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## The Information Railroad

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1-Union – a syndicalist list (loosely speaking), where IWWs, DeLeonists, anarcho-syndicalists and assorted Marxists discuss a range of issues and share information on current labor struggles. Like most electronic discussion lists, this is unmoderated, which means that the quality of the debate is uneven and some participants are hostile to the list's stated goals. But the discussion is more productive (and more civilized) than that found on lists such as the Anarchy list. email: 1-union-request@lever.com

The Amateur Computerist – a quarterly newsletter of historical and theoretical arguments on computing and its utility to workers. For electronic subscriptions: au329@cleveland.freenet.edu For the printed edition send \$5 (1 year) to R. Hauben, PO Box 4344, Dearborn MI 48126.

Everywhere you turn, nowadays, you bump into the information "revolution." Politicians prattle about information "super-highways," national competitiveness and better jobs. Transnational corporations shift data-entry and computer programming work to Barbados and Ireland, using computers, fiber-optic lines and satellites to move data back and forth. Cable companies promise 150, 300, 500 cable channels – and have scores of Home Shopping Network imitators in development. Computer workstations automatically monitor the number of key strokes per minute in many workplaces, and report that information to the boss. Computer networks make it possible for labor activists and others to keep in almost-instantaneous contact with each other, to coordinate international campaigns and to access a wealth of information.

Vice President Albert Gore speaks of "a planetary information network that transmits messages and images with the speed of light from the largest city to the smallest village on every continent." This, Gore promises, will lead to

robust and sustainable economic progress, strong democracies, better solution to global and local environmental challenges, improved health care.... help educate our children... It will be a means by which families and friends will transcend the barriers of time and distance. It will make possible a global information marketplace...

Gore advocated five principles upon which "information highways" should be based: private ownership, competition, minimal regulation, open access and universal service. The U.S. effort would "be built and maintained by the private sector," Gore said, and he encouraged other countries to do the same. Gore concluded by exulting that telecommunications links "strengthen the bonds of liberty and democracy around the world. By opening markets to stimulate the development

of the global information infrastructure, we open lines of communication..."<sup>1</sup>

Similarly, Commerce Secretary Ronald Brown issued a report, "Putting the Information Infrastructure to Work," which promises "a fundamental change in the way we work, the way we learn, the way we communicate." Brown looks to information technology to enhance U.S. competitiveness, speed electronic commerce, improve health care, improve the environment, sustain libraries "as agents of democratic and equal access to information," and provide government services faster and more efficiently.<sup>2</sup> President Clinton's science advisor agrees: "Information highways will revolutionize the way we work, learn, *shop* and live." And Gore promised Communications Workers of America members 500,000 new information jobs in the next 18 months.<sup>4</sup>

Computer, cable television and telephone services are. converging – today it is technically possible to deliver similar services over each of these networks, at much higher volumes than was possible just a decade ago. Hype about the "information superhighway" is nearly inescapable. Whether we like it or not – and we are told that we *will* like it –corporations are wiring the land, developing a host of new information and

#### **Labor Resources Online**

(This section is largely obsolete, based upon a network of listserves and bulletin boards long since superseded by more powerful technologies also more susceptible to corporate control.)

LaborNet – Particularly strong on international labor news from Russia and Asia, this rank-and-file net also offers industry and union specific conferences in airlines, auto, graduate employees, IWW, National Writers Union, teaching, Teamsters, etc. Inter-connected to the Internet, shares conferences with EcoNet and PeaceNet (and with APC systems around the world), \$3 to \$10 per hour on line. In Canada many of these same services are available on the WEB. email: labornet-info@igc.apc.org; in Canada, support@web.apc.org

AFL-CIO Labor Net – Several AFL-CIO unions operate conferences on CompuServe, a commercial information vender owned by H&R Block.

Computer Professionals for Social Responsibility – among other projects, they publish a useful free electronic newsletter: *CPU: Working in the Computer Industry* email: cpsr@cpsr.org

RSI Network – A major industrial hazard of the Information Railroad is repetitive stress injury for keyboard workers. This bimonthly electronic newsletter discusses treatment, workstation design, case studies, etc. Email: majordomo@world.std.com. The message should read: Subscribe RSI

Economic Democracy Info Net – EDIN maintains a Labor Issues section containing government documents, labor law, and files on U.S. and international labor issues. It is accessed via gopher. Type gopher garnet.berkeley.edu 1250

Spunk Press maintains an anarchist/alternative (rather broadly defined) electronic contact list which includes newsgroups, archives, electronic newsletters, mailing lists and email addresses for publications. Requests to: ian@spider.co.uk

<sup>&</sup>lt;sup>1</sup> Albert Gore, Remarks prepared for delivery to International Telecommunications Union, March 21, 1994, emphasis added. (Distributed electronically over IAMCRNet, International Association for Mass Communications Research)

<sup>&</sup>lt;sup>2</sup> "Brown Releases Report Highlighting Benefits, Barriers of National Information Highway," News Release, Department of Commerce, distributed electronically. The full report (which I have not read – there is no mention of barriers in the news release) is available for a charge from the National Technical Information Service or electronically under the documents/papers subcategory of the speeches/testimony/ documents category on the iitf.doc.gov gopher.

<sup>&</sup>lt;sup>3</sup> John Gibbons, quoted in John Burgess, "Can U.S. ride to prosperity on 'information highway?" *Minneapolis Star Tribune*, May 10, 1993, IOD.

<sup>&</sup>lt;sup>4</sup> Harry Jessell, "Gore stumps for superhighway bill," *Broadcasting & Cable*, June 20 1994, p. 36.

In relation to the ports movement

The transport of commodities is the point in the chain of control least dominated by the capitalist structure. Production is strictly controlled by the rigid structure of the enterprise. Consumption is fully dominated by the extreme vulnerability of the isolated individual. Spatial mobility in the transportation of commodities implies a certain distance from immediate control by the instruments of the enterprise structure. And it is here where world capitalism is currently fighting its fundamental battle. And, within transportation, it is precisely in the movement of commodities within ports that there continues a possibility for exercising some kind of counterpower with a certain degree of autonomy and strength....

[The alternative port workers movement should] create information centres which can be used by the base at different points: ports, autonomous trade union organisations, national and international coordination. Such information centres, characterized by their openness, accessibility, participation, and by their ascending, descending and horizontal diffusion, should be administered by representatives of the base, or those serving them, and supplied with the necessary material equipment (computer information bulletins, magazines, data centres, etc.).

We would also suggest that the contents – the data to be worked upon, stored, systematised, analysed, distributed – should be the following: Working conditions, skills, wages, collective agreements, standards, laws and working rules, etc.; Trade union experiences, organization, strategies, campaigns – especially solidarity campaigns –coordination, etc.; .... Documentary archives, magazines, articles, documents relative to matters of interest....

video "services," and deploying information technologies in our workplaces. Indeed, they began deploying earlier versions of these technologies more than ten years ago. But these systems have not been developed with our needs in mind, and to the extent that workers have been consulted at all it has been only as potential consumers. Now the government is trying to speed the course of these developments in ways that would strengthen the corporate stranglehold on what could be an invaluable community resource.

### Highways, Webs & Railroads

A great deal of energy has been expended debating the most appropriate metaphor for discussing the evolving system, which the Clinton administration originally described as a National Information Infrastructure. This never caught on, whether because it's an awkward phrase or because people couldn't figure out just what was being proposed (after all, infrastructure includes everything from schools to sewers). Instead, politicians, corporate officials and journalists began speaking of an "Information Highway" (which quickly metamorphosed into a superhighway), a much more concrete metaphor, and one that quickly spawned a host of associated metaphors (Highway Robbers, Potholes, Road Kill, Toll Booths, On Ramps, etc.)

At a recent labor conference many people challenged the "superhighway" metaphor, arguing that highways are lifeless, ugly, unfriendly places (they preferred to think of the emerging information systems as a web – a living, interdependent organism). Others favor "superhighway" precisely because the emerging system looks to be lifeless, a fiber-optic scar across the land. Others thought the emerging systems looked more like a Shopping Mall where everything is for sale and people and ideas are tolerated only if there is money to be made off of them.

This debate over metaphors is an argument over how we should think about the emerging system – its possibilities and dangers, its structure, how it is controlled. To see it as a Shopping Mall is to position it as an abomination; a Web is a much friendlier concept (and one that proponents hope would shape policies in a more congenial direction). Each of these visions is technologically possible, but none really captures the essence of what is presently being built. Thus we are offering our own metaphor, the Railroad.

While railroads and highways both get people and goods from place to place, there are important differences. Ugly as they may be, highways are accessible to any automobile or truck (most exclude bicycles and motor scooters) on equal terms. You might be required to pay a toll (particularly out east), but you go where you want, carry what you will, and move at your own rate of speed (subject, of course, to speeding laws and the highway patrol – restrictions which have led some to favor Infobahn as a metaphor, after the German autobahns which are reputedly free of such annoyances). Highways are owned by the public.

Railroads, on the other hand, are privately owned. (Passenger service is provided by a government-owned company, Amtrak, but it leases access to rail lines.) The companies which operate them generally have a monopoly over their particular routes, and they can set rates and policies subject only to the constraints of the capitalist marketplace. The owners determine the routes, which towns will be served and which (the vast majority) will not. They decide which services they will make available. You don't drive on a railroad, you are cargo – just like the coal and other goods being hauled from place to place.

The railroads have organized their business in such a way as to make it practically inaccessible for the majority of the population (the railroads don't handle small freight, many communities lack train service, passenger trains run so infrequently, Dolgoff noted that the very same technologies which could open new roads to freedom could be used (and were being used) for very different ends – to regiment individuals and obliterate human values. The new society is not technologically determined, rather we must develop and fight for our own vision of the future.

#### **Information & Power**

The following excerpt from a proposal by the Spanish Coordinadora dockworkers union, "Information and the Construction of Socialism," presented at a conference of alternative dock workers unions in Hamburg, Germany in 1985, was translated by Carlos Betancourt and Peter Waterman.

He who has information has power. The collection and use of data and information about objects, persons, groups or peoples one wishes to dominate or exploit – this is the secret of the accumulation of power, the manipulation of persons, groups and peoples, the exploitation of natural resources, of natural and human behaviours at the end of the 20<sup>th</sup> century....

The alternative to the monopolistic accumulation of information is the socialization of information: access to data centres by those persons, groups or peoples about whom information is accumulated in such data banks. Against monopoly, diffusion....

The existence of secret data banks is not only dangerous for the 'informatised' (not the same as the 'informed') but is as – or more – dangerous than the existence of arsenals of weapons

In so far as wages and conditions demands are concerned, we need, in the first place, to emphasise the necessity for access to information. In the same way as there exist health and safety committees, there is an undeniable necessity for information-access committees....

preventing shippers from moving from port to port to unload scab goods or to play workers off against each other). That proposal was never implemented, but as computer networks become more widespread it is quite feasible to link workers in every plant companies operate around the world. Such networks could help rank-and-file workers to counter the bosses' international strategies with their own and to mobilize nearly instantaneous international campaigns.

Several years ago, Sam Dolgoff pointed to the decentralizing and democratic possibilities opened up by the "cybernetic revolution." Computers and modern telecommunications networks make decentralized, non-hierarchical decision-making more feasible, and indeed more efficient than centralization and bureaucracy. Dolgoff noted the vast amount of information even then being distributed over the Internet by scientists, educators and others "who are now already self-organized into local, regional, national and international federations [which] freely circulate information..."

The unfoldment of the new society will depend greatly upon the extent to which its self-governing units will be able to speed up communications; to understand each others' problems, and thus better coordinate their activities.... The new technological revolution could expedite the disappearance of the parasitic institutions of the state and representative government. ...

The organization of the new society will not, as in the state or other authoritarian associations, emanate from "the bottom up" or from "the top down" for the simple reason that there will be no top and there will be no bottom. In this free, flexible organization power will naturally flow, like the circulation of the blood, throughout the social body, constantly renewing and revitalizing its cells.[21] and so poorly, that they are impractical for most people). The service the railroads provide the general public is impoverished and centralized, but this way of running railroads has proven highly profitable to those in charge.

The railroads are like the emerging information system in another important way - they were built on the wholesale theft of valuable public resources. Railroads received massive land grants from the government in exchange for building railroads. By right the railroads ought to belong to us, the entire population, since they were built on our land (often land still held by native Americans) by ill-paid workers with money largely raised from the sale of more of our land. Similarly, the Information Railroad is being built on the back of a publicly owned network of computer networks, the Internet (so called because it is less a physical network than a system for coordinating the informational resources of hundreds of computer systems across the country and the world). Much of the financing for building the system is coming, directly or indirectly, from our taxes, and much of the information being bought and sold is ours as well.

As communication scholar Herbert Schiller notes, the Clinton plan is "a blueprint for corporate domination" sold through the same empty promises that were earlier used to sell radio, television and cable:

The nation's information/media/culture sector is currently the site of sweeping transformations... Stunning corporate mergers and acquisitions among telephone, computer, cable and entertainment companies, each of them already dominant in their field, are preparing the way for ... an unprecedented corporate enclosure of national social and cultural space.<sup>5</sup>

 $<sup>^{5}</sup>$  Herbert Schiller, "Highway Robbers,"  $\it The~Nation,~Dec.~20~1993,~p.~753.$ 

#### Access

It seems clear that many people will be kept off the Information Railroad routes. A growing number of people - about 7 percent - do not even have basic telephone service, let alone the computers, modems and high-quality lines needed to hook into computer networks. Far fewer people are hooked up to cable television - the other distribution system. Industry is urging the government to abandon even the pretense of universal access for new communication services. Although Vice President Gore suggested that connections to libraries and public schools should be subsidized in the name of universal access (though this would at best set up a distinctly second-class access system for the poor, particularly in an era where both are being starved of the resources to provide even their present functions), a former Federal Communications Commission research director argues that universal service policies would discourage investment (indeed he advocates letting rates for local phone service rise to market levels).<sup>6</sup> Plans filed by four telephone companies with the Federal Communications Commission for "video dial-tone" networks (which would upgrade telephone networks to also deliver movies, television and information services) illustrate why telecommunications companies want to dump universal access requirements. Pacific Bell, Ameritech, Bell Atlantic and U.S. West propose to build their networks almost entirely in wealthy areas. Similarly, when

economic benefits will largely be limited to the handful of giant corporations that provide the programming and own the railroad lines that deliver the endless stream of advertisements and pay-per-view offering to our homes. And the alternative communication systems that have been developing on the Internet and on similar nonprofit networks will be forced to the margins.

But there are other possibilities. Many labor and other social movement activists are using computer networks to coordinate their efforts nationally and internationally, to mobilize international solidarity, to share information. When the Chinese government massacred its citizens near Tianamen Square, dissidents transmitted detailed, vivid reports instantly by fax, telephone and computer networks to activists throughout the world. During Yeltsin's recent coup, activists countered the official lies with first-hand reports which were distributed over networks affiliated to the Association for Progressive Communications (in Canada the WEB, in the U.S. LaborNet and PeaceNet). Rank-and-file workers in the auto, airline and trucking industries share information and ideas over LaborNet computer conferences. Workers in Mexico, Indonesia, Russia and other countries post news of their struggles, ask for (and distribute) information about transnational corporations operating in their area, share information about toxic chemicals and other hazards. The IWW's Industrial Worker is produced by groups scattered across the U.S. and Canada, using electronic mail to find information, edit and discuss articles, and transmit the final articles to Chicago for printing.

In the 1980s, Spanish dockworkers in the Coordinadora union proposed developing a computer network that would link all the European ports (and would be accessible not only to union officials but to any dockworker), and which would make available information on all the major shipping companies, on working conditions, and on labor disputes (thereby

<sup>&</sup>lt;sup>6</sup> Peter Pitsch, "Disconnect the Universal Subsidy," *Wall Street Journal* , April 4 1994, p. Al2. This position is shared by many in the industry, but is by no means uncontroversial. The head of QVC, a home-shopping company that operates two cable channels and recently tried to buy Paramount, calls for building two competitive information highways. "If you have one wire, then you better have it be a common carrier [like the telephone] and regulated within a true inch of its life." He seemed quite shocked when his interviewer argued for a single, unregulated wire. Don West and Mark Berniker, "Barry Diller: TV's Smart Agent," *Broadcasting & Cable*, May 231994, pp.19–30, esp. 26–28.

each screen. People on these corporate networks pay more than do Internet users, but while they don't always have access to the full range of Internet materials they can access a variety of for-profit databases not available over the Internet including the full text of many newspapers, <sup>20</sup> latest stock prices, weather and travel info, and specialinterest discussion groups similar to, but not interconnected with, those on the Internet.

In any event, federal funding of the Internet (\$12 million) is scheduled to end next year, as the feds award new contracts for information networks to private vendors. The Internet will continue for several years even if it is displaced as the primary system, but as more and more people sign on and the funds for maintaining and expanding the system dry up it will increasingly become unreliable. And, of course, much of the information currently available over the Internet is likely to be shifted to the for-profit systems, where providers can charge for access. Indeed, the National Science Foundation recently announced that it is awarding five key contracts to telephone companies (Pacific Bell, Ameritech, Sprint, MFS and MCI) to operate Internet Network Access Points and the new Internet highspeed backbone. Many users fear the telephone companies will seek permission to price service by usage (presently Internet-connected institutions pay a flat fee for connection) and are lobbying against metered pricing in order to preserve the free flow of information through the Internet.

## **Stopping the Railroad**

If current developments continue, the Information Railroad will develop much as radio, television and cable before it – as a system for selling goods and deadening minds with an endless stream of corporate-produced programming. The

Nynex decided to test the market for interactive services it chose three luxury apartment buildings in wealthy Manhattan neighborhoods.<sup>7</sup> The reason is very simple, that's where the money is.

Information has traditionally been available to the general public through a relatively democratic institution, the public library. Those with money could get information more conveniently (and sometimes more quickly) by buying their own copies of books, magazines and specialized publications, but vast amounts of information were made available through libraries free of cost to anybody able to read it. The Internet is organized on the same principle, but with the difference that anyone can make information available. Increasingly information is being withdrawn from this free public sector and being transformed into a good for sale. Private information vendors have made more information available, but at a price that puts it out of reach of all but the wealthiest. Much of their products are simply electronic compilations of government information that was once available free of charge through government documents libraries; the government is eliminating many of its publications and much of this information, gathered with our tax dollars, is now available only to those who can buy it.8

## **Big Money, Small Dreams**

These technologies could easily be used to create a truly public information system, with terminals available to all at public locations (libraries, post offices, stores, schools, workplaces, and

<sup>&</sup>lt;sup>20</sup> Sam Dolgoff, *The Relevance of Anarchism to Modern Society*, Third Edition, Charles H. Kerr, 1989, 30–31.

Mary Lu Carnevale, "Coalition Charges Four Phone Firms With 'Redlining' in Adding Networks," Wall Street Journal, May 24 1994, p. B7; Leslie Cauley, "Interactive Trials Are Trials Indeed-Tough to Start and Tough to Judge," Wall Street Journal, May 18 1994, p. Bl.

 $<sup>^8</sup>$  This discussion borrows heavily from an interview with Herbert Schiller, "The Information Superhighway: Paving Over the Public," published in *Z Magazine*, March 1994, 46–50.  $\cdot$ 

union halls) containing a wealth of information (about employers, social services, local events, political concerns, etc.) that people could use to help them in their daily lives. Such a system could provide useful information and, more importantly, it could provide an opportunity for people to communicate with each other – to distribute alternative information, to air their views, to make contact with like-minded people. A truly democratic communication system is technically quite feasible.

But that is not what the corporations have in mind. They see the Information Railroad as a means to deliver products and advertisements to a passive consuming (and paying) audience.

On this point the cable operators, phone companies, computer makers and broadcasters are all agreed. Although they are battling to achieve their cut of the traffic on the highway, they are unanimous in seeking to exclude the public's participation and interest....

In the long run ... hardware sales will be dwarfed by the golden flows that will be extracted from the viewing public for the shows, games, films and specialized data that will be transmitted. Private ownership of the electronic highway confers the right to determine who and what will be given access...

While the electronics and cable companies... claim, for example, that interactive TV heralds the arrival of viewer participation and autonomy already announced plans for the new services belie this promise. Most of the interactivity, in a corporateowned and sponsor-supported system, will inevitably be directed to the future invasion of the home with marketing messages ...

In addition to the established home shopping networks, cable programmers are waiting in the faculty can be laid off as students are increasingly "taught" by cheap, automated systems. 18

#### Centralization

The Internet is essentially a cooperative. Although it was started with Defense Department funds to link researchers around the country, the Internet now links over 1.5 million computers in 50 countries. Users can scan libraries for obscure books or locate a unionist in another country who shares an interest in a particular corporation's plans. "The Internet's structure encourages participation and involvement. User contributions have sustained resources like bulletin boards and archives, which offer others easy access to information... And it is run democratically, with users on diverse sites participating in network administration and maintenance." 19

The Internet also suffers from shortcomings. Aside from the handful of cities with established "FreeNets" (local access centers allowing people to hook into the internet by phone), users must pay hourly access charges unless they are affiliated with a University or other institution connected to the Internet. As a result, most Internet users are affiliated (as students, workers, etc.) to universities or other government agencies, hundreds of thousands of other users are on commercial networks (CompuServe [owned by H&R Block], America OnLine, Prodigy, etc.) that already charge for information on a pay-per basis and reserve the right to control the types of information they distribute. In addition to charging users, Prodigy (owned by IBM and Sears Roebuck) sells advertising on the bottom of

<sup>&</sup>lt;sup>18</sup> Betsy Reed, "The Wealth of Information," *Dollars and Sense*, March/April 1994, 9.

<sup>&</sup>lt;sup>19</sup> The National Writers Union has filed suit over this, noting that newspapers and magazines are not paying the freelance and syndicated writers who provide the bulk of their copy for the right to republish their work in electronic form.

for example, work with toxic chemicals for about \$6 an hour (no benefits). If they object or try to unionize their plants are closed and the work transferred to a new sweatshop, whether in the U.S. or any other country where cheap workers can be found. Sometimes these electronic sweatshops go bankrupt owing thousands of dollars in back wages to workers. These workers are prisoners of the "virtual corporation," where manufacturers such as IBM, Digital Microwave and other industry giants contract out their manufacturing operations to fly-bynight contractors; the resulting corporate "flexibility" is highly profitable to the bosses, and helps keep U.S. workers "competitive" with our fellow workers around the globe. 16

Nor are engineers and programmers immune from "competitiveness." Telecommunications, computer and other information industry firms are laying off hundreds of thousands of workers around the world as they turn their technology to the task of eliminating high-paid workers. And much of the surviving work is being transferred to countries like India and Ireland where skilled workers can be hired much more cheaply than in the U.S.  $^{\rm 17}$ 

Universities and schools are also succumbing to the lure of high tech exploitation. The State University of New York, for example, is trying to increase faculty "productivity" by offering courses and even entire academic programs via the information railroad. Lectures can be carried by video or as computer files, class discussions and papers by email, and students' progress monitored by computer. One lecture can be shown to thousands of students around the world, exams can be graded automatically, classrooms and libraries can be phased out, and

wings with channels devoted to advertisements, game shows, food and the Macy's catalogue.<sup>9</sup>

A trade magazine recently listed scores of new cable channels - among them TACH: The Auto Channel, Television Shopping Mall, Lincoln Mint Network (an interactive shopping "service" complete with coupon-dispensing device in your home), Catalog 1 (a Time Warner-Spiegel joint venture featuring 16 upscale catalogs), and a host of music, movie, talk and sports channels. 10 Cable companies talk of 500-channel systems, but most of these channels would be devoted to advertising, to home shopping (even though industry surveys show that 71% of cable subscribers reject such "services"), 11 and to pay-perview services. There is no money to be made by developing systems - labor channels, public access, dossiers on major corporations with information on their labor and environmental policies (as distinct from information on credit-worthiness and stock prices, which find a ready market), etc. – in which people can talk to each other about our common problems, and therefore they will be put on line only if we buy the bandwidth (inevitably the corporations will be able to outbid us) or we force the owners to open up spaces for the public.

The Information Railroad is not being built by public interest groups, it is being developed by the giant corporations that

<sup>&</sup>lt;sup>16</sup> For a running list of these layoffs and detailed discussions of working conditions in the industry see *CPU*: Working in the Computer Industry.

<sup>&</sup>lt;sup>17</sup> For a generally optimistic assessment of these developments see "Potholes along the information highway," *The Voice* (United University Professions, AFT), April 1994, 8–9, 15.

<sup>&</sup>lt;sup>9</sup> Herbert Schiller, "Public Way or Private Road?" *The Nation*, July 12 1993, 65. Similar prospects await computer users, from the advertisements built into the Prodigy system to the "Internet Ad Emporium" promised in a recent press release from Multimedia Ink Designs of Poway, California.

<sup>&</sup>lt;sup>10</sup> Broadcasting & Cable, May 23 1994, special section "NCTA '94."

<sup>&</sup>lt;sup>11</sup> Harry Jessell, "Cable ready: The high appeal of interactive services," *Broadcasting & Cable*, May 23 1994, p. 75. The article reports that cable subscribers are willing to pay a few dollars more a month for interactive services such as video on demand or information services. The text claims there is widespread interest in interactive TV shopping as well, but 71.1% said no when asked "Would you be willing to shop from your home using interactive TV?" This even though other questions held out the possibility of lower prices.

already provide telephone and cable television. A \$26 billion merger between the Bell Atlantic telephone company and cable giant Tele-Communications Inc. that would have given the merged firm control over phone or cable lines going into more than 40 percent of American homes (and a good deal of the programming carried over those lines) has fallen through. But plenty of other corporations are lining up at the trough looking for a piece of the action. The recent Viacom/Paramount merger, for example, brings together a distributor (Viacom is one of the largest cable operators in the country) and a content provider (Paramount makes films, publishes books and owns sports teams), positioning them to own and control both what we receive and the channels we get it over. The source of the self-based or the self-based or

Companies already make about \$12 billion a year, primarily by selling information on a pay-per-use basis to computer users (lawyers, stock and currency brokers and similarly well-heeled interests are the primary customers, and most of the commercial services now available are targeted to their needs – thus there are two competing services providing the full text of all U.S. court decisions and other information for lawyers, but none targeting the more numerous homeless population). They hope to expand in part by broadening the range of information made available and marketing it to new audiences, but also by getting us to pay for information which is presently available for little or no cost.

### The High-Tech Jobs Machine

Much of the money driving the Information Railroad isn't seeking to communicate with the general public, however. Rather, corporations and other institutions have been investing heavily in telecommunications for several years in order to develop and control global business operations and increase the flow of profits by moving work, goods and money around the world almost instantaneously. A recent AFL-CIO Executive Committee statement on Telecommunications Policy embraced Clinton's national information infra-structure proposal, but urged "policies to encourage a unionized, high-skill, high-wage workforce ... [and] to promote a positive trade balance..." This is precisely what Clinton and the corporations do not have in mind.

While corporations have good reason to believe that these technologies will help improve profitability, there is no reason to believe the claim that high tech jobs will restore American "competitiveness" or create secure, well-paid jobs. Although a handful of high-tech workers (engineers, computer programmers, etc.) are well paid, most workers in computer and other high-tech firms earn miserable wages working in unsafe conditions for subcontractors driven by ruthless competition. Thousands of workers in California's Silicon Valley,

<sup>&</sup>lt;sup>12</sup> Though there is a lot of hype too – the Yankee Group found that would-be builders of the information highway aren't spending nearly as much money as they claim on interactive media. Pacific Telesis, for example, claims to be spending \$16 billion over seven years, all but two billion of that was already slated for routine maintenance and upgrading of its facilities. Ameritech claims to be spending \$33 billion, Yankee says it's closer to \$4.5 billion. John Keller, "They'll Spend Lots But Lots Less Than They Say," *Wall Street Journal*, May 18 1994, pp. Bl, B3.

<sup>&</sup>lt;sup>13</sup> Erika Wudtke, "Who's watching the wires?" *MediaFile*, April/May 1994, 10.

<sup>&</sup>lt;sup>14</sup> These issues were explored in several books by communication scholars (long before information became a subject for politicians' speeches) including Herbert Schiller's *Who Knows: Information in the Age of the Fortune 500* (Ablex 1981) and Vincent Mosco's *Pushbutton Fantasies* (Ablex 1982). For a discussion of the impact of computerization on jobs see Harley Shaiken's *Work Transformed: Automation and Labor in the Computer Age* (Lexington Books, 1986).

<sup>&</sup>lt;sup>15</sup> Statements Adopted by the AFL-CIO Executive Council, Bal Harbour, Florida, February 15–18, 16. Elizabeth Kadetsky, "High-Tech's Dirty Little Secret," *The Nation*, April 19 1993, pp. 517–20. These issues are also addressed in Glenna Colclough and Charles Tolbert's *Work in the Fast Lane* (State University of New York Press, 1992).