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Reinventing Democratic Culture in the Age of Electronic Networks*

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By David Bollier

Four years ago, when I examined the convergence of various communications media, I saw great opportunities for reinvigorating public life, democratic participation and a public interest agenda. That promise, if anything, has soared way beyond anyone's imagination by intervening developments. But navigating this new world has also become immensely more complicated by the explosion of the Internet, the tumult in telecom markets and regulation, and by dozens of technological advances. Although nonprofits have launched many worthy ventures in the new media, their impact has been fairly modest and, in the broad perspective, disappointing.

It is urgent that foundations and nonprofits, working together, develop a coherent, operational plan for grappling with the emerging media universe. This is not just a matter of not being "left behind," but equally a matter of seizing rich opportunities to enhance organizational impact and reinvent democratic culture. The failure of nonprofits to develop serious strategic plans for exploiting the new media will only result in their marginalization over the long term. This dynamic has received dramatic demonstrations in the commercial world as innovative companies utterly transform markets and invent new business models by exploiting computer/telecom technologies; non-adopters are shunted to the sidelines or go out of business.

New electronic technologies are, in fact, transforming many basic structures in commercial banking, retailing, advertising, academia, schools and libraries, and dozens of professions. As individuals gain direct access to new information sources and each other, many traditional intermediaries (newspaper editors, the medical profession, book publishers, etc.) are being bypassed. Amidst the uncertainty and upheaval, a grand social re-negotiation of institutional, social and personal relationships is occurring. Even the historic prerogatives of national sovereignty (control of the money

supply, the power to enforce national laws) are being subverted by trans-national data flows.

Neither the nonprofit world nor foundations are exempt from the changes being spurred by digital technologies. But to ensure that these institutions do not get locked into a reactive, catch-up mode, I believe that they need to assume a much more assertive, creative role as the computer/telecom revolution proceeds. Despite huge uncertainties, there is compelling evidence that some of the core priorities of the mainline foundations -- social equity, democratic values, equal opportunity, educational achievement -- will be profoundly affected by the new technologies and media marketplaces. The real question is how to proceed intelligently in such a fast-moving realm of peril and opportunity.

This memorandum proposes a framework for answering this question. My analysis derives from conversations between February and May 1996 with more than three dozen people: fourteen previous MacArthur General Program grantees as well as many other policy advocates, academics, technologists, librarians, video and film producers, foundation program officers, community organizers, and others. Despite casting a wide net in my research, I have no illusions about my comprehensiveness; the larger the continent of knowledge, the greater the shoreline of mystery. This project could have fruitfully consumed another six months of inquiry, such is the range of germane developments. That said, I believe the following scaffolding for a long-term strategic agenda can be put forward:

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A. The Need for a Sovereign Citizen Vision

There is an urgent need for new institutions, resources and leadership that can develop a sovereign citizen vision for the new media environment. It is critical that this vision, in its inception, reflect citizen needs, independent of the commercial priorities and political calculations of others..... 4

B. The Transforming Effects of Distributed Electronic Networks

Electronic networks are profoundly transforming the basic structures of commerce, politics, governance, community and culture. If foundations and nonprofits fail to exploit the new networking technologies and revamp theirorganizational practices, they risk marginalization over the long term..... 5

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In a culture beset by the breakdown of civil connection, we urgently need to find new ways to nurture democratic participation and genuine bonds of community. To do this, we need to understand better the distinct interpersonal and social dynamics of online media, and to press for telecommunications policy frameworks that support citizenship and community.....
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A. Developing a More Muscular Policy Advocacy

An overworked, underfunded corps of public-interest telecom advocates needs to grow in size, intellectual breadth, and grassroots connections if it hopes to prevail in pending policy debates of great significance. The primary goals of the public-interest community should include winning public benefits from new allocations of digital spectrum, limiting concentration of media ownership, ensuring programmer access and diversity on new video delivery systems, ensuring universal and affordable user access, securing a new user-friendly regime of intellectual property law, and assuring strong First Amendment protections in new

media environments, among other issues....
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B. Building a Broader, More Organized Constituency
Public-interest policy advocacy will not make greater headway until it
begins to develop stronger, more collaborative linkages with grassroots
constituencies. This will require nonprofits to develop new internal
networking capacities, activate new niche constituencies, build more
effective coalitions, and leverage government information to improve
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The new networking technologies are not discretionary extras for
nonprofits, but vital tools that can profoundly enhance organizational
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to integrate networking technologies into their operations and to
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If progressive telecom advocates hope to prevail, they must shed some
obsolete policy paradigms and develop more contemporary,
sophisticated intellectual critiques. They must also cultivate a keener
awareness of the "meta-dynamics" of the new media environment:
the new economic/business models, the new taxonomies needed to
understand the new environment, the new rhetorical modes of
expression, and the new ecology of public knowledge..
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III. HOW THE FOUNDATION WORLD MAY HAVE TO CHANGE

In today's volatile, fast-changing media universe, foundations may need
to re-assess their own missions and operations in order to remain
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of grant programs, and foundations may need to find new ways to
show greater flexibility, speedier decisionmaking, and openness to
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PART I

ORIENTING OURSELVES TO THE FUTURE: THREE VITAL PERSPECTIVES

As the MacArthur Foundation and other civic-minded philanthropies grapple with the challenges ahead, there are three vital perspectives that should inform our thinking: the need for a sovereign citizen vision for the new media; the transforming effects of distributed information networks; and the need for a telecommunications architecture that fosters community, democracy and culture. These three viewpoints can help focus our thinking on the most critical priorities.

A. The Need for a Sovereign Citizen Vision

When assessing the performance of public-interest telecom advocates, there is much to laud, criticize and improve. But it seems to me that the overriding problem is the lack of a coherent, positive *vision* that can help mobilize and unify diverse nonprofit players and organize their discourse into a more coherent framework. Currently, the public-interest vision is largely fragmented, muddled or reactive. It tends to be issue-specific, and not part of a larger political philosophy or self-organizing, expanding movement. This problem derives in large part from the deficiencies of progressive politics, and it may be too much to ask a hardy band of telecom-survivors to reinvent that. Yet this intellectual deficit remains a serious impediment. We don't have a vision that is at once analytically coherent, empirically informed and marketable.

The corporate world, on the other hand, has developed an intellectually respectable, highly marketable consumerist and entertainment-oriented vision of the new media -- a vision that dovetails nicely with that of computer libertarians who regard the Internet as the last 20th Century outpost of individual freedom. Drawing upon writers like George Gilder, Alvin Toffler, Nicholas Negroponte and Esther Dyson, *Wired* magazine has given these visions a sheen of intellectual depth and cultural hipness. And Newt Gingrich has given it a political currency and respect.

No one in the public interest community has come close to developing a public interest correlate of similar panache. The Electronic Frontier Foundation got off to a great start with its crusade for an "open platform" telecommunications architecture, an idea that

was both easy to understand and sophisticated. It offered a fresh, forward-looking vision, not a rhetorical retread. Less elegantly, Vice President Gore built upon this groundwork in his January 1994 UCLA speech, which outlined six basic principles for the National Information Infrastructure (NII). The Aspen Institute's "Toward an Information Bill of Rights & Responsibilities," edited by Charles M. Firestone and Jorge Reina Schement, is another substantive if abstract statement of telecom ideals.

But a social vision cannot simply be declared. It must be socially enacted over time and given a political embodiment. This requires an infrastructure of supporting institutions, treatises, technology projects and leadership. The burden of this memorandum is to outline what that hypothetical infrastructure must include. As explored in Part II, I believe there are four interrelated challenges that must be aggressively and simultaneously pursued: to develop a more muscular policy advocacy apparatus; to build a broader, more organized constituency that can express its own independent vision; to use the technologies to expand the organizational capacities of nonprofits; and to foster a greater intellectual and strategic depth. None of these goals can be pursued effectively in isolation from the others. Indeed, it is the failure of these different realms to inter-connect that has limited their success.

I begin with "sovereign vision" to emphasize the need for a counterpoint to industry-influenced or politician-led outlooks. We need to ascertain what citizens, nonprofits, schools, artists of all sorts, and other non-commercial parties want and need *independent of* the commercial dreams and political calculations of others (which is not to say that the citizen vision should be *oblivious* of market or political forces). Industry and politicians have their own interests, which may or may not coincide with citizen and consumer interests. For example, now that Microsoft is donating software to public libraries as part of a test-bed project, it is possible that libraries will accept a less bracing agenda for themselves in the new media environment. Educators and the disabled community, too, may modify their aspirations as a result of the Baby Bells' "free" wiring of schools and the industry-funded Alliance for Public Technology's "gifts" to disabled organizations.

My point is not to disparage such collaborations *per se*. There are times when the narrow commercial motives of certain industries coincide with a larger public interest. But quite often corporate and citizen interests diverge. And if there is not an autonomous citizen/nonprofit capacity to define and advocate these interests, it is likely to be swept aside or never even articulated, as occurred during

consideration of the telecom legislation. It is important that the nonprofit sector not prematurely abandon certain goals because of corporate or political pressures that preemptively curb ambitions from the outset.

Therefore, as a first order of business, the nonprofit/civic sector must be able to set forth its own vision and mobilize the support of its own autonomous constituencies. Citizens and nonprofits must first have the opportunity to define their own best interests and develop a coherent strategic vision for actualizing them *before* collaborating with industries, politicians and others who may have divergent interests and certainly greater polemical resources. If compromises are necessary, they can be negotiated later. But if the nonprofit vision is integrated with a corporate or political agenda from the start, its bargaining power and long-term prospects will be artificially limited. That is one reason why bringing all parties to the table to exchange ideas, compile a corpus of literature and similar value-neutral endeavors do not necessarily advance a citizens' agenda. The prescriptions of Part II are premised upon this first principle of a citizen-sovereign vision.

B. The Transforming Effects of Distributed Electronic Networks

One of the great engines of transformation in our era is the distributed electronic network. Nonprofits urgently need to understand the dynamics of distributed networks because they will increasingly be needed to fulfill core nonprofit missions. Networking is forcing deep structural changes in how our societal institutions function. It is re-configuring our experiences of time, distance and community, and eroding traditional boundaries between public and private, work and home, and work and education. The key challenge, as William Mitchell, Dean of the MIT School of Architecture and Planning puts it in *City of Bits* (MIT Press), is how to design the new living/working/recreational/public/private spaces for a society interconnected by electronic technologies. How should the new online spaces "map onto" the established practices of the "real world"?

The most competitive corporations are in the vanguard of revamping their organizational architectures to exploit the powers of distributed networking. In the course of transforming the communities that are corporations, networking technologies are challenging the most basic premises of industrial-era institutions -- vertical hierarchies, concentrated power and bureaucratic functionality. In their place is emerging a new kind of organization that is more fluid, flexible, organically coordinated and integrated

with external entities (customers, vendors, government, the community). It is more comfortable with ambiguity, change and improvisation. Instead of trying to create and control uniformity and efficiency through Taylorite management schemes, the most far-sighted business organizations now try to understand and control variability, complexity and effectiveness. To some theorists, this transition is nothing less than a movement away from the Newtonian world view of orderly cause-and-effect to the messier, non-linear world depicted by complexity theory, which is premised upon self-adapting organic wholes that fitfully evolve into higher levels of organization and fitness.

These trends are reflected in numerous management theories such as Total Quality Management, corporate re-engineering, the "learning organization," employee empowerment, and so forth. The common goal is to flatten hierarchies and push greater responsibilities down to the people at the front lines of shifting markets. Another goal is to use strategic cooperation -- often with vendors and even competitors -- to compete more effectively in the marketplace. Hence the proliferation of alliances, joint ventures and long-term relationships with outsiders. The boundaries that have customarily defined organizations are becoming more permeable, as companies use electronic technologies to establish close, long-term collaborations with vendors (e.g., Wal-Mart) and customers (e.g., Netscape). One of the more thoughtful surveys of how digital technologies are revamping commerce and organizational life is Donald Tapscott's *The Digital Economy: Promise and Peril in the Age of Networked Intelligence* (McGraw Hill). A shorter critique is my own *The Future of Electronic Commerce*, published by the Aspen Institute.

Dee Hock, the founder of VISA International, calls the emerging breed of organizations "chaordic," meaning that they function in the zone between chaos and order. They are receptive to the latent creativity that exists in chaos yet stabilized by sufficient order. According to Hock, there are only two "pure" chaordic organizations in the world, the Internet and the VISA credit-card network that he founded. Chaordic organizations, he writes, are distinguished by being equitably owned by all participants. Power and function must be distributive to the maximum degree. Governance must be distributive, so that no individual or institution can dominate deliberations or control decisions. The organization must be infinitely malleable yet extremely durable. And it must be able to embrace diversity and change. (Note how these "chaordic" principles comport with the ideals of American democracy, and you can begin to see why

electronic networking may be an unparalleled tool for revitalizing American civic life.)

My point here is to underscore the powerful organizational (and therefore cultural) transformations that distributed information networks are precipitating. It is important to realize that these changes are not just occurring "out there," but equally inside our heads. "After all," as Dee Hock puts it, "a corporation, or for that matter any institution, is nothing but a mental construction, a concept to which people and resources are drawn in pursuit of a common purpose. All institutions are merely conceptual embodiments of a very old, very basic idea -- the idea of community." New technologies are redefining the sinews of social connection -- within organizations, between organizations, between individuals and each other, and between individuals and organizations. In the process, they are changing our social relationships and our very identities. (See, e.g., Sherry Turkle's new book, *Life on Screen: Identity in the Age of the Internet* (Simon & Shuster), which explores the varieties and depth of interpersonal transformation being wrought by computer networks.)

The sweeping implications of the online social revolution were vividly expressed by French Bishop Jacques Gaillot, who recently told *The New Yorker*: "Of course, the primitive Church was a kind of Internet itself, which was one of the reasons it was so difficult for the Roman Empire to combat it. The early Christians understood that what was most important was not to claim physical power in a physical place but to establish a network of believers -- to be online." *A network of believers dedicated to a shared purpose: I*t is the very definition of community. And it is what makes certain kinds of communities based on distributed networks so hardy, resilient and creative. Computer networks are enabling the creation of entirely new genres of communities. The implicit issue raised by so many digital technologies really is, What kinds of communities shall we form and what structures can enable them to flourish?

C. Creating a Telecommunications Architecture That Supports Community, Democracy and Culture

It is a delusion to think that digital technologies will solve complex, deeply rooted social and economic problems -- a mindset exemplified by the House Speaker's famous suggestion of providing a laptop for every inner-city child. Andrew Blau of the Benton Foundation has astutely noted that telecommunications policy is often seized upon as a surrogate for failures in economic and education policymaking: *Let technology sweep away the tangled complications*

of history with a grand sweep of new solutions! is the general drift of such thinking.

If such Tofflerian visions are fatuous, it is equally inescapable that the new telecom world -- in essence, our society's new central nervous system -- *will* profoundly shape how our democratic culture evolves. "Community" is often invoked in discussing the new online world, and its relevance is unquestionable. Yet "community" is often used in facile, uncritical ways that obscure and confuse rather than clarify the challenges we face. We need to develop a more meaningful taxonomy of "community" so that we can support behaviors, experiences and values that are truly valuable in this era of "bowling alone."

One concept that I have found extremely useful in this regard is the idea of the *gift economy*, a theory that stands in contradistinction to free market theory. The gift economy is a branch of sociological inquiry that illuminates the ritualized moral connections (through gift-giving) that bind a group of people together. The Internet is a colossal example: People make available all sorts of useful information for free, in defiance of orthodox economic "rules" that claim such voluntary behavior can occur only with financial incentives. In fact, the Internet is so robust precisely because people are giving of themselves without demanding a specific contractual payback. This is the very essence of community and civility. People are willing to give of themselves without economic payback because they trust that they will share in the "free wealth" that the community freely passes among itself -- much as an academic community (before the sanctioning of entrepreneurialism) freely shares among itself and disdains those who financially profit from the community's shared knowledge.

Online relationships are not necessarily communitarian, however; they often are secondary relationships that allow a person to join or opt out at will, and not primary relationships that engage our deepest personal commitments. With some justification, critics such as Vartan Gregorian lament: "What is being created [in cyberspace] is less like a village than an entity that reproduces the worst aspects of urban life: the ability to retreat into small communities of the like-minded, where we are safe not only from unnecessary interactions with those whose ideas and attitudes are not like our own, but also from having to relate our interests and results to other communities." ["A Place Elsewhere: Reading in the Age of the Computer," *Bulletin of the American Academy of Arts and Sciences*, January 1996]

At the same time, there are many real, powerful forms of community that subsist online. This can be vividly seen on SeniorNet, an online community of senior citizens, and in the virtual community that was aghast at a "virtual rape" in its cyber-domain; no one was physically harmed but the interpersonal shock to the individuals and community was real. The new book by Douglas Schuler, *New Community Networks: Wired for Change* (Addison-Wesley), suggests how richly satisfying and useful community networks can be. For now, it is enough to say that the nature of community in the emerging American culture needs a sharper, more intelligent focus. The interpersonal relations developed online should neither be trivialized nor hyped. But they should be understood as consequential to our national life, our local communities and our daily personal experiences. (A provocative analysis of one online community, the WELL, can be found in "Voices from the Well: The Logic of the Virtual Commons," by UCLA sociologist Marc A. Smith. The text can be found at http://www.sscnet.ucla.edu/soc/csoc/virtcomm.htm.)

The stakes may be higher than we casually suppose. In a culture showing increasing signs of anxiety, anomie and the breakdown of civil connection, we need to find new ways to nurture deeper, more humane values, democratic participation and genuine bonds of community. As the U.S. population grows to a phenomenal size, with a far more diverse population clamoring for economic opportunity and political empowerment, the very basis of the American experiment will be put to the test.

Digital technologies may hasten a reckoning. According to the *Wall Street Journal* "Outlook" column (4/15/96): "High technology, rather than international trade, is turning out to be the force that is driving a deepening wedge between the pay of skilled and unskilled workers," prompting many downwardly mobile Americans to question the ultimate benefits of innovation and to look for scapegoats. The recent wave of telecommunications mergers followed by mass layoffs suggests the huge dimensions of the problem. And this may only be the beginning if, as Richard Sclove suggests, the new technologies displace local businesses (travel agents, stockbrokers, etc.) with large national businesses offering discount prices. What happens if such national and global businesses "hollow out" community economies -- what Sclove calls the "cybernetic Wal-Mart effect"?

Can our culture endure the kinds of market- and technology-driven transformations that are seemingly under way? Can Americans remain sufficiently committed to democratic constitutionalism if the social and economic bases of our society change so radically, and perhaps negatively? This may sound

apocalyptic, but the alarming rise of the religious right, the militia, an economically fearful work force, and social and voter alienation on a mass scale, suggests that the culture upon which our political life is based may be more fragile and volatile than we dare imagine. It behooves us to be as alert and intelligent about the emerging paradigms as we can, if only to help us give our most cherished values a new and sounder footing. I find odd reassurance from Alfred North Whitehead:

> It is the first step in sociological wisdom to recognize that the major advances in civilization are processes which all but wreck the societies in which they occur -- like unto an arrow in the hand of a child. The art of free society consists first in the maintenance of the symbolic code; and secondly in the fearlessness of revision, to ensure that the code serves those purposes which satisfy an enlightened reason. Those societies which cannot combine reverence for their symbols with freedom of revision, must ultimately decay either from anarchy, or from the slow atrophy of a life stifled by useless shadows.

Can we combine the reverence we have for American democratic and social values with a fearlessness of revision in adapting them to the new circumstances that are all but upon us? These issues deserve a more searching examination than they have received from most quarters, if only because so much of our culture is rapidly migrating to the online world. Robert Putnam accuses television of displacing the idle social time that we previously spent with each other. What if this time is soon sopped up by online media instead? If the online realm does not allow for building genuine communities -- i.e., personally satisfying interconnections and communication beyond those afforded by the unfettered marketplace -- then I fear our society will face some serious convulsions.

Yet there are reasons to be hopeful. Never before have we had a communications medium of such vast democratic potential. Chaordic systems, as suggested above, tend to challenge concentrations of power that are unresponsive. Proponents of citizenship have never enjoyed such a home court advantage! But will the democratic propensities of distributed electronic networks be neutered in significant ways by commercial interests? Conversely, will the nonprofit world be resourceful, farsighted and clever enough to use the technologies and public policy to reinvent democratic culture? I consider these the central questions.

PART II

A FRAMEWORK FOR ACTION

Given the unpredictable course of new technology and markets -- not to mention the political culture -- it may seem quixotic to chase after a goal that is so complex, intangible and long term: reinventing democratic culture. Yet, when seen in concrete particulars, it becomes clear that there is much to protect and defend as well as many fertile opportunities to exploit.

I see four key areas that need significant support and interconnection:

1) The need for a more muscular policy advocacy.
2) The development of a broader, more organized constituency base.
3) New initiatives to make the technologies work for us.
4) Greater intellectual and strategic depth in guiding future initiatives.

Part II explores each of these areas in depth.

Currently, these fields of endeavor are grossly underdeveloped relative to the burgeoning needs. Furthermore, each is relatively isolated from each other, which means that the synergies of cross-fertilization never emerge: Policy advocacy is not well-informed by what is occurring "in the field" nor given greater political clout by organized constituencies. The technologies are not being sufficiently used to organize grassroots constituencies, nor to build new linkages between them and policy advocates. And very little original, imaginative thinking is being done, which means that new strategic opportunities are never even identified, let alone pursued in any serious way. Moreover, such thinking, when it is conducted (and especially when conducted by academics), tends to be isolated from timely empirical realities and not coordinated with policy advocacy. What we need is a public interest equivalent of industry market research: rigorous empirical research that can inform larger strategic priorities, particularly policy development.

So, apart from bolstering activity in the four areas, I see a great need for *process-oriented innovations*. The challenges subsist in what I call the "meta-realm" -- the normative, taken-for-granted processes by which the public interest/nonprofit community has pursued its

interests (a theme explored in depth in Section D below). To change the meta-realm means to invent new places for telecom leadership to meet and collaborate, new kinds of "ambassadors" and meta-institutions to cross-fertilize and consult among the four domains, and new kinds of aggressive organizational outreach by nonprofits themselves. To say that the real challenges are meta-challenges means that these processes (advocacy, constituency-organizing, intellectual discourse, etc.) *themselves need to be re-invented*. But this requires a broader field of vision than we have customarily brought to the table. With that introduction, let us consider the four areas that I believe need much greater support.

A. MAKING POLICY ADVOCACY MORE MUSCULAR

1. Reinventing the Telecom Policy Advocacy Community

The small fraternity of Washington policy advocates plays an indispensable, often heroic role in advancing the public interest. But if a roll call of full-time activists were to be held, this group would number no more than a dozen. The computer/broadcast/cable/telecommunications industries absurdly outgun the public interest forces on most fronts. Consider the digital spectrum giveaway, valued at between *$10 billion and $70 billion,* which is being followed by only one full-time public-interest advocate.

One critical need is simple: to expand the number of talented policy advocates in this area. I hasten to add that these advocates must be capable of legal analysis, lobbying, participation in FCC rulemakings and litigation. While public education and expert testimony are always valuable, advocacy ultimately will not be effective unless it is embodied in law. Yet legal talent in this area is disturbingly scarce. I trace many deficiencies in public interest telecom advocacy to this basic lack of legal infrastructure. And it is self-perpetuating. As a precarious, modestly paying, underdog niche -- and one requiring considerable knowledge of complex legal, regulatory, political and marketplace histories -- few individuals are daring enough to attempt a career in public interest telecom advocacy. So there is no "breeding ground" to nurture fresh legal talent for the future either. What now exists survives only through the extraordinary commitment and stamina of a few individuals.

If the lack of resources is a pervasive problem for most public-interest telecom advocacy groups, they are also collectively disadvantaged by their balkanization. There are complex reasons for this: different organizational histories, issue foci, tactical approaches, leadership styles, and occasional hostilities. Most of the groups work separately on issue-specific projects, with only a few institutional alliances and nominal collaborations. This is not necessarily bad; "genetic variance" has its virtues in developing innovative ideas. But there could be greater achievements, I believe, if there were a more coordinated leadership, more fluid collaboration and a common vision.

Unfortunately, the Washington policy community has become somewhat parochial over the years. As a fairly small, enclosed group of people scrapping for limited foundation monies, the various

organizations are understandably eager to protect their own funding sources and advocacy franchises. While there is little outright animosity, there is a certain stand-offishness among the groups. They generally trade information at the monthly meetings of the Telecommunications Policy Roundtable, a well-attended, useful forum hosted by the Center for Media Education. And the groups periodically sign on to each others' issue-crusades. But the coalescence and collaborations are not particularly smooth, robust and mutually reinforcing. There are not the natural synergies that come with a genuine *movement*.

One Washington player told me he wishes the telecom advocacy fraternity could be "re-potted" somehow in new institutional soil, to allow new roots and flowers to grow. It is an apt analogy. The telecom fraternity does not receive sufficient cross-pollination from unexpected quarters. It magnifies the significance of political epiphenomena and has trouble entertaining a larger vision. Underfunded and overworked, the Washington advocates have little time to think broadly and speculatively about the future; there are raging fires to be fought, after all. So, even though the media marketplace and culture have changed a great deal over the past few decades, this community, as now constituted, has not come up with a fresher, more compelling vision that gets beyond the tired telecom rhetoric of the 1970s.

How, for example, in a political culture that disdains government intervention and cross-subsidization, are public needs and social equity going to be assured? What policy mechanisms can be devised (and what political sponsors can give them credibility and respect)? These issues are being dealt with in only piecemeal, on-the-fly fashion, often using rhetorical wallpaper to cover over unpleasant analytic holes. A sweeping political/intellectual rethinking is what is most needed. But for this to occur, the public interest telecom community (and promising new allies who travel in different orbits) would need the basic funding, academic institutions and policy think tanks to develop a more trenchant, politically attractive critique. The deficit stems from the skewed "political economy of knowledge-creation," an insight that conservative foundations like Olin and Scaife have fruitfully exploited for many years.

2. The Next Arena: FCC Rulemakings

Although enactment of the Telecommunications Act of 1996 foreclosed many public interest policy goals, it left many other issues unresolved. Within the next two years, the FCC plans to carry out more than eighty rulemakings pursuant to the Act, many of which are

supremely important to the public interest. New FCC regulations will affect the prices that consumers will pay for telecom services, and the choices they will have; the diversity of voices they will be able to hear via new media; and the overall ecology of public discourse and cultural expression. What follows is a brief survey of some of the more important proceedings.

Digital Broadcast Spectrum

Will broadcasters be allowed to have a valuable public resource for free?
If not, what will be the terms of the public benefit?

Existing TV station owners have asked Congress and the FCC to give them vast quantities of additional space on the valuable public airwaves without any significant public interest benefits received in exchange. Broadcasters claim they need the new space to move from the current analog transmission system to digital broadcasting. This sweeping giveaway of the airwaves, worth as much as $70 billion, was nearly sanctioned by Congress. The final telecom bill, however, made a few alterations. It did not require the FCC to give the spectrum to incumbent broadcasters, and does not permit broadcasters to provide just one free channel (while using the rest of the spectrum for revenue-generating ventures). Moreover, each service, whether broadcasting or not, would be required to serve the public interest.

As Congress now mulls whether to require an auction of the spectrum, broadcasters are asking the FCC to endorse their specific technical standards for digital television. This so-called Grand Alliance standard (developed with no input from the public interest community) needs a large amount of spectrum to work, raising questions about the efficient use of spectrum and unjust enrichment for broadcasters. Also, the standard is not compatible with personal computers, which would force citizens to buy new, expensive TV equipment instead of relying upon technology they may already have.

Concentration of Media Ownership

Will the number of corporate owners of mass-audience media shrink even more, fueling vertical integration and limiting the diversity of voices the public can hear?

Even with the proliferation of the Internet's many networking functions, today's centrally distributed "mass media" -- the gatekeeper-controlled systems of broadcasting, cable and satellite TV -- are likely to remain in place for years to come. Given the scarcity of

such outlets and limited number of gatekeepers hostile to open access, it remains important that media ownership be as diverse as possible by maintaining strict ownership limitations. Even though the White House helped eliminate some of the most egregious provisions, the final telecom bill allows unlimited ownership of radio and TV stations nationally; huge increases of radio ownership locally; and automatic telephone company buyouts of cable systems in smaller towns.

Strict monitoring of the FCC's behavior in this area is critical, especially since the Act directs the FCC to consider eliminating or modifying its "duopoly" rule, which prohibits common ownership of two stations in a local market. Worse, the Act requires a biennial FCC review of its multiple ownership rules, providing the industry with regular opportunities to press for further rollbacks on ownership restrictions.

Open Video Systems

Will telcos be allowed to discriminate against unaffiliated programmers, limiting the diversity of views and programming? Or will alternative viewpoints have guaranteed access?

One of the most serious losses of the telecom bill was any provision requiring "common carriage" access to video services. By ensuring non-discriminatory access, telephone companies (for example) would not have been able to exert editorial control over the programmers using their system. This so-called "video dial-tone" system has been abandoned. One provision in the Act, however, allows for something short of common carriage, yet still significant in terms of enhancing access. A telephone company can choose to be regulated as a cable system, common carrier, or a newly created "open video system." If it chooses the latter (chiefly to avoid having to obtain a franchise from the local government), the telco must make channel capacity available to unaffiliated programmers on a non-discriminatory basis. If demand exceeds capacity, the telco may not select programmers for more than one-third of the system's capacity. Properly drafted FCC guidelines could create tremendous new opportunities for access by diverse programmers. Or the door could slam shut on alternative voices.

Affordable and Universal Access

Will low-income and rural residents, schools and libraries, among others, enjoy affordable access to advanced telecommunications systems?

One of the more significant FCC proceedings will determine the future of universal service and low-cost access to the new media. The FCC has already begun a two-track proceeding to define what universal service should mean in the new environment, and what discounted rates will be granted to schools and libraries. The first track will feature an inquiry by a federal/state Joint Board composed of FCC commissioners, state regulators and consumer advocates. The FCC will solicit further comments before a second round of comments are solicited in response to the Joint Board's recommendations. At this time there are no clear indications how the Joint Board and FCC will engage with this issue. *Public Access to the Internet* (MIT Press, 1995), an anthology edited by Brian Kahin and James Keller, appears to be a useful set of policy essays exploring these issues.

Interconnection to Local Telephone Company Infrastructure

Will the Baby Bells be allowed to thwart genuine competition in local telephone networks, or will robust competition and lower prices be allowed to emerge?

One goal of the telecom act is to force local telephone companies to surrender their monopoly privileges and become competitors with newcomers who choose to provide local telephone service. To ensure that local telcos do not foil new competition, Section 251 of the Act permits consumers to keep their phone numbers if they use another carrier; gives competitors access to poles and other rights-of-way; requires telcos to provide interconnections between their networks and competitors' facilities and equipment at reasonable rates; and provides competitors with non-discriminatory access to any services the local network may provide, such as voice mail and call waiting. Section 252 sets forth procedures for ensuring fair negotiations between a telco and competitors. The Media Access Project warns: "If the stranglehold of the Bells is to be broken, these rules must provide for broad, inexpensive and simple access to local telephone networks, zero tolerance for anticompetitive behavior and for swift resolution of disputes."

3. Beyond the Telecom Bill: Other Policies of Great Public Significance

Amazingly, the telecom-related policies that will affect citizens, consumers, nonprofits and others extend far beyond the FCC docket. Some of the larger, most pressing concerns:

The Future of Intellectual Property Law

Will computer users lose the right to copy and retransmit electronic information while "fair use" and the "public domain" are radically curtailed, to the detriment of research, robust public dialogue and economic growth?

The rights of consumers in using networked information may be radically circumscribed if the various copyright industries (film studios, record companies, book publishers, and others) succeed in imposing traditional intellectual property norms on digital technologies. Led by Assistant Secretary of Commerce Bruce Lehman, the copyright industries are proposing a comprehensive intellectual property scheme to govern the electronic universe. It would curb traditional user rights to browse, share or make private noncommercial copies in digital media (acts that are now permissible in print media). Many activities that are commonplace on the Internet would be illegal or subject to new pay-per-use pricing schemes. Online service providers, furthermore, would be responsible for prohibiting dissemination of unlicensed material and reporting violations to enforcement authorities. What may be most alarming is how the copyright industries want to greatly diminish fair-use rights and shrink the public domain. This would invert the core purpose of copyright law, contend critics, because it would allow knowledge to be more readily suppressed rather than more easily disseminated. Copyright law would instead function as a kind of trade secret law.

This copyright scenario is set forth in a White Paper released by the Intellectual Property Working Group of the National Information Infrastructure Task Force in 1995, and was promoted at the recent World Intellectual Property Organization gathering in Switzerland. Despite its vast implications, this issue has received remarkably little attention, chiefly because of its arcane legal nature. Yet a concerted response from users is vitally important. Two of the leading copyright experts leading the charge are law professors Pamela Samuelson of Cornell University and Peter Jaszi of American University, both of whom, with Mitch Kapor, have helped organize the Digital Future Coalition, a new group to fight the NII White Paper and legislation. James Love, the Nader-backed advocate at the Center for Study of Responsive Law, is another leading advocate.

The First Amendment

What will be the contours of First Amendment rights for citizens using online media?

The constitutional rights of citizens in cyberspace is largely virgin territory. The most significant arena for forging new constitutional definitions of free expression involves obscene

communications on the Internet. Although the challenge to the CDA may be over, other First Amendment controversies about online speech are likely to erupt in the future, with attempts to define legal standards for online libel, commercial free speech, and the use of anonymous reposters that can shield users' real-life identities. While it is important to defend the libertarian side of the First Amendment, I believe it is also important that nonprofits pro-actively develop new online forums and editorial venues for democratic deliberation. A libertarian dystopia of the sort envisioned by Vartan Gregorian could indeed emerge if there are no "common spaces" to forge and foster shared mainstream values.

Privacy/Security in Electronic Communications

What legal and technological protections shall exist to protect the privacy of individuals?

This, too, is an enormous and complex issue. As more commercial vendors go online, pools of data that were once separate and compartmentalized are likely to be pooled. This poses serious new threats to individual privacy. Everything from medical records to buying preferences to travel itineraries could be accessible to government, businesses and prying individuals. Some Internet search engines are even capable of compiling listings of individuals' newsgroup postings. In short, processes and transactions that have traditionally "disappeared" (because no technology could capture and aggregate them) are now being recorded and manipulated. The Clinton Administration formed a Working Group on Privacy composed of representatives from various federal agencies. But its work has resulted in little progress in forging new privacy protection policies.

A related issue is what kinds of encryption of data will be permissible. To conduct commerce, businesses want to develop utterly reliable cryptographic technologies. But for national security purposes, the federal government wants to retain the right to intercept electronic communications, with court authorization, in order to apprehend terrorists, drug dealers, and other criminals. Civil libertarians understandably fear abuses of this authority, and have so far, with business support, succeeded in fending off the Clinton Administration's encryption policies.

Citizen Access to Government Information

Will citizens have free and convenient online access to government documents and databases? Or will these resources be inaccessible because government by default takes no concerted action or gives information resources to private vendors who charge high prices?

If "information is the currency of democracy," as the adage goes, then government policy with respect to its electronic information resources is a vital issue for American democracy. History has shown how such tools as the Freedom of Information Act, the Toxics Release Inventory, and other government data/information-disclosure systems are invaluable tools of accountability. Yet when push comes to shove, government information disclosure invariably entails a fight. We saw this in the SEC's great resistance to making its EDGAR database (containing corporate 10-K filings and other data) accessible over the Internet for free; it wanted to give the data to "value-added" private vendors. The *Congressional Record*, *Federal Register*, and various federal databases (the Agriculture Department's AGRICOLA) came very close to a similar fate. Even now, while there is a federal government Web site to help small businesses in their dealings with the government (OSHA, SBA, etc.), there is no user-friendly government Web site to help *citizens* interact with the government. And West Publishing still struggles to maintain its monopoly over publishing federal court decisions, even though there is no justification in today's online world for privatizing taxpayer information in this way.

There is also great need to pressure the federal government to make its information resources accessible and user-friendly. It is vital, for example, that the Clinton Administration adopt citizen-accessible technical protocols for the Government Information Locator System, or GILS, an electronic system for locating (but not providing seamless access to) diverse government data systems. Currently, the architecture of GILS is being debated by government technical experts, with virtually no input from the public. Without citizen intervention, GILS is likely to become a narrow catalog system that is not interoperable with either other government agencies or commercial networks -- and therefore not a cheap, efficient platform for public access, such as a Web site. One need only consider how RTK Net (a "right to know" database of toxic pollutants) engendered a whole new domain of policy advocacy to realize how a poorly designed GILS could squander untold new opportunities for achieving policy reforms. A well-designed GILS, on the other hand, could be as catalytic a tool as the Freedom of Information Act.

Children, Television and the New Media

How well will television, the Internet, CD-ROMs and other technologies serve children?

If it is sometimes hard to talk about how the new media marketplaces and technologies will affect the culture, it is much

easier to do so when the focus is children -- a distinct and vulnerable segment of the population which naturally elicits our sympathies. Children provide a useful prism for bringing many larger, diffuse issues into focus. The FCC deadlock has now been broken on whether to require broadcasters to air three hours a week of "educational" programming. But the implementation of that rule and auxiliary issues remain. So do emerging children-related issues on electronic networks, such as marketing to children on web sites and invasions of their privacy.

Open Architecture of the Internet

Will the Internet remain an open, accessible system with affordable pricing, or will a pay-per-byte proprietary scheme evolve that features "bottlenecks" for excluding competitors?

Many public interest advocates have an abiding worry that telephone companies or cable systems will contrive new ways to "fence off" the Internet by creating new proprietary systems. This could happen through a number of different strategies. TCI, the cable giant, and Kleiner Perkins Caufield and Byers, are currently developing @Home, a new interactive video and data system that would try to impose a "cable model" of bottleneck control over content. @Home would charge about $35 a month and offer a three-tier pricing strategy offering content providers a directory listing, interactivity with subscribers, and customer billing and usage tracking services. Because @Home will use ultra-fast cable modems (allowing the transmission of moving images and very quick downloads, for example), the new system could set the deluxe standard for interactive communications, siphoning away talent and prestige from the Internet and marginalizing it. (For more, see *Convergence* magazine, February 1996.) Many public interest advocates fear that such attempts to make the "last mile" connection to the home a closed, proprietary system (such as set-top boxes) is an attempt to kill the Web as an open platform.

Thus, finding ways to ensure high-bandwidth connections for the "last mile" of wire to the home has great importance, especially if companies cannot find ways to make money through the open-architecture structure of the World Wide Web. That is one reason why some citizen advocates are trying to ensure that ISDN, or Integrated Services Data Networks, will be widely accessible and affordable to consumers. ISDN telephone lines offer roughly twice the speed of conventional modem lines, and could provide a valuable new platform for enhanced networking services. But many telephone companies have deliberately dragged their feet in making ISDN available or affordable, with some charging wildly exorbitant prices. Under

pressure from advocates, a number of telephone companies are reassessing their policies and, often, actually lowering their rates.

Digital Technologies, Jobs and Economic Vitality

What are the long-term social and economic consequences of digital technologies on American communities?

Social policy has not begun to catch up with the disturbing fallout of the digital revolution. As mentioned earlier, Richard Sclove of the Loka Institute believes that the technologies could hollow out many local economies by consolidating those services into major national businesses. The massive job layoffs made by major media corporations following their mergers also suggests the rise of "a new kind of macroeconomic Moore's Law," in the words of Daniel Burstein and David Kline, authors of *Road Warriors: Dreams and Nightmares Along the Information Highway*: "As the rate of new wealth creation fueled by digital technology rises, the number of people required to produce it is decreasing." This thesis has also been explored by Jeremy Rifkin in *The End of Work: The Decline of the Global Labor Force and the Dawn of the Post-Market Era*. These macroeconomic and social implications of digital technologies deserve a more focused, rigorous review, and they need to be made a part of the ongoing policy debate.

SECTION B

BUILDING A BROADER, MORE ORGANIZED CONSTITUENCY

The number of telecom policy issues now pending is huge. The implications for the public are vast. But public interest advocates are not terribly effective at winning, except in special circumstances. Why? Beyond the rooted pathologies of our current political culture (i.e., campaign finances), I believe the chief reason for ineffective public-interest advocacy is the lack of a broad, well-organized constituency. As one respected advocate told me, "We can get in to see Senators and FCC Commissioners -- we have access, we can give testimony, we can file petitions -- but we don't usually have the power to change their minds."

Policy is not just made through rational persuasion, although facts and analysis matter a great deal, of course. An equally important factor is the visibility and organization of public interest constituencies. FDR once told a group of businessmen who had come to lobby him: "Gentlemen, I agree with everything you say. Now go

out there and *make* me do it!" That is the burden that the public interest telecom community has not met. We are not going out there and *making* policymakers adopt our policy proposals. It reminds me of the quip by gangster John Dillinger: "I've always found that I get farther with a kind word and a gun than with a kind word alone."

Historically, the political clout wielded by public interest advocates has derived from the publicity powers of the mainstream press. Our side has used the press either as a crypto-ally or a useful conduit to reach the public and indirectly influence policymakers. But the potency of this once-formidable lever has greatly diminished since the 1970s. A headline or two can tweak the national consciousness and perhaps prompt a hearing. But the mainstream press is too crude and unreliable an instrument for pushing through a policy agenda nowadays.

The only real solution, I believe, is to spend more energy and resources organizing the disaggregated constituencies who do support our policy positions. In some ways, the public interest community needs to show the same grit-and-gumption that the religious right has shown, by marshaling raw citizen support and giving it political/institutional force. Many grassroots forces are active, but not adequately connected to effective Washington lobbies. They talk among themselves on the Internet but cannot translate that latent energy into a real-life political impact. Meanwhile, many Washington players have forgotten how to reach out and organize, preferring to stay within the cloistered world of Washington and pursue "facade politics."

Facade politics is the mindset developed in the 1970s whereby crusading public interest organizations claim to represent citizens, and may even have large paying memberships which occasionally send letters to Congress. But these memberships are largely inert, and the Washington headquarters make few efforts to empower members at the local level and help them become semi-autonomous, active players in their own right ("building local capacity"). Undeterred by a grassroots opposition, retrograde politicians are free to ignore public interest advocates and pay no political price.

This is why so many public interest telecom crusades amount to pillow fights: There is no organized, outraged constituency that can inflict moral censure and political damage on politicians, the FCC and other players for hostile actions. Some political players, particularly the Clinton Administration, may want to "make nice" with the public interest community and work to find congenial solutions. But too often, these players have prior political debts that trump enlightened

policy. (Note how Vice President Gore was not willing to take a more visible, aggressive public stand in his lobbying of the telecom bill. Why? Because he could not count on a public interest/nonprofit constituency to make a visible show of support to bolster his hand.) Without a constituency to protest and stand behind a sovereign vision, the public interest community can be rolled and have no recourse beyond press denunciations, and, on rare occasions, lawsuits. In its worst manifestation, public interest advocates act like abused spouses, unable to keep from returning to "friendly" politicians who abuse them some more. Why this perversity? Progressives have no where else to go, and the politicians know it.

It is critical to see that progressive policy aspirations are directly linked to the organized potency of their constituencies. Ultimately, advocacy without credible grassroots support is destined to stall. On numerous fronts -- environmentalism, campaign finance reform, consumer protection -- we have seen the limits of facade politics. This raises some questions: What tactical models are best at organizing constituents, and what are the mechanics of mobilizing would-be allies?

1. Developing Better Internal Networking to Coordinate, Recruit and Mobilize

Conceive of an organization as a set of relationships among people, and one can begin to see how the networking technologies can fortify its advocacy capacity. By allowing pervasive, easy use of e-mail, fax alerts, fax on demand, online briefings, access to document archives, mass dissemination of publications -- all in short periods of time -- a lumbering dinosaur can begin to move with speed and agility. Indeed, this is the transformation that major corporations have achieved through information technologies. It is time for the nonprofit world to re-invent itself in a similar manner. If advocacy will be improved, so will membership recruitment, press relations, nonprofit governance, delivery of services, administrative efficiencies, and many other endeavors.

Two foundations that recognized this early on are the W. Alton Jones Foundation and Brainerd Foundation, which brought together 100 environmental leaders, foundation officials and technology experts in June 1995. (The Pew Foundation is also quite advanced in grappling with digital technologies, and the Mellon Foundation in exploring new models of electronic publishing.) The goal was to determine how "wired" the environmental groups were, and to suggest how the technologies could vastly enhance their advocacy. A

consensus document generated by the conference reached several key conclusions:

- With the unprecedented growth of low cost, interactive online systems, continued reliance on costly print publications and direct mail undermines the competitiveness of environmental non-governmental organizations (NGOs) in the emerging electronic marketplace of ideas.

- The core demographic groups that support environmental causes are the fastest growing segment of users of new online services, offering unique opportunities to develop new electronic publications and services to meet their needs and interests.

- Mobilizing grassroots support for environmental causes requires investment in new information systems that can help individuals in different local communities understand how broad national and global environmental issues uniquely impact their lives.

A survey of the environmental groups attending the conference reveals the "primitive" state of communications at most environmental groups. Of more than 1.3 million instances of membership communication, about 991,000 were delivered via bulk mail. Press conferences are still the main way of communicating major issues to journalists. Phone trees are the primary tool for mobilizing constituencies -- while electronic bulletin boards, fax broadcasts, and other networking tools are fairly rare. The challenge is not simply to make these technologies available; they must be integrated into the daily strategic decisionmaking of the organization. As the conference organizers concluded: "Environmental NGOs must work toward a cultural shift within institutions to take technology out of the 'backroom' and apply it to achieving mission critical goals. Part of this culture shift will involve a much greater commitment to cooperation among organizations with shared goals."

In this regard, one highly effective electronic activist models is SCARC-NET, the "intranet" of the anti-tobacco activist community. Formed by the Advocacy Institute, SCARC-NET has been an invaluable tool for trading documents, debating strategic plans, and mobilizing rapid responses. Such examples abound, but they have not been rigorously studied. Hundreds of activist-oriented networks flourish under the auspices of Peacenet and Econet, two sister-networks devoted solely to promoting peace, human rights, social justice and environmental issues. These networks are jointly run by the Institute for Global Communications (IGC), a division of the Tides Foundation based in San Francisco. There are at least 900

newsgroups operating through IGC, which itself is allied with the Association for Progressive Communication (APC), a worldwide umbrella group of networks in more than ten countries. The nature of these "communities" varies widely, of course, ranging from casual chat to moderated discussions to action-oriented advocacy.

What may be most exciting is the unexpected diversity of activist models out there. There is a Usenet newsgroup devoted to these ideas, misc.activism.progressive, and an MIT Web site on civic participation (http://www.ai.mit.edu/projects/ppp/home.html). I have heard of environmentally committed foresters within the U.S. Forest Service who electronically share views that question official policy. There are multinational networks of activists whose communications frequently usher a story into the mainstream press, spurring change. Indeed, the profusion of innovative advocacy anecdotes and models is so great, but so difficult to identify and evaluate, that Essential Information, the Nader-founded group, has assigned a person to routinely prowl the Web for innovations worth replicating.

2. Developing New Niche Constituencies

One of the most significant challenges lies in activating "niche constituencies" to recognize their own self-interest in the new technologies, both from the perspectives of internal operations and public policy. Unfortunately, existing efforts in this area have not caught fire. The Public Interest Summit in 1994 and the Benton Foundation -- along with general press coverage -- have "softened up" the field. Nonprofits know that something is going on. But even when strong personal presentations are made to the executive committees and boards of organizations, there is often little follow-through by those organizations.

In general, the policy community's outreach to niche constituencies -- library users, educators, artists, writers, independent video producers, etc. -- need to be more intensive and sustained. The community networking people have a Washington presence, but their stories and perspectives are not forcefully represented in policy circles. Dozens of other professions and user communities simply are not plugged in to the policy debate or action. Yet their participation can be transforming. When CD-ROM publishers were alerted to challenge West Publishing Company's monopoly on federal court rulings, they became a moral and political force in their own right, changing the terms of policy debate in the process. Similarly, when Intel and Microsoft (yes, Microsoft!) were shown that they had a self-interest in more aggressively prodding telcos to lower their ISDN rates, it also had a transforming influence. The strategic development

of new niche constituencies -- especially business sub-sectors whose views coincide with the public interest vision -- could be remarkably effective in bolstering advocacy.

3. Developing effective coalitions.

A vexing problem is how to overcome the stubborn balkanization of the telecom/nonprofit community. I think the chief answer is to support those organizations that show initiative and effectiveness, which naturally attract followers/collaborators. These organizations are able to imagine/conceptualize new strategic opportunities, define the terms of engagement in tactically shrewd ways, and bring together diverse groups to actualize the plan. Coalition-building requires development of a compelling, specific message that speaks directly to people's self-interests and galvanizes them. Unfortunately, some coalitions have relied upon more generalized, lofty appeals without the immediacy, focus and personal relevance of message-driven campaigns. Not surprisingly, their political traction is limited.

4. Leveraging government information to improve policy advocacy.

I have already alluded to this strategic opportunity, but it deserves a brief, separate mention. Unleashing reliable government information and making it popularly accessible is one of the most cost-effective tools for achieving policy reforms. This has been seen countless times over the past twenty-five years, exemplified by the Sunshine in Government reforms (which opened up congressional and federal agency deliberations), the Freedom of Information Act, the Federal Advisory Committee Act, as well as statistical disclosures such as the Toxics Release Inventory and Home Mortgage Disclosure Act.

In terms of making government information resources electronically accessible, public interest forces have achieved some important beachheads. But this area deserves far more concerted, focused attention. If nonprofits and advocacy groups were more actively educated about their huge stake in government information, it might propel a new coalescence among those groups around information policy goals. It would also quicken the desire of the participating nonprofits to update and improve their own communications infrastructures.

SECTION C

MAKING THE TECHNOLOGIES WORK FOR US

Progress in the two preceding areas -- policy advocacy and constituency development -- will be seriously hampered unless a third leg in the stool is added: getting online and innovative at using the technology. Nonprofits as a whole are grievously behind. Worse, there are only a few fledgling efforts to remedy the growing chasm between the nonprofit and commercial worlds. Section C discusses how to get nonprofits online and how to propel them to the forefront of creative experimentation with the technologies.

As mentioned earlier, this need is not propelled by techno-faddism or "keeping up with the Joneses." It is prompted by the technology's potential to achieve core missions and effect change. As Harvard Professor Mark Boncheck writes in an April 1995 paper:

> [C]omputer-mediated communication [CMC] offers geographically dispersed groups with a need for intra-organizational communication and information exchange an important alternative to more costly personal and broadcast media. CMC reduces communication, coordination and information costs, facilitating collective action by making it easier for groups to form, improving group's efficiency at providing collective goods, increasing the benefits from group membership, and promoting group retention through more informed decision-making. [*Grassroots in Cyberspace: Using Computer Networks to Facilitate Political Participation.* Working Paper 95-2.2: Presented at the 53rd Annual Meeting of the Midwest Political Science Association in Chicago, IL, on April 6, 1995.]

Information technologies allow time and resources to be used more efficiently, and coordinated better both internally and externally. Nan Aron of the Alliance for Justice reportedly claims that the new technologies "changed her life" after they were introduced within her organization. Others have had similar epiphanies. The new networking capabilities are not "add ons" to the organization; they *change* organizational practices in profound ways, creating a new, more versatile "platform" of capacities. It is therefore a mistake to see new technology investments as "capital expenditures" that are somehow distinct from program-related expenditures. Increasingly the technologies are utterly *integral* to program.

1. How to Get Nonprofits Online?

The challenge thus becomes, How can foundations begin to close the "technology gap"? Training and technical assistance are an obvious answer, but early attempts in this area suggest that getting nonprofits online and developing their techno-sophistication is a complex matter. It implicates an organization's leadership, its established practices and the work culture. Precisely because networking technologies cut so deep, it is difficult to help organizations make the cultural transition. It is not enough to offer technical seminars or even on-site demonstrations. Because of the numerous and subtle barriers, nonprofits need close, ongoing collaborations with technical experts and active interventions and inducements.

One fledgling effort to get more nonprofits online is being led by Rob Stuart of the Rockefeller Family Fund. The project, highly cost-effective at $75,000 a year, pays for a "circuit rider" technical expert who meets with nonprofit leaders, sets up their equipment and software, and consults with them on an ongoing basis to deal with glitches, questions and general advice. The RFF project seems to have learned a great deal about how to get nonprofits online:

"Based on the first six months of the Project, we have identified four strategic goals essential to building the nonprofit community's capacity to use modern technology for increased effectiveness.

> *"1. Expose the groups to the technology.* Despite the ubiquitous presence of the Internet in the news, many nonprofit groups do not have even basic electronic communication capacities.…Nonprofit leaders are often too busy with ongoing projects to afford themselves the opportunity to explore new technologies. Thus, a major goal of the project will be to take the technology to the leaders. The project will perform on site demonstrations and pursue opportunities to give presentations at conferences attended by nonprofit leaders.
>
> *"2. Train foundations to identify and support effective communication/technology strategies for grantees.* Like their grantees, foundation officers suffer from a lack of exposure to technological advances. The Project will meet with foundation staff, sponsor seminars, make presentations to boards, if desired, and be available for consultation on an ongoing basis.

> *“3. Help the helpers.* The Project will identify models and strategies for "teching up" and "training up" the grantee community. The Project will develop opportunities and strategies for grantees and foundations to increase their technical capacity by keeping track of new products introduced on the market. Additionally, the Project will promote existing technical assistance organizations and work to stimulate new innovative technology training programs.
>
> *“4. Promote collaboration amongst the community.* The Project will serve to insure that groups and foundations active in promoting technology are kept abreast of what each other are doing. Where possible, the Project will promote the development of a longer term technology strategy within this community.”

As this description suggests, simply making expertise available is not enough to get nonprofits online. Outreach must be hands-on and interventionist, not generalized and passive. Many experts I talked to said that nonprofits virtually have to be taken by the scruff of the neck to be put online. But once they're online, they become immensely grateful and enthusiastic users, quickly expanding their general outreach, membership communications, press relations and networking.

One way that the learning curve can be flattened, and innovations quickly diffused through a nonprofit community, is to develop cooperative ventures. Whether it is a technical assistance program or a group Web site, the sharing of online expertise allows new ideas and new solutions to circulate quickly. This kind of collaborative effort was one of the lessons that W. Alton Jones/Brainerd learned: "Environmental organizations also need to leverage their investments in information production by promoting cooperative 'electronic gateways' that guide individuals to the information they need, regardless of who produced it." Beyond the inter-group advantages of such cooperation, electronic gateways shared by like-minded nonprofits help establish a "branded identity" for the groups. They become recognizable, respected editorial platforms, which themselves serve to attract audiences. The more that the site has a distinct personality and reliable, timely information resources, the more likely that it will be accessed by users. (See the excellent report, “Circuit Riders: Pioneers in Non-Profit Networking,” published by the W. Alton Jones Foundation.)

2. Spurring Innovative Applications

Nonprofit groups do not just need to be online; they need to have the capacity to develop their own creative applications. While they ought to use off-the-shelf technologies and software as much as possible, nonprofits have much to gain by using them in innovative ways. Some examples help illustrate this point:

- To combat the misleading claims of corporate PR departments, one public-interest group started a Web site that debunks deceptive scientific assertions that have public policy implications. After taking out an ad on the *New York Times* op-ed page, the number of "hits" on its home page soared from 3,000 a month to 53,000.

- Before releasing a report on geographical disparities in IRS enforcement, a privacy activist/journalist gave selected reporters advance access to the complex data via his Web site. (A password was required to gain access.) By the time the press embargo on the printed report was lifted, reporters at the key national press outlets had already familiarized themselves with the data, manipulated it to highlight local story angles and made their own interpretations.

- One activist is assembling an interactive TV channel that will allow voters, on demand, to listen to video statements by candidates during the campaign season. By providing a common platform for lengthy candidate statements on diverse issues, the nature of public discussion may change. Candidates could be forced to speak more completely and thoughtfully about issues, instead of serving up with memorable sound bites. Changing the normative platform changes the discourse and, one hopes, the actions.

One can imagine other innovative applications. I know of one advocacy organization whose leader conducts 15-minute telephone briefings for his local affiliates via a speakerphone. Imagine the time savings if he could put those briefings on a Web page that could be downloaded at any time using RealAudio software and passwords. Or consider if a video camera were mounted on a computer screen, so that the briefing could be interactive in real time with a small group of people. A virtual meeting could be held fairly inexpensively and spontaneously.

Developing new applications is not without risks. Some innovations fail, or don't quite work the way they are envisioned to work. This has been one criticism of putting online the statistics collected under the Home Mortgage Data Act. HMDA data is far

more sophisticated, and generally must be "packaged" and interpreted in order to be useful to local groups using the Community Reinvestment Act. Online access to the raw data does not seem to be the ideal delivery mode for HMDA statistics. One alternative, developed by one group, has been to interpret and synthesize the data so that it can be more useful to local activists -- and then to put that data online. To judge by the impressive number of hyperlinks on the World Wide Web linked to this database, this database seems to be much used.

Tracy Westen has suggested a meta-project that could provide a significant service to the nonprofit community. He proposes that foundations sponsor a software template, or networking model, through which nonprofits could index themselves and their considerable information resources. Westen calls for a "Dewey Decimal system" that will organize the knowledge, resources and expertise of nonprofits and make them widely accessible via the Internet. Such a template would be a new platform that would pro-actively influence the evolution of nonprofits by encouraging them to orient their work and information resources around the new platform. This would echo the role played by the public television broadcasting platform, which made possible and elicited a new genre of television programming that would otherwise never have developed.

A depressing counter-example could be cited as well: the failure of nonprofit and religious groups to secure broadcasting spectrum for themselves -- and thus a viable mass-audience platform -- during the legislative debates leading up to the 1934 Communications Act. This defeat gave commercial broadcast interests free rein to shape American culture and public discourse as they saw fit. Whatever the merits of commercial TV, the effective exclusion of nonprofit, civic interests from radio and TV resulted in an incalculable loss to American culture over the following generations. We occupy a similar window of opportunity -- and peril -- right now.

SECTION D

DEVELOPING GREATER INTELLECTUAL AND STRATEGIC DEPTH

1. Building a New Intellectual Infrastructure

Previous sections have alluded to a serious structural deficiency in the public interest telecom community: the lack of capacity to

develop more cogent, empirically driven intellectual critiques, and then to strategically use them in policy advocacy.

In the late 1970s and early 1980s, the right-wing foundations invested heavily in developing their intellectual and communications infrastructure; the mainline foundations invested in programs. The former's long-term investments (leveraged by other resources, to be sure) are now paying enormous dividends. Their outreach to the mass public and policy elite is highly effective, and their terms of debate tend to govern. Indeed, conservative foundations have virtually created new cultural conversations out of whole cloth. One example is the "conservative feminism" exemplified by Lisa Schiffren, Laura Ingraham and others; another is the work of Charles Murray (*The Bell Curve*), whose work has been generously supported and marketed by the same foundations. Industry, too, has developed powerful infrastructures for germinating, developing and marketing intellectual critiques, whether it is the "Wise Use" environmentalism or the American Council on Science and Health ("tobacco is far worse than pesticides"). Industry routinely spends huge amounts on research, strategic analysis, think tanks, polling, marketing and PR.

In today's political/newsmaking/cultural universe, it is vital that public interest telecom advocates and nonprofits have this sort of intellectual and marketing infrastructure. Without it, they are not likely to move far beyond the tired conceptual and rhetorical traditions that are its current subsistence. They will not come forth with the larger analyses or the intellectual sophistication that other players (particularly industry and libertarians) bring to the table. Mainline foundations need to play a more active, creative role in imagining and funding such an infrastructure.

A positive vision is needed, one that takes account of the actual dynamics of new technologies and the marketplace. Moreover, the vision must get beyond "the sky is falling" rhetoric that characterizes so many public-interest campaigns and offer a more positive, hopeful vision. Public-interest alarmism can attract press attention and rattle the cages of industry. But it is ultimately a reactive tool, and thus of limited strategic value.

Two under-developed positive visions are the "open architecture" paradigm developed by EFF and Mitch Kapor years ago, and the "gift economy" that I mentioned earlier. Another positive vision worth developing is a recontextualization of telecom policy in American democracy and culture. Telecom policy is too important to leave to telecom policy experts. After all, it is our democratic culture that is at stake! But the humanists, artists, sociologists, political

scientists and others who might inform this discussion are nowhere to be seen. And the policy community is too busy and parochial to develop a broader critique.

Here are some questions that occur to me:

- If the market cannot generate all sorts of programming or information, then what kinds of institutions and funding schemes can be devised to serve unmet nonprofit needs?

- What economically sustainable model of public service can be proposed for a fiercely laissez-faire communications marketplace? What does "public service" mean in a networked, personalized information environment?

- How can community networking such as freenets become economically sustainable? In a milieu that presumptively favors individual pay-per-use and user fees, what mechanisms can socialize costs to support community networking?

- How can the integrity of a public life and civic culture be maintained in the face of the fiercely mercantilist marketplace that dominates the American polity?

The public interest community must begin to address such questions, particularly if they hope to use telecom policy as an instrument of pro-active reform that can embody their values. Conservatives have long relied upon the Frederick Hayeks, Russell Kirks, and the Milton Friedmans, along with a host of popularizers such as George Gilder, William F. Buckley, Charles Murray and Ayn Rand. By comparison, progressive forces have far fewer intellectuals/philosophers (and even fewer popularizers with platforms and a sense of style) who have sorted through these philosophical dilemmas and given guidance to their colleagues manning the polemical front-lines. They have not done the hard thinking about values and language that their adversaries have, and it shows.

The value of a theoretical framework is that it keeps people's eyes on the prize. Short-term, epiphenomenal developments (which so captivate and divert the press, pollsters and politicians) are not allowed to dictate the evolution of advocacy and policymaking. Without a larger vision, public interest advocates are far more prone to cling to archaic policy paradigms and tropes, and be intellectually flummoxed. An example: When the telecom bill first started down the pike in 1994, public-interest advocates called for a 35% "set-aside" of

space -- a notion that was highly confusing if not nonsensical in a networked environment (what does 35% of a network mean?). This intellectual deficit was privately rationalized as an expedient "place holder" for an issue, which could be assigned to the FCC to figure out later.

Compare this expedient (if necessary) performance to the writings of George Gilder and Esther Dyson, and you begin to see that public interest advocates suffer from a "strategic intelligence gap" of enormous proportions. This is no surprise. We have no institutions or resources or venues to develop creative new critiques – or to draw new linkages between emerging empirical realities and policymaking. I.F. Stone once said that "facts are subversive." It's an insight that could have enormous value for the public interest community in deflating some pernicious policy paradigms: marshal data about real people and real circumstances in order to break through the conservative discourse.

B. Meta-Problems in Search of Meta-Solutions

The problem is not just the lack of resources. The intellectual challenges are quite daunting in their own right. One reason that strategic answers are so elusive, I believe, is that so many of them lie in what I've called the meta-realm. They hover just below our consciousness in the taken-for-granted norms of the world. Emergent paradigms quietly challenge conventional mental constructs. But will we insist upon calling the new phenomenon a "horseless carriage" or will we explore the new normative concept now known as the automobile? Will we think in terms of "electronic publishing" or will we take pains to understand the distinctive new dynamics of that genre of electronic communications?

What follows is a review of some important meta-issues that need intellectual attention:

Taxonomies and Language. Consider how our taxonomic/linguistic categories sometimes channel our thoughts and actions in the wrong directions. Xerox PARC linguist Geoffrey Nunberg has pointed out that when a social reality changes, but language does not, conceptual errors are common and especially difficult to identify and eradicate. This is because language canonizes a historical domain and naturalizes contingent social categories. Precisely because language is abstract, transparent and decontextualized, its limitations may not be easily grasped. It is therefore difficult to coin new linguistic categories. To the extent that language is constitutive of social types, one of the most significant

challenges we face is developing the new language that can canonize a new domain of nonprofit/progressive endeavor.

New Conceptual Strategies. Another meta-challenge for nonprofits is developing new conceptual strategies in carrying out their missions. Silicon Valley companies understand that one of their most potent competitive weapons is their proprietary business models -- their plans for creating new markets in the perplexing electronic/software realm. A now-familiar example is the early realization by some companies (RealAudio, Netscape, Yahoo!) and the failure of others (General Magic) to understand the inverted economics by which *giving away* one's content is the surest way to capture a market. If one's software system or navigational tool becomes the industry standard, then the ancillary markets (customer support, supplementary service, server software) becomes the market. Free software simply primes the pump.

Such adroit strategic maneuvering requires deep insight into the meta-dynamics of electronic networks -- the novel ways that social, personal, technological and economic factors co-mingle to alter market dynamics and create new paradigms. But the nonprofit world has little awareness of this realm, let alone a critical understanding or pro-active capacity to shape it. (It is revealing, for example, that the Foundation Center's Web site is a proprietary system for downloads -- a design that actually inhibits the Center's outreach and efficacy.) Unfortunately, the smartest, most insightful futurists work for high-tech companies, which consider thinking proprietary; ideas are capital, after all, in an information age. And most academics are not truly on top of the digital scene. The challenge then becomes building a new network of intellectuals.

One example of a misplaced, or limited, conceptual model may be the public interest community's heavy focus on *access* to the new media. The more critical fulcrum of power may be control over managing attention and assembling audiences. Should the nonprofit world so readily cede this territory to commercial ventures, especially when the costs of being a successful "content producer" are relatively low? "Access" is a vestigial term that is most meaningful in a broadcast regime, where commercial broadcasters have already devoted huge sums of capital and marketing to create a platform (the network) that can reliably capture a significant audience.

In the world of networked information, access is clearly a necessary but insufficient condition to creating a new public space. We need to set our sights higher than "access," and explore the feasibilities of creating our own platforms that can attract and

aggregate audiences. Establishing a widely recognized and trusted "branded identity" to assemble new publics may hold far greater paybacks over the long term than access alone. These platforms could be editorial vehicles, information search engines (such as Yahoo!), or cooperative Web sites, among other possibilities.

New Venues for Intellectual Development. Another meta-problem is the lack of venues through which the civic/nonprofit/advocacy/user representatives can meet, converse informally, plan strategically, develop personal relationships, cultivate new institutional collaborations, and organize to address common goals. Business has numerous such forums, ranging from Esther Dyson's PC Forum and Aspen Institute conferences to a wide range of sector-specific conferences and trade forums. But nonprofits involved in telecom/new media issues have few if any conferences or retreats at which they can nurture common interests. The Wenner-Gren Foundation, reports Tracy Westen, assembles leading anthropologists for a "five-day coffee break" at a remote European castle. The unstructured time filled with intense, informal talk about professional concerns in small groups and at common meals, has provoked some of the most significant breakthroughs in the field.

"Our side" needs a similar retreat through which to incubate new ideas and strengthen relationships. They need a crucible through which they can develop a sectoral consciousness and personal affinity for each other, beyond what is possible, say, at monthly meetings of the Telecommunications Policy Roundtable or Benton workshops. (The Airlie House retreats for telecommunications economists served this purpose in the late 1970s before being commandeered by the neo-orthodox economists.) Too much attention has been paid to formal, institutional collaborations and interaction, when the more catalytic changes are more likely to emerge by leveraging the informal, interpersonal relationships -- the kitchen table conspiracies -- that are the real mainsprings of change-movement leadership. Such a setting might stimulate the new conceptual breakthroughs and language that must precede and inform new policy paradigms. It could also give rise to a richly provocative network of thinkers, advocates and innovators, much like the Global Business Network serves as an ad hoc "watering hole" for a strategic elite.

A New Ecology of Public Knowledge. Another meta-issue involves the emergence of new sources of credible public knowledge and new *kinds* of public knowledge. By its low-cost access and global reach, the Internet has changed the ecology of public knowledge and discourse. It has effected a kind of cultural *perestroika*. As a result,

the historic "warranting structures" of common public knowledge are changing. A front page story in *The New York Times* or a *Nightline* show can provoke considerable change among opinion leaders and the educated public. Why? Because the *Times* and *Nightline* are daily forums read/seen by an influential common audience. As certain online forums gain a similar prestige and credibility in certain fields of expertise, those forums will become new loci and leverage points for effecting change. This can already be seen in specialized cases, as when a Mideast policy specialist during the Persian Gulf War posted a striking analysis of the situation on a respected electronic newsgroup -- which soon became part of the mainstream Washington discourse and policy decisionmaking. Online postings by respected activists can similar catalyze reactions among certain communities, altering discourse and action in ways that were previously impossible.

New Rhetorical Forms. Yet another meta-issue is the subtle but critical phenomenological differences between print and digital media. This is not an arcane aesthetic matter. It has vital *practical* implications for nonprofits as they seek to use the new media effectively. Peter Lyman, the chief librarian at UC Berkeley, writes:

> Digital words may have a relationship to actions that printed words do not have; they are a doing, a performance, that has the capacity to evoke something like the feelings we normally associate with relationships between human beings.
>
> Computers sometimes evoke an emotional engagement, making them a genuine field of play. In play, thought and action are unified in a sense of "flow," in which the sense of time disappears. This sort of human-tool relationship is not unprecedented, for musical instruments are also tools that become a medium for expression, which seem to become one with the body in a skilled performance which is disciplined yet often experienced as play. Sherry Turkle's ethnographic studies suggest that the computer's responsiveness unites the emotional power of play with learning by enabling the user to "work through" life contradictions and issues.

I cite this lengthy passage to emphasize that nonprofits must be able to exploit the new, protean rhetorical potential of the new media. Failure to "learn the new language" will leave us less able to be sophisticated "content creators" in the online world. A parable: When television was a new medium in the 1950s, George Burns imported vaudevillian rhetorical forms (a stage and curtain, a static

camera, etc.) while Lucille Ball took full advantage of the fluid, dynamic possibilities of the TV camera and studio production. Burns' TV career fizzled; Ball's took off. Nonprofits must not become the George Burns of the new media, blindly adhering to the rhetorical conventions of print when the real action has moved on to the world of graphic design, color, attitude, interactivity and soon, motion.

This is particularly critical now that sheer creativity -- and not costly production apparatus -- may be the chief factor in the success of a Web site and other future media. On the Web, at least, upstarts with compelling ideas can actually compete on an equal footing with major corporations having huge production budgets. Hence the importance of attracting audiences over having access per se. And hence the special importance of open-architecture standards to prevent the TCIs and Baby Bells of the world from artificially restricting access to a given telecommunications platform.

But will nonprofits: 1) understand the distinct rhetorical dynamics of the new media; 2) have the resources to develop their own formats; and 3) have a critical mass of practitioners to develop their own rhetorical traditions? Or will the crude production standards that generally prevail at PEG-access cable channels continue in the new media as well -- along with a future of small audiences? Now is the time to take stock of these challenges and to engage the imagination of public-spirited tech innovators -- and many others who may not travel in "our" circles but could help imagine a hospitable media universe for nonprofits and civic purposes.

PART III

HOW THE FOUNDATION WORLD MAY HAVE TO CHANGE

My inquiries into the nonprofit world unexpectedly took me to the threshold of another issue: how foundations themselves conduct their business. I am modest about venturing into this territory because I have not spent much time exploring it, and I am not intimately familiar with internal grantmaking processes at foundations. Yet I have learned enough from various grantees, and from the "Philanthropy in the Digital Age" session in New York on April 9, 1996, to realize that foundations would do well to reassess their own missions and operations, particularly with respect to the networked environment.

If foundations want to have a meaningful impact, then their grantmaking must take greater account of the fluid dynamics of the current world. One grantee told me that its foundation support for policy advocacy arrived months after the issue had been disposed of by the FCC -- yet the money could not technically be used for a closely related policy goal that had unexpectedly arisen. One citizen-activist tells the story of how his work developing new media vehicles for candidate issue statements unexpectedly found valuable uses in high school classes, which were of course beyond the scope of his grant.

Based on his grantmaking for Internet-related purposes in eastern Europe, Jonathan Peizer of the Soros Foundation (Open Society Institute) argues that foundations must find new ways to foster experimentation; show flexibility with the terms of grants; expedite bureaucratic decisionmaking; and act as sources of venture capital for new nonprofit projects. I agree with his analysis, that traditional philanthropy will be far less catalytic and influential in a world marked by rapid change. Foundations must develop new ways to allow (indeed, encourage) improvisation among its grantees, so that they can seize new opportunities when they arise. If the slower, more time-bound processes of traditional grantmaking continue to govern, then nonprofits will be severely disadvantaged in achieving their missions.

The most fruitful grants may not be the most detailed and schematic. As complexity theory suggests, life evolves in unexpected, non-linear ways. Why not accept and leverage that dynamic, rather than adhering to the formalistic fictions that often govern grantmaking? A difficult question, of course, is ensuring accountability. It is not self-evident what evaluation criteria should be applied to grants when their implementation takes place in such a fast-changing milieu. Yet the up-side of acknowledging the new realities may provide more than adequate compensation. The MacArthur "genius program," indeed, is based upon the premise that supporting creative individuals, and not necessarily a specific program, can yield remarkable benefits. I think this premise could be constructively applied to telecom grantmaking.

This would entail greater risks and, perhaps, a higher rate of "failure." But this may be unavoidable. Corporations no longer try to develop and implement five-year plans because the world changes too radically within that time frame. So, too, foundations need to find new ways to accommodate its grantmaking goals and schedules to the rapidity of change. Proven players must be given greater flexibility to seize transitory strategic opportunities. Perhaps foundations would do better to fund evolutionary pathways, through which projects can

organically grow and develop, rather than fixed, final projects which may be blown off-course by the vagaries of real life (or which discover promising new pathways along the way).

Another systemic need: Grantmaking must take greater account of information technologies *as integral parts of grant programs.* It is fallacious to see the telecommunications infrastructure as capital overhead, when organizational architecture is so influential -- in determining the range of strategic choices available to nonprofits and the kinds of internal and external interactions.

Throughout my study, I have noted the need for new "meta-structures" and "meta-strategies" that could help the public interest community achieve their goals. This lesson applies to the foundation world as well. I think foundations need to cultivate a new set of non-traditional advisors, if only because the "recognized authorities" do not necessarily reside in identifiable institutions; they are, instead, members of virtual networks. Moreover, grantees themselves are rich sources of knowledge whose expertise and experience remains seriously underleveraged (in part because they are not networked). Consider, for example, how the NTIA grant program has failed to facilitate coordination and sharing of knowledge among its grantees in similar areas (urban areas, health, etc.) Such a convergence and collaboration of groups on the front lines of experimental endeavors could yield fantastic new insights, personal connections, and a consolidation of knowledge. In computer circles, "collaborative filtering" is, in fact, now seen as a hugely promising new field.

Grantmakers, I believe, need to see themselves as facilitators of such convergence and collaboration. They should also find better ways to disseminate the knowledge gleaned by their grantees, so that any lessons can have wider impact. In short, foundations need to apply the lessons of networked intelligence to their own domains, so that they can more forcefully advance their own agendas. It was suggested at the April 9 Rockefeller meeting that foundations might consider themselves as "curators" for grantees. Perhaps this is a useful concept for thinking about new foundation roles.

Finally, I think the mainline foundations need to be more aggressive in responding to assaults upon nonprofits that would restrict their free speech, advocacy and lobbying (such as the Istook Amendment). The constructive, salutary role of nonprofits in democratic culture can no longer be taken for granted; it must be forcefully articulated and defended. But this, too, will not happen automatically. It requires a more concerted, focused response.

These scattered speculations suggest the need for new sorts of meta-institutions and processes by which traditional foundation goals can be actualized. It is beyond my capabilities here to suggest specific structures, but I think new exploratory leadership is needed, particularly by foundations, which are one of the few American institutions with the resources, stature and independence to assert such leadership at this critical juncture.