns and civic culture as well.

In that light, there is now widespread awareness in the United States that the arrival of huge, corporate superstores tends to kill small businesses, leaving main street with boarded up buildings, prey to all the social ills that crop up when the economic core of a community expires. But I wonder if those newly vigilant about mega-mall sprawl are aware that potentially greater destruction will occur as people abandon local concerns to start buying online? Many shops survive on a precarious margin. If, for example, 10-15 percent of the sales of the neighborhood bookstore quietly migrate to the Internet, there's good likelihood likely that shop will eventually fold.

In this regard, the threat to local concerns posed by Net vendors is far more insidious than presented by the large chains. Communities may summon their powers to unite against a Borders or Wal-Mart. But electronic vendors can creep in under their radar screens. This suggests that in the age of global communications we will have to become more judicious about where and how we make purchases. In the interest of sustaining living communities, it makes sense to avoid Internet net commerce altogether when there are reasonable, local sources of supply. This is not only a question of altruism, but of self-interest broadly informed. The short term advantage of sending to a computer data bank in Seattle for a bargain priced book to be read thousands of miles away makes no sense if the action contributes to a depleted economy down the street, undermining the integrity of community life. Yes, we should use every Internet resource to explore the market and make intelligent comparisons. But when it comes to casting "dollar votes," the money is often better spent closer to home, in a neighborhood where people actually live rather than the neverhood of digital bits.

In sum, my suggestion is not that we need a cyber-communitarian philosophy to counter the excesses of today's cyberlibertarian obsessions. Instead is a recommendation to take complex communitarian concerns into account when faced with personal choices and social policies about technological innovation. Superficially appealing uses of new technology become much more problematic when regarded as seeds of evolving, long term practices. Such practices, we know, eventually become parts of consequential social relationships. Those relationships eventually solidify as lasting institutions. And, of course, such institutions are what provide much of the actual framework for how we live together. That suggests that even the most seemingly inconsequential applications and uses of innovations in networked computing be scrutinized and judged in the light of what could be important moral and political consequences. In the broadest spectrum of awareness about these matters we need to ask: Are the practices, relationships and institutions affected by people's involvement with networked computing ones we wish foster? Or are they ones we must try to modify or even oppose? ◆