



## Reading Resources: General

### Reading 3

Title

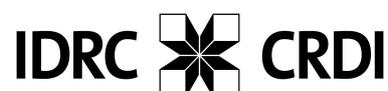
**'Internet and Society: Social Theory in the Information Age'**

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with



# International Development Research Centre (IDRC)

## Internet and Society: Social Theory in the Information Age

(Excerpted text. Dotted lines indicate snipped passages.)

*Christian Fuchs. New York: Routledge (2008).*

Attributions of contemporary society, such as postindustrial society, information society, knowledge society, network society, virtual society, Internet society, and so on, are discontinuous conceptions that see differences and rather exclude the continuity of modern society and its competitive structures. In order to avoid an affirmative ideological functionalization of such concepts and to give them a critical twist, the notion of transnational network capitalism/transnational informational capitalism was introduced. Computer networks are the technological foundation that has allowed the emergence of global network capitalism, that is, regimes of accumulation, regulation, and discipline that are helping to increasingly base the accumulation of economic, political, and cultural capital on transnational network organizations that make use of cyberspace and other new technologies for global coordination and communication. The need to find new strategies for executing corporate and political domination has resulted in a restructuration of capitalism, which is characterized by the emergence of transnational, networked spaces in the economic, political, and cultural system and has been mediated by cyberspace as a tool of global coordination and communication. The transition from the Fordist to the post-Fordist mode of capitalist development has resulted in new strategies of accumulation that allow the reduction of variable and constant capital costs in order to increase profit. The informatization and globalization of society and its subsystems can be understood as such strategies. Economic, political, and cultural space have been restructured; they have become more fluid and dynamic, have enlarged their borders to a transnational scale, and handle the inclusion and exclusion of nodes in flexible ways. These networks are complex due to the high number of nodes (individuals, enterprises, teams, political actors, etc.) that can be involved and the high speed at which a high number of resources is produced and transported within them. Global network capitalism is based on structural inequalities; it is made up of segmented spaces in which central hubs (transnational corporations, certain political actors, regions and countries, Western lifestyles and worldviews) centralize the production, control, and flows of economic, political, and cultural capital (property, power, skills). This segmentation is an expression of the overall competitive character of contemporary society.

The relationship of Internet and society is characterized by antagonisms that are an expression of the modern antagonism between cooperation and competition. That this relationship is antagonistic means that it is nonlinear; technology doesn't determine society and doesn't have single effects. The relation is complex and dynamic; new technological applications can have several effects that exist simultaneously. In modern society, these effects are antagonistic. Which effects shape the overall character of social systems and society is determined by human practices and social relations; technology is embedded into social systems; humans produce and design technologies; they give them a certain shape. Simultaneously, the potentials of their ideas and behavior are conditioned by technological structures. In order to avoid a techno-deterministic understanding of the Internet that either sees only one-dimensional effects or only opportunities (techno-optimism) or risks emerging (techno-pessimism) in society from technology, the Internet wasn't conceived as a global technological network of computer networks but as a techno-social system that consists of a technological and a social system that mutually shape each other so that human knowledge is technologically stored and transmitted with the help of a global technological network of computer networks that conditions human meaning production, cognition, communication, and cooperation so that further knowledge emerges that is technologically stored and transmitted, so that further

practices are conditioned, and so on. The Internet is conceived as a dynamic dialectical system in which technological structures and social structures/human practices produce each other. In contemporary society, this system advances both opportunities and risks.

Network logic in contemporary capitalism has effects that advance both cooperative, inclusive potentials and the overall competitive and exclusive character of society. The central conflicts and struggles of modern society have been transformed in the information age; transnational networks and knowledge have become strategic resources in these struggles. The antagonism between cooperation and competition lies at the heart of global informational capitalism. The accumulation of money, power, and definition capacities is advanced with the help of network organizations and technological networks, but at the same time the global, decentralized, networked character of the Internet undermines the possibilities for the control of resources by specific dominant classes. The antagonism between cooperation and competition manifests itself in five specific antagonisms characteristic for informational capitalism (this idea was first introduced in Fuchs and Hofkirchner 2003; Hofkirchner and Fuchs 2003). In figure 10.1, these antagonisms are shown; the cooperative side is deliberately printed on the left-hand side and the competitive side on the right-hand side because cooperation is considered as a bottom-up self-organization process and competition as a top-down domination process.

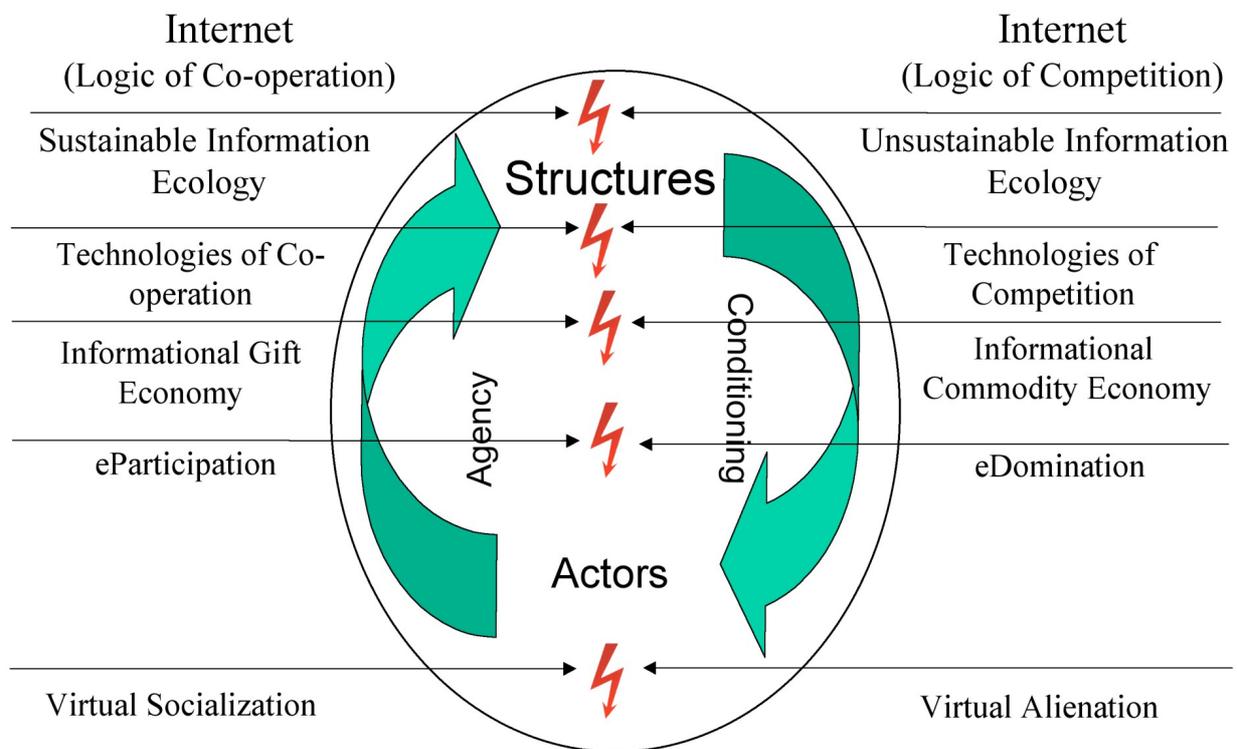


Figure 10.1: The antagonisms of informational capitalism

In the ecological system of society, the logic of Internet cooperation has produced opportunities for a more sustainable ecology such as potentials in reducing emissions due to telework and teleconferencing, in reducing the resource and energy intensity of the economy by virtual products and dematerialization. However, in a capitalist society shaped by instrumental competitive logic, there are limits to these opportunities and new risks emerge: A flexible economy requires individuals to travel frequently; new contacts emerge on the Internet that might require more business traveling;

there is a limited share of the “cleaner” ICT sector in the total value added; fossilfuel combustion is a profitable industry; there are rebound effects of virtual products that cause new resource and energy impacts; the production of computers results in a lot of emissions and waste; under capitalist conditions computers have a short lifespan (because this is a way to maximize profit) and electronic waste is an effect; reusable and upgradable computer equipment might not be as profitable as nonreusable ones; and computers consume much energy, which under current conditions benefits the fossilfuel industry. The overall impression that emerges is that the logic of profit and accumulation severely limits the potential positive effects of ICTs on the ecology and produces new risks, pollution, and depletion of nature. Under the dominance of competitive logic, the informational ecology is unsustainable.

Networks enable connectivity and global diffusion of information, which is an intangible resource. Due to these characteristics, we find a reproduction and aggravation of the antagonism of the productive forces and the relations of production in the Internet economy. On the one hand, information is sold as a commodity with the help of intellectual property rights on the Internet; new spheres of capital accumulation emerge. On the other hand, information can be copied easily and cheaply, and it can be diffused at high speed all over the world in almost no time. From these characteristic of information, the phenomenon of its free sharing, which undercuts profitability of the Internet commodity economy, emerges. The commodity economy and the gift economy collide; social struggles and conflicts are a result of it. The productive forces have been transformed into networked global structures so that new spheres and more efficient methods of capital accumulation emerge. But at the same time, networking and globalization undercut the commodity character of the economy; they advance new forms of cooperation that question the logic of competition. Capital accumulation, with the help of knowledge commodities, is in knowledge capitalism based on the specific characteristics of information: It is generally not used up by its manifold usage; it expands during usage; it can be compressed, can replace other economic resources, can be transported at the speed of light over global information networks; the costs of reproducing information are generally very low and are further diminished by technological innovations and progress. Hence, knowledge as commodity can be produced and diffused very cheaply; the mechanism for gaining profit from information commodities is that such goods are sold at prices that are much higher than the commodity values. The model of the cooperative gift economy and the competitive commodity economy are not altogether different; cooperation and gifts are subsumed under capital: Corporations in the Internet economy make use of gifts, free access, and free distribution in order to achieve a high number of users, which allows them to charge high advertisement rates and drive up profits. Especially Web 2.0 platforms make use of this model.

At the level of corporations, networking has transformed many corporations into transnational, decentralized, outsourced, distributed firms that make use of new technologies in order to coordinate production and allocation. Cooperating teams, production units, and corporations (strategic alliances) form a new strategy of cooperation for accumulating capital and gaining competitive advantages. Corporations functionalize cooperation as an ideology in order to advance the logic of competition, that is, the accumulation of capital by reducing the constant and variable capital costs. Corporations talk much about cooperation and participation; however, their understanding of these notions is very limited and instrumental and serves overall class interests.

In the realm of class formation, knowledge plays a crucial role in informational capitalism: Exploitation has become a universal condition of society; the commons of society (knowledge, communication, social relationships, education, skills, social services, medical services, health services, entertainment, reproductive labor, technology, nature, public infrastructures) form an immediate force of production; they are produced by all but appropriated only by capital in order to

achieve profit. Capital consumes the commons for free in order to accumulate; it exploits not just wage labor but society at a whole, which includes groups such as houseworkers, the unemployed, migrants, people in developing countries, retirees, students, and precarious and informal workers. All humans cooperate, produce, reproduce, and consume the commons, but only the capitalist class exploits the commons. The exploited groups form one overall class-in-itself, the multitude. In the political system, the antagonism between cooperation and competition is reproduced as antagonism between eParticipation and eDomination. eDomination means the use of knowledge and networked computer technologies to try to coerce others to act in certain ways, in which they would potentially not act under other circumstances, and for accumulating political capital (power). It is a competitive process. Phenomena of eDomination are, for example, digital divides, information warfare, and electronic surveillance. Digital divide means that the Internet, under given societal conditions, is an exclusive social space not accessible to and available for all. It is a segmented space; this segmentation is due to structural inequalities in modern society that are caused by its competitive class character (class in the Bourdieuan sense). There is asymmetrical access to the physical infrastructure, digital skills, usage capacities, usage benefits, and the institutional context of new technologies. These asymmetries are visible along stratifying lines such as the distribution of economic, political, and cultural capital, age, family status, gender, ability, ethnicity, origin, language, and geography. Information warfare means that information has become a strategic factor in warfare, which supports the physical destruction of enemies.

Information warfare has been conceived as a relatively general and broad notion; it includes psychological, communicative, and networking operations. Information warfare means intimidation of the enemy and the production of fear by targeting the psyche of the enemy's military forces and population, observers, and public spheres with the help of information politics and the mass media and the gathering and manipulation of enemy data (cognitive and psychological level), the destruction and manipulation of the information infrastructures, flows, contents, meanings, and effects of enemy communication, encryption and decryption of military communication, battlefield communication, and intelligent weapons (communicative level), and the networking of war in military alliances and decentralized networks of coordinated autonomous military cells (netwar level). Information warfare aims at destroying the influence of enemies; it is based on a competitive separation into friends and enemies.

Electronic surveillance aims at controlling the behavior of individuals and groups, that is, they should be forced to behave or not behave in certain ways because they know that their appearance, movements, location, or ideas are or could be watched by electronic systems. In electronic surveillance, data on individuals are gathered with the help of digital systems.

These data are known to powerful actors who have the authoritative and allocative resources needed to control these gathered, person-centered data that can be used for coercive means. After 9/11, both information warfare and electronic surveillance have been enlarged in extensity, speed, and intensity, and they have reached a new quality because there are forces that aim to convince people that war and surveillance are necessary for security and that civil rights could be limited in order to protect society.

The competitive logic of eDomination is challenged by cooperative phenomena of eParticipation. Participation is an integrative notion of cooperation; in participatory systems, people are included in ownership, decision making, and norm and value definition. eParticipation is a term that describes that computer-based information and communication technologies (ICTs) can be used for empowering cognition, communication, and cooperation processes of humans so that they can jointly construct participatory social systems. Opposed to the rather competitive logic of

representative digital democracy and plebiscitary digital democracy is grassroots digital democracy, in which all those who are concerned with certain problems or phenomena participate in the decision-making process and try to find consensus by rational communicative action that is supported, but not substituted by, ICTs. In the concept of eParticipation, there is also a stress on the political usage of ICTs in civil society. The term cyberprotest has been employed for describing the usage of ICTs by protest groups and movements for providing alternative online media, networking themselves, communicating and coordinating protest online, and organizing protest not only with the help of but also within cyberspace itself. In cyberprotest, protest movements make use of the Internet for coordinating, communicating, and networking protest, which can also take on global forms. Civil society has a double character; it legitimizes domination but can also be or become a sphere of critique and of initiating potential social change.

The main antagonism of cyberculture is the one between cooperative cyberculture (socialization) and competitive cyberculture (alienation, isolation, fragmentation). The first culture is based on values, ideas, and structures of sharing and building relationships, the second on values, ideas, and structures that erect borders, construct classes, and separate people. Cooperative cyberculture is based on the idea of unity in diversity—a dialectical interconnection of the One and the Many—, competitive cyberculture on the ideas of unity without diversity and diversity without unity—a separation of the One and the Many. Under given societal conditions, cyberspace is both a tool for the reinforcement and the shrinking of sociability; it has an antagonistic character in the sense that, depending on the users' psychological and social context and capacities of online communication, it can enforce or diminish social relationships and feelings of alienation.

Aspects of cooperative cyberculture are, for example, cooperative virtual communities like Wikipedia, critical online journalism, cyberfriends and cyberlove, high-quality cyberscience, authentic participatory cyberart, participatory eLearning, participatory eHealth. These phenomena of cooperation are challenged by predominant competitive forces such as commodified virtual communities, one-dimensional online journalism, cyberhate, fast low-quality cyberscience, unauthentic cyberart, individualized eLearning, or individualized eHealth.

One insight of the theoretical approach elaborated in this book is that the Internet is not a technological system that determines social systems; it doesn't have linear one-dimensional effects on society. In contemporary society, the Internet has produced both risks and opportunities that contradict each other. Neither techno-optimism nor techno-pessimism is appropriate because both have deterministic understandings of technology and society.

Rather, feasible seems a position of techno-realism that assesses the actually existing effects, critically judges risks, and tries to help shape society in ways that advance opportunities and minimize the risks of new technologies.

On the one hand, ICTs are embedded into social systems and overall society; they are shaped by social forces and relations. On the other hand, ICTs condition, that is, enable and constrain, human social action. This relationship can be described as an endless dynamical evolving loop.

Another insight is that the antagonisms that structure modern society are reproduced on the Internet; existing trends are amplified into two directions, a cooperative and a competitive one. New media as such don't have clear-cut effects; they are antagonistically structured and embedded into the antagonisms of capitalist society. The antagonism between cooperation and competition that shapes modern society, limits self-determination and participation, also shapes the techno-social Internet system. Under the current societal conditions, which are characterized by the colonization of society

by the instrumental logic of accumulation, the risks and competitive forces dominate over realized opportunities, cooperation, and participation on the Internet. The Internet is a class-structured, segmented, stratified social space.

The analysis could end here, but the question remains: Where can we go from here? It might seem odd to some that I talk about ethics in this context because the problems that we are confronted with concerning the Internet, such as electronic waste, digital divides, information war, electronic surveillance, the commodification of community, cyberhate (e.g., neo-Nazis on the Internet), are very material, social, real, and violent in character. Hence, what seems to be needed to solve these problems is material change and not bonos mores and spiritual reflection. For many people, ethics is purely ideological, ideational, and a form of philosophical idealism. However, I want to give an alternative understanding of ethics that sees it as a form of material practice for social change.

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The approach of cooperative cyberethics stresses that cooperation is a principle that could strengthen participation in the information society and that it should practically be applied to questions of the information society, a society that is increasingly shaped by technology (cyberspace), network logic, and information. Cooperative information society ethics is a more precise term, but, because of its clumsiness, the term cooperative cyberethics is preferred.

The task of cooperative cyberethics is to analyze the antagonisms of the information society, to question and deconstruct the uncritical appraisal and demonization of ICTs and the information society, and to stress the importance of the principle of cooperation for realizing a participatory development path of the information society. Cooperative cyberethics is oriented on social problems; it points out actual risks of the information society and tries to provide and discuss arguments that help people to practically strengthen real cooperation in the information society.

The goal of cooperative cyberethics is a cooperative society, or what Gunilla Bradley (2006) has termed a good ICT society, a society that is integrative, humane, bottom-up, and advances the common good and equality. There is no panacea for achieving a cooperative information society and for avoiding the further colonization of society by the instrumental reason of competition. If opportunities can be advanced and risks minimized, it is decided by political action and in social struggles. Hence, there is no panacea or recipe of how to achieve a cooperative society. However, at the policy level I want to give some personal suggestions for potential reforms that could strengthen cooperation, inclusion, and participation in society.

I am not confident that a cooperative society can be achieved, but the task of cooperative cyberethics is also to give an idea of potential reforms that could in principle be taken. The measures suggested concern both the techno-social and the societal level because Internet and society is an integrative relational domain that needs to be considered as a whole. The list is fragmentary and tries to give only some potential examples.

- The support of the development of resource- and energy-saving ICTs.
- The legalization of file sharing on the Internet.
- The advancement of free software in society and the economy.
- The support of the growth of the free software and the open-content movement.
- The support of the diffusion of technologies of cooperation and cooperative online platforms (such as Wikipedia).
- The economic redistribution from high-profit corporations, upper classes, and the rich,

towards low-income classes by increasing taxation of capital and high incomes.

- The support of the growth and diffusion of the Internet gift economy.
- The global redistribution of wealth.
- The full cancellation of all debts of developing countries.
- The multiplication of development aid.
- The introduction of a basic income guarantee for all absolutely poor individuals in the world (which could be financed, e.g., by the introduction of the Tobin tax).
- The support of local hardware production that aims at free or cheap local products and the large-scale adoption and production of free software technologies (that are adapted to local needs) by developing countries.
- The rigid enforcement of antitrust laws.
- The introduction of rigidly regulated employment contracts (definition of minimum wage and participation rights, extending and enforcing labor legislation, limit and control of working hours, maximum workload, abolition of precarious jobs, securing of training and education opportunities, etc., minimization of psychological and physical risks at work, etc).
- The support of self-managed corporations and cooperatives.
- The reduction of working hours without loss of income for employees.
- The launching of unions for the unemployed, precarious workers, migrant workers, reproductive workers, and the poor.
- The taxation of large ICT corporations (and large corporations in general) in order to support public goals.
- The introduction of an unconditional guaranteed basic income that secures basic needs for all, attenuates poverty and precarious living and working conditions that have been coproduced by technological rationality and rationalization, gives people more freedom from economic compulsion, and could potentially give them more time for rational and critical political discourse (given the conditions that an infrastructure that secures opportunities for political education and participation for all is given). A redistributive basic income could be one among several mechanisms that advance the reclaiming of the commons by its cooperative producers, given the condition that it is implemented as a basic right for everyone and considered as a share of the value that is produced cooperatively by all in society but that is now exploited by capital for free.
- The implementation of free public ICT access points for all.
- The universal availability of ICT infrastructure and network connectivity for free or at very low prices for all.

The financial support for civil-society protest organizations.

- The support of open-media initiatives.
- The funding of civil-society new media projects.
- The large-scale implementation of open social software tools (mailing lists, discussion boards, wikis, blogs, political chats, etc.) that support political citizen-citizen communication on government and civil society Web sites.
- The support of cyberprotest that questions oppressive political, economic, and cultural regimes.
- The financial support for projects that implement open political communication on the Internet.
- The introduction of compulsory participatory and critical political education courses in secondary education.
- Campaigns that stress the importance of social movements, protest, and critical capacities

as democratic forces in society.

- The creation of public discussion forums in public spaces and on public television.
- The financial support of political open TV channels and programs.
- The support of social movements that struggle for participatory democracy and for reclaiming the commons.
- The stronger enforcement of data protection and privacy mechanisms for Internet users.
- Introduction of global-privacy and data-protection laws.
- The establishment of funds for universal free telecommunications services financed by a tax on the profits of large telecommunications and Internet corporations.
- The support of publicly provided free access to computers and Internet for all in developing countries.
- The definition of more mechanisms that help advance international understanding, inter- and transcultural dialogue.
- The provision of free universal basic services in areas such as health, primary, secondary and higher education, and pension.

Full disarmament.

- The strengthening of mechanisms of international right such as the International Court of Justice, international treaties, and the UNO (United Nations Organization), and the minimization of the influence of transnational institutions that advance particularized interests.
- The advancement of participation in education, schools, universities, administrations, government, parliament, and so on.
- The support of digital literacy and digital involvement for excluded groups such as the elderly, the disabled, migrants, rural areas, developing countries, low-income groups, and so on.
- ICT diffusion in public institutions such as hospitals, libraries, schools, universities, public spaces, and so on, so that free public access is enabled.
- The provision of free public-health and educational programs in developing and developed countries.
- The public provision of free digital-literacy programs in developing and developed countries.
- The funding of alternative online-media projects.
- The advancement of comprehensive schools in countries that favor differentiated school systems.

The global networking of society by new media gives us an impression of the overall wealth and innovative capacities of contemporary society. However, due to the colonization of society by the instrumental reason of competition, new achievements remain limited to certain classes and don't benefit all. The overall impression is that the material conditions for a cooperative society (in which all live in wealth, hard labor can be abolished, and all participate) exist today, but human reason lags behind these material potentials. It seems that a cooperative society has never been more realistic in an objective sense but has never been more unrealistic in a subjective sense. The networking of the world advances the idea of bottom-up, grassroots self-organization and of a participatory society. However, this principle contradicts the dominance of competition and the logic of profitability; an antagonism of cooperation and competition shapes contemporary society. Under the given conditions, humans are confronted with a colonization of ever more spheres of society to an ever-larger extent by economic reason and the competitive logic of accumulation. A foundation of a cooperative society is the decolonization of society and an overall paradigm shift towards cooperation and participation. It is feasible that a cooperative society and a cooperative

social system can best be constructed in bottom-up, grassroots self-organization processes, in which civil society plays an important role. Such a society can't be rigidly planned by state institutions; however, it probably is necessary that infrastructures are organized that enable and empower self-organization processes and provide them with resources.

What remains is the active hope for self-organizing processes that transform the competitive information society into a cooperative information society. The transformation of the established competitive direction, towards which the information society is heading, into a cooperative direction would mean elementary social change, but such a change presupposes that humans feel a vital need and desire for self-organization and cooperation. If such needs and resulting political practices will be able to develop in a significant degree is uncertain.