

Communication, Education and the Internet

Clifford G. Christians
University of Illinois–Urbana

By what ethical standard should we judge new information technologies? If we want to hold the internet accountable, what is a legitimate norm? Through what principles can we appropriately raise questions or make charges if necessary, and expect responsible answers?

Our bread and butter in social ethics is justice. And this is the only legitimate possibility for understanding new computer-based technologies. For the heavy lifting that needs to be done in ethics, it must be distributive justice.

A number of ethical issues are already transparent within the structure and services of online information systems. Protecting the privacy of data is a major issue, for example. Issues such as surveillance, deception, gender discrimination, and racial stereotyping deserve book length treatment. But the centerpiece ought to be social justice. For ethics and the new information technologies, our intellectual workhorse must be distributive justice.

Distributive Justice

The master principle of this ethical model is allocating to everyone according to essential needs, regardless of income or geographical location. Comprehensive information should be ensured to all parties without discrimination. In contrast, the dominant conception, under private ownership at least, is allocating to each according to ability to pay. The open marketplace of supply and demand determines who obtains the service. From this perspective, commercially owned companies are different from charitable organizations, like churches,

and therefore have no obligation to subsidize the information-poor.

An ethics of social justice based on need offers a radical alternative to the prevailing view of supply and demand in the marketplace. Fundamental human needs are related to survival or subsistence. They are not frivolous wants or individual whims. Agreement is rather uniform on a list of most fundamental needs - food, housing, safety, and medical care. Everyone is entitled - without regard for individual success - to that which permits them to live humanely.

The new world of electronic communications cannot be envisioned except as a necessity. Communication networks make the global economy run, they give us access to agricultural and health care information, they organize world trade, they are the channels through which the United Nations and political discussion flow, through them we monitor war and peace. Therefore, as a necessity of life in a global order, the information system ought to be distributed impartially, regardless of income, race, religion or merit.

Rather than the norm of efficiency, a social ethics of distributive justice should be up front at the head of the information revolution. Over the long term, our task is to establish social justice on the cutting edge of the digital age. But this task is as difficult as scaling the Himalayas. Insisting on distributive justice as the primary ethical principle for information technology is akin to building a house in a hurricane.

The culture of information technology today is instrumentalist. Engineers design a global system using the principle of efficiency, and companies compete for it on the basis of profitability. Machineness and technological imperatives dominate, radically at odds with human wholeness and moral imperatives. Transmission speed and economic prowess have no need of wisdom, commitments, and ethics. Within this worldview, those involved in information technology rarely crack the surface or raise value questions; they concentrate on mechanics and growth and speed instead.

Instrumentalist Worldview

The French thinker Jacques Ellul wrote The Technological Society in 1954 and 50 books on the technological order until his death in 1992. He sees instrumentalism in technological societies as a whole. In his terms, their infrastructure conforms to technique (Ellul, 1964). The social world patterned off machines driven by efficiency, Moral values are precluded. Technique and judgments about rightness or wrongness are mutually exclusive. Technique works like a guillotine, decapitating other social values. As “in ancient days they put out the eyes of nightingales in order to make them sing better” (Ellul, 1967, p 75), we ignore commitments and ethics for industrial prowess.

Although technologies have always been used, we are now in a quantum shift to another order of magnitude. The issue for Ellul is not a proliferation of technologies one by one, but a technological order, a technological society. Although civilizations across the centuries have invented tools, a qualitative shift has occurred in the 20th century. Ellul refers to a sociological law: As quantity increases quality changes. A town of 1,000 people in Taiwan is on a continuum of numbers to Taipei, a city of 2.5 million. However, along the trajectory, a fundamental shift occurs so that a major urban center is radically different from a rural village.

In previous eras, tools were held in check within a larger complex of social values. However, today the pervasiveness and sophistication of modern techniques reorganize society to conform to their demand for efficiency. In Ellul’s terms, technological societies have sacralized the genius behind machines. They have uncritically allowed the power of machineness to define engineering and business, but also politics, education, medicine, and the church.

Unable to establish a meaningful life outside the artificial ambiance of a technocratic culture, human beings place their ultimate hope in it. Seeing no other source of security we tend to become slaves to technical

productivity. Moral purpose is sacrificed to technological excellence.

In the classic case of the tomato picker designed by the University of California-Irvine, a new hybrid tomato had to be developed—tough skins so they would not break, tomatoes that all ripened at the same time with chemical color added as necessary, and tomatoes square or oblong so they moved on feeding trays better. Adapting the tomato to the machine is an analogue of Ellul's concern in the technological society. Relentlessly and overwhelmingly, an instrumental mentality preempts human existence for itself.

The question, then, is not whether technical means can be analyzed but the more complicated problem of world views. Machineness, efficiency, and the mystique of technique eat into our deepest being—our philosophy of life. The technological order is so pervasive, so overwhelming in its ubiquity, we can contain it no longer. Of course, an unending list of short term crises demands our attention also, but our major worry long term ought to be our attenuated philosophy of life. The instrumentalist worldview is invading our spirit, and influencing the way we teach and learn, and managing our social institutions. A calculus of averages and probabilities is replacing ends, the common good, and distributive justice; the technological order is reconstituting the moral order in terms of technique.

Media technologies are implicated fully. The principle of efficiency that characterizes the technological enterprise as a whole also dominates the communications apparatus; the media do not transmit neutral data but integrate us into the overall system. In Ellul's framework, communications media represent the meaning edge of the technological system. Information systems incarnate the properties of technology while serving as the agents for interpreting the very phenomenon they embody. For Ellul, communication systems are the innermost and most elusive manifestation of human technological activity. As the mass media sketch out our world for us, organize our conversations, determine our decisions, and influence our self-identities, they do so with a

technological rhythm.

In working on an ethics of new media technologies, we do not have the luxury of dealing with the internet, digital communications, computer storage systems, satellite transmission, and so forth in isolation. We need, instead, sophisticated social ethics to match the power of our instrumental era. Modern technology has introduced such novel scales and consequences that the framework of traditional ethics no longer addresses them. Given the explosive and largely unknown effects of technological innovation, for example, consequentialist ethics on the whole are irrelevant. Moreover, the incredible development of technology in the professions is radically transforming their structure and practice. Our models of professional responsibility built on informed consent, whistle blowing, contract duties, and rights do not speak to the conditions of the global communications order. I do not believe the principle of supply and demand is rich enough ethically, is powerful enough for us in technological societies who are caught up in an instrumentalist philosophy of life.

Global realities demand global communications. Information technologies are a necessity for the modern world. But as information systems expand in size, and the transmission of data is speeded up, their ethical base is being undermined though it is needed now more than ever. Thus a conundrum: Whatever is gained in transmission is lost in ethics. In the process of fabricating expert mechanical systems, the world is sanitized of the moral dimension. Efficiency and morality are a contradiction in terms. As the justice principle of ethics is articulated, it must make its way in the alien environment described by Jacques Ellul where moral claims have little resonance. Information technology is a wonderful media system. We acknowledge in our conference the value of the world wide web, digital libraries, and online newspapers for our social and political life. But they are caught up also in the problems of instrumentalism. They are more mutually compatible with the mechanics of the marketplace than with the principle of distributive justice.

There is no reasonable likelihood that social justice will ever be fulfilled by the marketplace itself. An ethics of justice requires that we intervene through legislation, public policy, and public ownership to implement it. Our approach to media institutions should be modeled after schools and libraries, which we accept as our common public responsibility, rather than determined by engineers or by profits alone. We provide a postal service for basic communication among all citizens at a cheap cost. This follows the principle of social justice in a way that the market model does not. In the digital age rooted in computers, the internet, satellites and the world-wide web—ideally all types of persons will use all types of media services for all types of audiences. Therefore, the normative guideline ought to be universal access, based on need. And universal service is the Achilles heel of new information technologies driven by invention, engineering and markets. Without intervention into the commercial system on behalf of social justice, we will continue to divide the world into the technologically elite and those without adequate means to participate.

In confronting the digital convergence of information technologies, we need a radical shift from the criterion of mechanical efficiency to an ethics of social justice. Our task in media ethics is critical reflection without stepping outside the big picture—ethical principles developed with full knowledge of the technological order. A need-based social justice serves like an ancient cornerstone of the media ethics building in this technological era, squaring up the lines and anchoring its architectural contours.

Entertainment Medium

Of course, information technology is very young. It came into its own in the 1990's. As Colin Sparks of England's University of Westminster reminds us, the internet is still being re-invented. It has gone from a mechanism of massive data transfers to a vehicle for email. Its most dynamic recent growth is as a channel of commerce. The vast majority

of the new website hosts has been business and sales. All technologies are “socially invented” in the course of their lives, and computer-mediated communications are a case in point (Sparks).

Perhaps the internet will finally emerge as an entertainment medium. Substantial efforts are being made in that direction. Following this path, the internet will parallel television—at least in the rich countries. As television is virtually in every home in industrial countries, and television as primarily entertainment, so the internet could largely reach saturation in the industrial world but primarily for entertainment.

In the United States last week, a major step was taken in this direction. The merger of America On Line and Time Warner was approved. As a corporation worth USD \$165 billion, AOL-Time Warner is now the biggest company in the world. In the United States, the largest corporation has been Exxon-Mobil, the oil company worth USD \$87 Billion with 150,000 employees and 42 million customers. In one quick step AOL-Time Warner redefines what a giant corporation means.

Until last week, Time Warner had been the biggest media company in the United States. Its formation in 1989 from Time Inc. and Warner Brothers was the first lane of the information highway in the United States. Time Warner has 13 million cable subscribers and publishers, 33 magazines read by 120 million people, its films grossed \$1.4 billion last year and Time Warner sold 119 million music records and discs and tapes (cf. New York Times, 11 January 2000; and 12 January 2001; Christians, et al., 2000). The rationale for merging with AOL is distributing all this entertainment material directly to homes—in addition to marketing it through theaters, cable TV companies, book stores, and magazine stands, and music outlets. The idea is to make every home through AOL internet technology an entertainment center.

The AOL Time Warner merger is an obvious example of Ellul’s concern with instrumentalism. The motivation behind it is efficiency, transmission speed, and technological growth. The mainstream view of

supply and demand fits hand-in-glove with the instrumental worldview. Ability to pay provides no counterweight, but sees communications as a commodity for sale. On the contrary, the principle of distributive justice insists that information be distributed to all as a social necessity for living humanely.

Public Support of Online Access

An instrumental worldview dominates our thinking on information technologies at present—supply and demand, engineering efficiency, the mystique of machineness, and technocratic thinking. Therefore, the best we can do is educate and speak out, create open spaces for social justice to get a hearing, and nurture a critical consciousness whenever possible.

This is the importance of our seminars today and tomorrow on technical communication. This conference is committed to the principle of social justice. Our challenge is to take seriously the technological capabilities of the internet, but meanwhile going beyond the marketplace ability to pay, to advocate distributive justice.

Certainly an ethics of justice insists on accountability from the information enterprises in the industrial world. But it also calls for grassroots justice, the importance of the backyard, a full knowledge of people groups everywhere. While public policy efforts must be unrelenting toward universal access, voices of justice are expected as well in libraries, children's theater, folktales, homespun music, poetry, and people's radio.

It is obvious that technological societies will have high levels of computer penetration, and non-industrial societies will have low levels of penetration. But even in technological societies, there is no guarantee that a market-based information system will reach everyone. Therefore, given inclusiveness as our goal, public provisions for online access will be essential for the foreseeable future. We need creativity and ingenuity from technical communications for the best ways to include those who cannot afford internet technology. We make books, tapes, videos,

reports and CD's available through libraries for those who wish to borrow them rather than purchase them. Along these lines, the Rand think tank in the U.S. recommended in an extensive study that internet technology be available in every library for those who do not have access to email and the web in their homes. This would require computer technology that easily accommodates multiple users while maintaining confidential data. To implement it, Rand estimated \$1 billion USD of government support.

Promoting Democracy

The larger context for the principle of social justice is democracy. We want digital libraries, people trained in using the internet for education, and online resources available for the public. But we work on these specific things in the context of democratization. It is for the purpose of enhancing a democratic society. In using distributive justice as our guide, the real issue is whether we are fostering citizenship. Taiwan is an industrial, hi-tech society, but a democratic one also. In advocating distributive justice, our aim is to be a world leader in both.

The internet is typically seen as an instrument of democracy. In fact, it is hailed as a ideal technology for making democracy work. It is not one way like broadcasting, from one point to a large audience. It is interactive in allowing both the equivalent of speaking and listening. The internet provides access to extraordinary amounts of information and thus empowers citizens to make informed decisions and to participate effectively in the public arena.

Democracy means that all adult citizens have equal political rights. Therefore, the realization of democracy through information technology must be measured by the extent to which the internet is available to everyone. It is too early to project with certainty, but there are no guarantees that this technology will be diffused to all. Internet hosts are disproportionately concentrated in the developed countries.

The top 20 countries in computer distribution have a per capita GNP of

USD \$19,000 annually, the rest of the world averages USD \$5,000 annually.

75% of the world's online users are in selected Asian countries (Japan, Korea, Taiwan, Singapore and the Hong Kong region), in Europe and the United States. 1% of the population in Africa have computers, and in India 1 out of 50,000 use internet. Finland has more internet hosts than all of Latin America.

In world terms Colin Sparks is correct in calling information technology a rich person's club. There is a direct correlation between per capita GNP and internet distribution. In the United States, 80% of those with incomes of \$75,000 have computers; only 6% do of those with incomes of \$15,000 or less. 87% of those with college degrees use internet, but only 8.7% of those who did not graduate from high school.

Less well off societies may never fully participate in internet technology or may use it predominately for leisure programs. Even in wired societies the existence of internet technology does not guarantee it will realize its potential as a democratic medium. There are no grounds for supposing that the geography of the digital world will be "any different from the geography of the plain old offline world" (Sparks, p.15). There is no technological fix. The history of the communication media indicates that they follow existing political and economic patterns; inequities in society lead to inequities in technology.

Therefore, my concern that technical communication contribute to the larger educational task of democratization, insisting on equal access. Democracy is empty if citizens are not able to articulate an informed opinion and gain access to helpful information.

And with democracy as the overall framework and long term goal for technical communications, I challenge you to endorse the People's Communication Charter. The PCC is a worldwide movement insisting on communication as a basic human right for the people's benefit

themselves, rather than controlled by business or government. Article 12 on Cyberspace, for example, declares that “All people have a right to universal access to and equitable use of cyberspace. Their rights to free and open communities in cyberspace, their freedom of electronic expression, and their freedom from electronic surveillance and intrusion, should be protected.” Article 3 on equitable access, article 5 on literacy and article 8 on cultural identity are of special importance to professionals in technical communications also. (<http://www.waag.org/pcc>)

Our educational task is not an ethical principle per se, but a democratic commitment that social communication as a vital human need ought to be distributed justly, that is, regardless of income, location or merit. Our long-term goal ought to be normative thinking on distributive justice widely shared by churches, media users and producers, teachers and students, government regulators and engineers. A general understanding of justice can be nurtured as we call one another to account within information systems where we have a voice and a hearing. And out of this reservoir of collective awareness, the specialized work of government policy and high-tech regulation can proceed with integrity. And we will have the political will power to provide online access to everyone as needed.

To summarize my concern about ethics and the internet, four propositions have been presented.

1. We need to adopt the ethics of social justice, rather than accept the principle of supply and demand.
2. Electronic technologies are part of the technological society, which fosters the instrumentalist world view. We cannot work on new information technologies in isolation from understanding the technological order as a whole.

3. Computer-mediated communications dependent on the market, on business, will not be universal in the foreseeable future. We need public provision for online access.

4. We need to support democratization even though our specific focus at this conference is education—using web-based technologies better and promoting online libraries. We ought to see our educational work within the larger political purpose of democratization. Therefore, in addition to the specific educational tasks at hand, we promote democracy, for only in a democratic society will the principle of social justice be fulfilled. To the extent we are strong on the justice of universal access in our democratic life as a whole, to that extent this principle will be used in our communication technologies also.

References

Christians, Clifford (1988). “Can the Public Be Held Accountable?” *Journal of Mass Media Ethics*, 3(1), 50-58

Christians, Clifford (2000). “Justice and the Global Media.” *Studies in Christian Ethics*, Vol. 13, No. 1, 76-92.

Christians, Clifford, Mark Fackler, Kim Rotzoll, Kathy McKee (2000). *Media Ethics: Cases and Moral Reasoning*, 6th ed. New York: Langman Addison Wesley.

Hansell, Saul (2000). “America Online Agrees to Buy Time Warner for \$165 Billion.” *New York Times*, January 11, 2000, pp. A1, C11-C12.

Labaton, Stephen (2001). “F.C.C. Approves AOL-Time Warner Deal, with Conditions.” *New York Times*, January 12, 2001, pp. C1, C11.

Ellul, Jacques (1964). *The Technological Society*. New York: Random Vintage.

Ellul, Jacques (1967). *Presence of the Kingdom*. New York: Seabury Press

Ellul, Jacques (1969). *Propaganda*. New York: Alfred A. Knopf

McCarthy, Cameron (1998). *The Uses of Culture: Education and the Limits of Ethnic Affiliation*. New York and London: Routledge.

Sparks, Colin (2000) "The Distribution of Online Resources and the Democratic Potential of the Internet." Unpublished paper, Center for Communication and Information Studies, University of Westminster.

Thiesen, Charles & Beckwith, Barbara (1989). "Marketplace of Creative Ideas May Now Go to the Highest Bidder." *Los Angeles Times*, November 20, p. B7.

Wallerstein, Immanuel & Balibar, E. (eds) (1991). *Race, Nation, Class: Ambiguous Identities*. New York: Verso.

White, Robert (1995). "From Codes of Ethics to Public Cultural Truth." *European Journal of Communication*, 10(4), 441-459.