

Inequalities in the information society: problems and solutions

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It is a great pleasure to be here speaking at this conference. We have come as a delegation from Toledo, Ohio--faculty and students, from the campus and the community. Our hope in coming to this conference was to meet new friends and exchange information that can contribute to a new era of cooperation based on these new technologies that we have, and a new political understanding that we so desperately need. We would like to extend a hand of friendship to everyone here and declare our commitment to build relationships of cooperation and reciprocity, of sharing what we have and joining any struggle we can to stop the evils of exploitation and build a better world for us all.

Will all of the Toledo spiders please stand up? After this session we will have a table in the IDICT booth, and the spiders will be there to answer and ask questions and pass out free our CDs and other publications so you can be more familiar with our work. We would like to learn about your work as well.

We work in a lower income inner city African American community in the post-industrial midwestern heartland of the USA. Toledo is a city of over 300,000 in a metropolitan area of 500,000. We are located one hour south of Detroit, 2 hours west of Cleveland, and 3 hours east of Chicago. We are in the heartland of the USA. The 2000 census figures indicate the city is 23% African American and 6% Latino. (The US census often reports these figures on Blacks and Latinos as if they are separate and not overlapping population categories.) Using the latest census figures the household income in Toledo was \$24,819 (USA = \$30,056, 25% more than Toledo), with a full 20% of the population below the official government poverty level. We are the home of the Jeep Cherokee for state of the art auto production, Libby glass, and the global headquarters of the Dana Corporation – auto parts and supplies are produced by over 70,000 employees, in 300 facilities in 34 countries with sales of over \$10 billion. In Toledo we have global capitalists, workers, and poor people being thrown out of industrial society.

In Toledo, Ohio, we are at the edge of industrial decline, a place where corporate decisions to maximize profit are life and death questions for entire communities. The old assembly line mass production capitalism created a solid foundation for the Toledo economy and drew to its neighborhoods immigrants from the US rural south and from Mexico, and from many parts of Europe, especially Germany, Hungary, and all of Eastern Europe. In the Great Depression the workers and their families launched a mass strike in 1936, the Auto-Lite Strike, and that led to the Great Sit Down Strike in Flint Michigan organized by the same activists. This strike wave that started in Toledo led to the Congress of Industrial Organizations, the CIO, and a new era of labor militancy was born. Now this industrial system is being transformed and the people who fed their families from the assembly line are now being abandoned at the beginning of this new information era. Our current social crisis far exceeds the 1930's and goes back to the mid 19th century origins of industrial capitalism discussed by Marx and Engels. This is the historic context for our meeting this week, and the material conditions that require our intervention in history.

The world we live in is not the world of yesterday, and it is not the world of tomorrow, it is the world of today. This statement has special meaning as we begin a new century, as we begin the information revolution, as we face the end of the industrial system we have struggled in for all of the 20th century. The history of

every country is the history of people fighting for a better life, sometimes in the realm of science, sometimes in the realm of politics, and always in the realm of culture we have been fighting for a better life. Our paper is about this current moment, our need to intervene in history to understand and change the beginning of a new kind of society, the information society based on electrical digital technology.

There are two general themes of this talk. The first is to discuss key aspects of the information society, how it is different from industrial society, how it transforms the class polarities of industrial society into polarities defined by informational parameters. Then, secondly, we will attempt to suggest how we might move forward given the polarities we face. How do we intervene in this historical process of the birth of the information society to advance the cause of democracy, peace and justice? What is the future potential of this information society for achieving the strategic goal of human freedom?

The revolution in technology

The information society is being born via a fundamental transformation in technology, digital electronic technology, hence many think of it as a revolutionary experience. This is a profound belief that we need to discuss. Are we in the midst of a revolutionary process? This is a key theoretical question with great practical implications. The word revolution means fundamental transformation, a change in the basic nature of society and the conditions for life itself. There can be many kinds of revolutions, revolution in music, in poetry, in all aspects of human activity, but there is a special sense in which the word revolution is used to define a new kind of society, the beginning of a stage of human history. It is in this latter sense that we are experiencing a revolution today – a fundamental transformation of the most important features of society, its basic character is being transformed. This is not merely a question of what is happening in a particular place, as clearly there are vast regions of the world without such technology. But, where these things exist so exists the global power that determines the well being of all of us, the forces we interact with whether we know it or not.

The machine driving this process is the computer, a tool that takes electricity to its highest level far exceeding being merely raw energy driving the moveable parts of machines. Now electricity is the environment in which information can be stored, manipulated, and presented. The first computer was probably the abacus created 5000 years ago. But the first computer to run on more than human energy was a steam driven machine created by Charles Babbage (1791 – 1871), a contemporary of Charles Darwin (1809 – 1882) and Karl Marx (1818 – 1883). Here we can observe a revolutionary moment in history – revolution in social science (Marx), revolution in natural science (Darwin), and a revolution in technology (Babbage). The full electrical revolution began when transistors became part of the process in 1948, followed by integrated circuits placed on silicon chips leading to the emergence of modern computing in the 1970's.

The computer has been linked with telephones and satellites to create networks for communication. This new global network is called the World Wide Web (WWW) and the Internet. For the first time humanity has the possibility of instantaneous communication of text, graphics (still and video), and sound on a global level.

At the base of this global network of computers and the Internet is the digital code. In fact we can say that the heart of the revolutionary process creating the

information society is the universal digital code, a code that can take all forms of information, text, image and sound, and in a series of digits, 0's and 1's, store this information and access it at any time and any place on the network. It is an interesting fact that much like the mid nineteenth century this is a time of fundamental revolutionary action on all levels: the technological revolution of the digital code for computer based communication of all forms of information, and the scientific revolution of the DNA code for life including the Human Genome. We are in search of such clarity about the nature of the social revolution that is happening now, and will surely be more and more obvious in the decades to come.

This use of the universal digital code is made possible by the rapid expansion of the capacity of the micro-chip based on Moore's law, an observation made in 1965 by an engineer Gordon Moore, co-founder of Intel, that every 18 months the capacity of the microchip doubles and the price is reduced by 50%. This is what has made the rapid explosion of opportunities like teleconferencing, DVD digital recording of movies and MP3 recording of music, etc. Given this explosion of technological capacity, there has been a massive investment, sometimes based on discovery and innovation but often based on a hunch and a gamble.

The rapid adoption of technologies of the Internet and the www is clear. In 1997 there were 40 million people on line representing about 1% of the world population, while by 2002 there were 544 million people on line making up 9% of the total population. But this general figure is quite polarized as Europe and North America make up 65% of online population, and the per cent goes up to 90% if you add the Asian countries of both parts of China (46 million), Japan (49 million), South Korea (22 million), Australia (10 million) and India (5 million).

Via this development in societies all over the world we have seen the development of three kinds of geospatial centers emerge:

- Technopoles: specialized urban areas based on the new technologies
- De-linked areas with virtually no connectivity, and
- Dual centers in which some have high connectivity and others are isolated.

The majority of humanity is coming under the influence and control of the technological productivity of the technopoles – they invent the machines and write the software the corporate, military and governments use. On the other hand, most of us live in dual environments of cities or de-linked if in most rural areas of the world. In fact, in the third world of Asia, Africa, and Latin America the internet and web based technologies are dominated by the NGO's of the dominate countries of Europe and North America, therefore much technology in Asia, Africa, and Latin America does not represent indigenous capacity building but the infrastructure of globalization. It is in this context that we have to debate the issue of development – to what extent an appendage of the global system of capital, and to what extent a freestanding economic base for the home market.

Political Economy

We have introduced the information society from a technical perspective merely hinting at social implications. But there are two aspects to our key concept, information – the technical part, and society – the social part. It is essential that our discussion of the technology be put in its proper historical social context. To get at this lets us take four key aspects of society to track the change from industrial

society to the information society. This historical process leads to the current moment in which we have decisions to make which is the true meaning of this conference.

The paradigm for the basic production model of the industrial system is that created by Henry Ford (whose company launched the first assembly line production) and Frederick Taylor (a University of Pennsylvania professor who launched the time motion study to make sure people were appendages to machines). This became the dominant paradigm for society, a model for our public schools, our government, and our social life including even family life. This production scheme was transformed into the Toyota system, a system that used computers and robots to build a new paradigm – lean production, based on just-in-time assembly using the team system. The Japanese lessened the time, cost, and labor power necessary for production. Lower cost led to higher rates of profit, with the most important lower cost being the decline in the cost of labor.

This new kind of production meant that new plants based on lighter faster newer technology replaced old plants, full of large old technology. This changed the geopolitics of production in that capital became more mobile and more and more delinked from the old nation states. Thus begins the new era of globalization.

One way to sum this up is to contrast General Motors with Microsoft as the paradigmatic corporations of the old industrial system and the new information system. General Motors was based in Michigan and maintained a workforce in life long skilled occupations, building on skilled immigrant workers from Europe. They built big buildings with hierarchal structures to fit the social organization of the corporation. They located near their production facilities, built near the natural resources they needed to function. On the other hand, Microsoft is located in Seattle Washington, not because it is the place where the largest number of engineers and computer scientists could be found, but it is simply the hometown of Bill Gates the founder. Their headquarters is more like a college campus and its divisions and work groups function like departments in a university, with one exception and that's the fact that like all capitalist corporations it is a dictatorship under the hand of its leader and board.

The basis for this is that it is the intellectual content of the soft ware and hardware that drives production. But this is more production with less human labor. In other words, there is a value crisis – surplus value is a result of exploiting human labor, and less human labor means less surplus value. This is a crisis as that is the basis on which the capitalist system exists. The World Trade Organization had at its founding a new international agreement by the big powers on intellectual property rights because that is the heart of their system. They must keep the intellectual content for production in private hands as commodities, and not shared by humanity. In fact, they are taking the lions shared wealth of the world, like the bio-diversity of global agriculture or the natural medicines developed by all of the world cultures and placing them under private patents for private profit. This is the age when the commons of the world are being closed in.

One aspect of this is the knowledge worker. This new worker is the new proletariat, sometimes in English called the cognitariat. The other side of this is that this new worker actively drives the system that downsizes to new levels. This in turn leads to the end of work thesis that argues that there is and will continue to be a reduction of people to be employed in material production and distribution, including service.

On a global scale things are more raw and explosive. On the one hand assembly line operations and other forms of production are being relocated to regions in decline, like some of the former socialist countries and key centers throughout the third world. On the other hand regions with labor superfluous to capital are being plunged into the terror of slavery, war, and genocide.

My argument is that the key social motion of globalization is the polarization of the world and most societies. The polarities we face define the times in which we live.

Social Organization

The industrial system reinvented bureaucracy and various forms of parliamentary democracy as the dominant forms and principles for the social organization of society. A bureaucracy is a rule governed formal structure with a hierarchy of power and privilege, and in this context the word democracy seems neutral enough, it is always implemented in a social context, hence each social layer of society has associated power and that defines what kind of democracy we have – there is one democracy for capital and another for labor. Justice for poor people in such a society is hard to come by.

The vertical form of the paper based bureaucracy has been thrown down on its side by the new information technologies of computer based networks and interactive databases. The information society seems to be more horizontal and free flowing, a web rather than a pyramid. The General Motors of 20th century industrialization is quite different in as a corporation than the 21st century Microsoft.

We now live in networks and our economic life has become according to Emanuel Castells a space of flows, tied into computer networks and a global system of just in time production schemes taking the Toyota system to its natural limits. But is this a society that embodies freedom or slavery? On the one hand there is the police system and on the other the educational system. Clearly there is a polarity here between the police and the schools, but in fact the polarity is also within the schools as they have negated the full liberating impact of the technology and limited it to class specific functions – one function for the rich and another for the poor.

Culture and consciousness

The rich own much of the cultural heritage of humanity, including new wealth like the Gates family of Microsoft, while popular culture has been high jacked by mass media. Corporations define culture in much of the world. Massive digitization is going on, but whose voices are missing. Herein is another polarity.

Moreover, our consciousness is manipulated by all of this. So in this era of information people are being nurtured back into the ideologies of extremism – rigid belief systems with fundamentalist interpretations. There is a polarity between ideology and information (what do you believe versus what do you know)

For each of the four aspects of society that we have just surveyed we have demonstrated two fundamental features of the historical process: One, there has been a change from industrialization to the information society. Two, the class polarities of industrial society have been reinvented as polarities of the information society. This polarity is a global process. We have to see things with the eagle's

eye, grabbing the whole picture. The AIDS crisis in the world can't be understood unless it is put in this context, since the first stage of the intervention has moved the crisis from the advanced capitalist countries to the margins of Asia, Africa, and Latin America. This is a genocidal pattern. The vicious terror of ripping a society apart through imperialisms nefarious economic dealings and the manipulation of decadent social and political forces in each society leads to the fratricidal wars such as in Central and Eastern Africa, the Balkans, and the Middle East. And in this context there are crimes that boggle the mind, from millions being killed in Africa, to cold-blooded massacres being excused by major powers such as the current view of the United States on plight of the Palestinians.

Solution

On a global scale this is a new situation, almost everything is changing, but where things will end up is not yet a settled question. We have a choice in the matter. We have basic choices.

To introduce our options it is useful to review a debate over how to conceptualize the problem we face. Three basic views have been advanced – we face a digital divide, a digital opportunity, or digital inequality. An African American official in the Clinton administration launched the term the digital divide voicing the spontaneous realization that what was emerging was a corporate/military technology and poor people and minorities would be excluded. It was counterattacked as a divisive almost Marxist concept that led to radical political thinking and action. The right counter attacked by saying things were much better than that, so instead of a digital divide (emphasizing differences) we need to call it a digital opportunity (emphasizing that options exist for everyone to get wired.). More modestly, and more oriented to the empirically oriented social sciences, there is the focus on the “digital inequality” that needs to be studied with regard to each new technology and its social realization in the social life of various communities.

We can take each position and show how the way forward can be envisioned and done no matter what set of questions we answer.

What do we do about the digital divide? Our view is that this is a theoretical question that must be guided by a values and vision, by ideology and theory. We have developed three key points to guide our work and we propose these for your consideration.

- Cyberdemocracy--everybody gets access and gets connected
- Collective intelligence--everybody gets to speak and have their voices heard, and
- Information freedom--everybody can consumer the information ending the commodification of the worlds intellectual and cultural heritage.

Our response to the digital divide is to use these three points to imagine a world we want to live in, what we want instead of what we got. Our collective imagination can give shape and form to our fundamental ideological consensus. Together we can create intellectual wealth about society at its best.

What do we do about the digital opportunity? Our argument here is that our tasks are the same as at any time in history. The fight is a fight for power, now in the name of cyberpower. We need to harness the tools of information technology and

build power for the exploited and oppressed people of the world, the majority of the societies we live in and hope to transform. There are three kinds of power, individual, social and ideological. My colleague Kate Williams will present our concrete work on these forms of cyberpower this afternoon, so stay tuned for that.

What do we do about digital inequality? Here I would like to introduce the key figure in the scenario we see unfolding--the spider. The spider is an insect that spins webs, a little spider, but as our tee shirts say, when spider unite, they can tie up lions. We know who the beasts are who claim to be the kings of the human jungle. We are the spiders. The web is dominated by corporate interests and this must be challenged by the poor and oppressed of the world, digitizing their identity and social and cultural wealth to create not only safe places for all of us in cyberspace, but a staging area to regroup our forces and build new offensives to liberate our selves – not only our minds but our entire societies.

In conclusion, I have argued that in the transition from industrial society to the information society we are facing great polarities, in political economy, in the social organization of society, in culture and in our very consciousness. We face the challenge of three possible situations and we have to have a plan for all three. For the digital divide we have to dream the impossible revolutionary dream of information communism, my term for our strategic values and vision of cyberdemocracy, collective intelligence, and information freedom. We can take advantage of whatever digital opportunity that exists to build cyberpower in its three forms, individual cyberpower, social cyberpower, and ideological cyberpower. And to fight the positional war to step-by-step reverse digital inequality, we need the tactics based on the key cadre of the information revolution, the cyberorganizer, and the spider.

Can we dream a revolutionary dream that rescues information technology from the corporations and the military? Can we avoid becoming technocrats who marvel at the technology toys and lust after what we don't have? Can we use the technology to reclaim the high ground and bring the quest for freedom and justice back into the center of our lives and work?

Now is the time.

Spiders of the world unite! Weave your webs! We have lions to tie up and a world to win.