Perspectives of Cyberethics in the Information Society

Robert Bichler, Christian Fuchs, Celina Raffl

Abstract

We suggest that co-operation is a guideline of moral action in the information society that allows a sustainable design of social and socio-technological systems and lies at the foundation of a global sustainable information society.

Key Words: Ethics, cyberethics, cooperative ethics, information society, sustainability

*****

1. Introduction

Moral action is action that distinguishes good and evil behaviour, and communicates judgements and rules deriving from these judgements. Good and evil, freedom, and happiness are important categories of ethics.

The different ethical approaches can be classified into four categories that form a typology. This typology is based on the distinction between subjects and objects in society. 1. There are subjective, individual ethics that conceive norms and values as individually constructed. 2. There are objective ethics that conceive norms and values on an objective level. Objective here can be understood in two forms: either as intersubjectively obtained or as an absolute dimension of ethics. Hence there are two subtypes of objective ethics. Intersubjective ethics see norms and values as the result of discourse and communicative action. Absolute ethics conceive norms and values in transcendental terms. 3. Dualistic approaches argue that there is a subjective and an objective level of ethics and that these two domains are independent of each other. 4. Dialectical approaches maintain that there is an objective and a subjective level of ethics and that these two areas produce each other and are interconnected.

The important idea for us in subjective ethics is the cognitive dimension; the important idea in intersubjective ethics is that social norms, values, and rules emerge in communication processes; the important idea in transcendental ethics is that there are guidelines of morality; the important idea in Marxian ethics is that co-operation is a foundation of freedom.

2. The Self-Organization of the Moral System of Society

Our concept of the moral system of society is based on a notion of social self-organization as dynamic process in which human actors

communicate in such a way that they produce and reproduce social structures that enable and constrain further human actions and communications by which further structures emerge and are reproduced, etc. This is a self-producing, self-referential, and reflexive process that is termed re-creation.[1]

There are two levels of the moral system: a structural level and an actor level, and these levels are mutually connected. On the actor level we find an individual moral structure that is made up of a set of individual norms, values, and rules of behaviour.

Moral structures are made up of rules, norms, and values. Rules are techniques or procedures of action,[2] norms are regularized rules achieved by routinised, repeated, and repeatable action, values are a weighting and an evaluation of rules and/or norms according to moral judgements in terms of good and wicked. These three components can be found on the individual and on the social level of the moral system. Human action is an expression of the practical realization of individual rules, norms, and values.

Based on individual morals human beings enter social relationships and form social groups by communication processes. We enter the moral system of society when our individual or social practices are oriented on moral issues. When we communicate with other actors about moral questions and judgements, we act on the social level of the moral system. In and through communication processes, the moral social structure of society is constituted and reproduced. By moral communication, i.e., communication about moral issues, social rules, norms, and values emerge and are reproduced. Moral communication is characterized by certain degrees of conflict and co-operation. Social rules are techniques and procedures of social action; social norms are institutionalized and possibly sanctioned social rules[3]; social values are collective moral judgments on social phenomena in terms of good and wicked. Collective morals don't necessarily require consensus.

Collective morals in a process of downward causation enable and constrain individual rules, norms, and values. This is not a mechanical deterministic process; individuals who are socialized in certain social systems (e.g., children educated by parents, pupils educated by teachers) are confronted with certain dominant values by other actors. How they react is not exactly determined. There is only a certain space of possibilities determined by the overall social structure, while the exact individual moral judgements are chosen based on relative freedom of action.

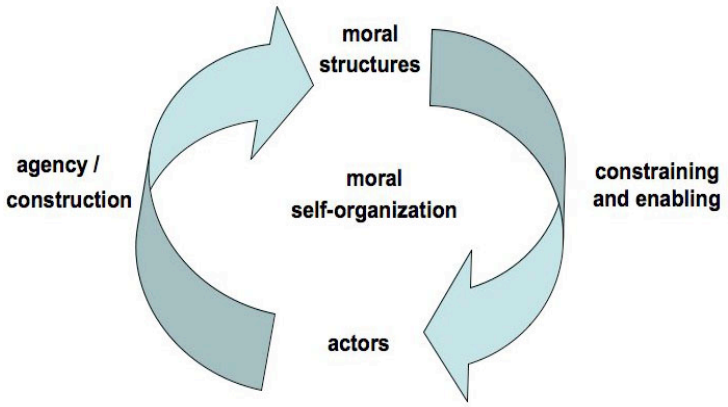

Figure 1: The Self-Organization of the Moral System[4]

The self-organization of the moral system is a process where individuals produce and reproduce social rules, norms, and values in and through communication; this results in social moral structures that enable and constrain individual rules, norms, and values that function as the foundation for further moral communication processes that result in the further emergence and reproduction of social morals, etc. (See Figure 1.)

Self-organization can on the one hand be understood on a synchronous level as the autopoietic reproduction of structures. Here the work of Maturana and Varela has been important. On the other hand, Ilya Prigogine has shown that on a diachronic level, self-organization means that new qualities and order emerge in a phase of instability and systemic crisis. He terms this principle "order from noise."

Because of the moral system's openness, new moral social structures always emerge in situations of crisis and the instability of at least one subsystem of society. This means that societal crisis, by the way of structural coupling, has a feedback effect on the moral system by which dominant morals of the specific system change, i.e., new qualities of the moral system emerge. The changes affect both the specific system in crisis and the moral structure of society in the specific realm in question. But this is not a deterministic process; crisis opens up a space of possibilities for new morals which are realized in concrete social processes. The deterministic element is that morals change in situations of crisis, but it is relatively open how they change.

With the rise of modern society, religious morals have diminished in importance due to the role that the economy and polity play in society. Economic freedom in the sense of civic liberties and a right to private

property has become a dominant social value that shapes society. Economic liberty in modern society means that each individual has the right to produce commodities and to sell them on markets. The moral values of modern society are to a certain extent antagonistic and self-contradicting. For example, the right to private property organized in the form of capital accumulation often contradicts the human right to social security. The rise of economic competition as a dominant structural principle of modern society is due to the fact that modern society is based on capital and markets. Modern society is characterized by conflicts of interest. The state system is a monopolization of the means of coercion that is used for installing a political system that forces the different interest groups to carry out conflicts in an unarmed way. This results in the democratic political system in which parties that are an expression of different antagonistic interests compete for the favour of citizens. This system is based on the distinction between government and opposition, majority rules, and laws. Laws are social norms defined by the government, sanctioned with the help of the state-monopoly of the means of coercion organized in the form of the executive system that consists of the police system, the military system, and the prison system and the judiciary system. Competition and conflict are the dominant principles of moral communication in modern society. Social norms and values are constituted in conflicting ways that establish power differences (that are renegotiated in election processes) that enable certain groups to pass laws and exclude others from this process. Morals can, under certain circumstances, become ideologies that legitimate domination by strictly regulating human action by appealing to a highest, absolute, irrational authority such as God, race, and nation.[5]

The self-organization of the moral system is a threefold process of cognition, communication, and co-operation. The cognitive level is the domain of individual rules, norms, and values, while communication and co-operation are processes that form the social level of the moral system. Co-operation is a type of social relationship for achieving social integration that is different from competition. Co-operation is a specific type of communication where actors achieve a shared understanding of social phenomena, make concerted use of resources so that new systemic qualities emerge, and engage in mutual learning, so that all actors benefit, and feel at home and comfortable in the social system that they jointly construct. We argue that co-operation is the highest principle of morality; it is the foundation of an objective dimension of ethics, a co-operative ethics. All human beings strive for happiness, social security, self-determination, self-realization, and inclusion in social systems so that they can participate in decision processes, co-designing their social systems. Competition means that certain individuals and groups benefit at the expense of others, i.e., there is an unequal access to structures of social systems. This is the dominant

organizational structure of modern society; modern society hence is an excluding society. Co-operation includes people in social systems; it lets them participate in decisions and establishes a more just distribution of and access to resources. Hence co-operation is a way of achieving and realizing basic human needs, while competition is a way of achieving and realizing basic human needs only for certain groups and excluding others.

We argue that co-operation forms the essence of human society, and that competition estranges humans from their essence. One can imagine a society that functions without competition. A society without competition is still a society. In contrast, one cannot imagine a society that functions without a certain degree of co-operation and social activity. A society without co-operation isn't a society; it is a state of permanent warfare, egoism and mutual destruction that sooner or later destroys all human existence. If co-operation is the essence of society, then a truly human society is a co-operative society and competition is a form of evil and human wickedness. Co-operation as the highest principle of morality is grounded in society and social activity itself; it can be rationally explained within society and need not refer to a highest transcendental absolute principle such as God that can't be justified within society. Co-operative ethics is a critique of lines of thought and arguments that want to advance exclusion and heteronomy in society. Co-operative ethics is inherently critical, subjecting commonly accepted ideas, conventions, traditions, prejudices, and myths to critical questioning. It questions mainstream opinions and voices alternatives to them in order to avoid one-dimensional thinking, and strengthen complex, dialectical, multi-dimensional thinking. The method of critique goes back to Socrates. In the 20th century, it has been advanced by approaches such as Critical Theory and Discourse Ethics.

3. Co-Operative Cyberethics

Computer technologies and knowledge transform society; transformation means that new questions of how social relationships should be regulated arise. New options for development, i.e., opportunities and risks, emerge. The challenge for Cyberethics is to discuss principles of morality that can guide human action so that people are empowered to establish a sustainable, participatory, global information society. Cyberethics can discuss real possibilities of development of the information society and criticize ideologies that portray the information society in uncritical and one-dimensional ways.

In Computer Ethics there is a debate on the question if new information and communication technologies imply new ethics: Expansionists like Carl Mitcham and Walter Maner argue that ICTs transform society to an extent that requires a new ethical framework, while traditionalists say that we can apply our ordinary scheme of ethical analysis

to issues involving cybertechnology.[6] Our position is that both arguments are simultaneously false and true: the information society is a societal formation that is both continuous and discontinuous; it is neither an entirely new society, but one structured around an asymmetrical distribution and accumulation of economic, political, and cultural capital,[7] nor an entirely old society. The way that structures work has been transformed, but not revolutionized by the increasing importance of ICTs, knowledge, communication, and network logic. If society has partly changed, we partly need to adapt our ethics. Given such an analysis, one can assume that in the Information Age we are still confronted with fundamental questions of ethics such as how to increase freedom, autonomy, participation, and co-operation in society, but the societal context has to a certain extent changed. Hence the realm of possible developments of society has also changed, hence the real options for action that humans have are somehow different, and hence we need to rethink which alternative paths of development are desirable and which ones are not.

Deborah Johnson argues that computer ethics will disappear in the future because computer technology will become an ordinary phenomenon and this will result in the integration of computer ethics into ordinary ethics (Bynum[8] refers to this assumption as the Johnson hypothesis). Tavani argues that computer ethics won't disappear because new phenomena like bio-informatics and Artificial Intelligence create new ethical questions.[9] In a similar vein, Moor says "novel applications of computing will generate new policy vacuums and hence new ethical problems."[10] We think that the disappearance of computer ethics would only be possible if computer technology no longer has any novel effects on society. But this is unlikely to happen. For example, the rise of nanotechnology will probably have huge effects on society that have thus far only been little discussed.

That we term our approach Co-operative Cyberethics stresses that co-operation is a principle that could strengthen the sustainable character of 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) and information. Co-operative Information Society Ethics is a more precise term, but because of its clumsiness we prefer to speak of Co-operative Cyberethics.

How has the space of possibilities of societal development changed? How has it remained unchanged? Modern society is based on an antagonism between self-determination and heteronomy, inclusion and exclusion. Co-operation is inherently inclusive, whereas competition advances exclusion and separation. Modern technologies have advanced both co-operation and competition under the premise of rationalizing the accumulation of economic, political, and cultural capital. In the information society (which might be better described by the term informational capitalism), social systems and

structures are increasingly shaped by knowledge, communication, and computer-mediated communication. This has resulted in the increasing importance of network logic and the globalization, i.e., time-space-distanciation, of social relationships. ICTs foster *networked forms of co-operation and competition*. New electronic media based on digitization, networking and computer technology are immersed in and embedded into the modern antagonism between competition and co-operation. Hence they don't have clear cut, mechanically determined, one-sided effects, but instead result in a set of multiple antagonistic uneven economic, political, and cultural tendencies; they pose both opportunities and risks. The task of Co-operative Cyberethics is to analyze the antagonisms of the information society, to question the uncritical appraisal and demonization of ICTs and the information society, and to stress the importance of the principle of co-operation for realizing sustainable developmental paths for the information society.

ICTs and knowledge today have effects that advance both the sustainable, co-operative, inclusive and the unsustainable, competitive, exclusive character of society. Depending on how ICTs are socially designed and applied, they can have positive and/or negative effects on society. The task of Co-operative Cyberethics is to point out the problems of the information society, and to provide arguments that suggest that co-operation advances a sustainable information society and suggest practical means for strengthening the sustainability of society.

Sustainability is based on the desire of all human beings to live in a fair, just, and beautiful society. All humans want to live a good life, if one desires the right to have a good life, one must also recognize that all humans have the right to live such a life. Hence sustainability can broadly be defined as a good life for all. A sustainable society encompasses ecological diversity, technological usability, economic wealth, political participation, and cultural wisdom.

4. Conclusion

Cyberspace is embedded into societal structures that don't result in an entirely new society, but also don't leave society unchanged. Old questions such as the conflict between co-operation and competition that appears in modern society in the form of conflicts on property, power, and symbols take on a new form. The task for Co-operative Cyberethics is to point out the real possibilities for strengthening societal co-operation and the co-operative character of cyberspace in the information age, and to criticize approaches and arguments that advance the competitive character of society and cyberspace. It rests on the principle that co-operation enables forms of social life that are more fulfilling, self-enhancing, democratic, inclusive, and participatory than the ones brought about by competition. To provide

arguments that show the superiority of co-operation over competition is one of the central tasks of ethics in the information age. A sustainable information society, i.e., a society that guarantees a good life for all, will be a co-operative society.

Notes

[1] C Fuchs, 'Some Implications of Pierre Bourdieu's Works for a Theory of Social Self-Organization,' *European Journal of Social Theory,* vol. 6, no. 4, 2003a, pp. 387-408. See also C Fuchs, 'Structuration Theory and Self-Organization,' in *Systemic Practice and Action Research*, vol. 16, no. 4, 2003b, pp. 133-167.
[2] A Giddens, *The Constitution of Society,* University of California Press, Berkeley/ Los Angeles, 1984, pp. 16-25.
[3] Ibid.
[4] R Bichler, 'Self-Organization and Ethics,' in *Proceedings of the Cultural Context of Self-Organization*, *International Interdisciplinary Scientific Conference*, Kiev, April 28-29, 2005, Irina Dobronravova (ed).
[5] L Althusser, 'Ideology and Ideological State Apparatuses,' in *Lenin and Philosophy,* Louis Althusser (ed), Monthly Review Press, New York, 1971, pp. 127-186. See also E Balibar et al., '*Race, Nation, Class: Ambiguous Identities*,' Verso, London, 1991, and A Gramsci, *Selections from the Prison Notebooks*, International Publishers, New York, 1971.
[6] H T Tavani, 'The Impact of the Internet on our Moral Condition. Do We Need a New Framework of Ethics?' in *The Impact of the Internet on our Moral Lives,* R J Cavalier (ed), State University of New York Press, Albany, NY, 2005, pp. 215-237. See also H Tavani, 'The State of Computer Ethics as a Philosophical Field of Inquiry: Some Contemporary Perspectives, Future Projections, and Cur-rent Resources,' in *Ethics and Information Technology* vol. 3, 2001, pp. 97-108.
[7] Fuchs, 2003a.
[8] T W Bynum, 'Computer Ethics: Its Birth and Its Future,' in *Ethics and Information Technology,* vol. 3, 2001, pp. 109-112.
[9] Tavani, 2001.
[10] J H Moor, 'The Future of Computer Ethics: You Ain't Seen Nothin' Yet,' in *Ethics and Information Technology*, vol. 3, 2001, p. 90.

Bibliography

Althusser, L., 'Ideology and Ideological State Apparatuses,' in *Lenin and Philosophy*. Louis Althusser (ed.), Monthly Review Press, New York,1971, pp. 127-186.

Balibar, E. and I. Wallerstein, *Race, Nation, Class: Ambiguous Identities*. Verso, London, 1991.

Bichler, R., 'Self-Organization and Ethics.' *Proceedings of the Conference 'Cultural Context of Self-Organization'*, *International Interdisciplinary Scientific Conference* (Kiev, April 28-29, 2005), Irina Dobronravova (ed.), In print, 2006.

Bynum, T. W., 'Computer Ethics: Its Birth and Its Future.' *Ethics and Information Technology*, vol.3, 2001, pp. 109-112.

Fuchs, C., 'Some Implications of Pierre Bourdieu's Works for a Theory of Social Self-Organization,' *European Journal of Social Theory*, vol. 6, no. 4, 2003a, pp. 387-408.

-----. 'Structuration Theory and Self-Organization,' *Systemic Practice and Action Research*, vol. 16, no. 4, 2003b, pp. 133-167.

Giddens, A., *The Constitution of Society*, University of California Press, Berkeley/ Los Angeles, 1984.

Gramsci, A., *Selections from the Prison Notebooks*. International Publishers, New York, 1971.

Moor, J. H., 'The Future of Computer Ethics: You Ain't Seen Nothin' Yet,' *Ethics and Information Technology*, vol. 3, 2001, pp. 89-91.

Tavani, H. T., 'The Impact of the Internet on our Moral Condition. Do We Need a New Framework of Ethics?' in *The Impact of the Internet on our Moral Lives*. Robert Cavalier (ed.), State University of New York Press, Albany, NY, 2005, pp. 215-237

-----. 'The State of Computer Ethics as a Philosophical Field of Inquiry: Some Contemporary Perspectives, Future Projections, and Current Resources,' *Ethics and Information Technology*, vol. 3, 2001, pp. 97-108.

The authors are associated with the Center for Advanced Studies and Research in Information and Communication Technologies & Society at the University of Salzburg (http://www.icts.uni-salzburg.at), Sigmund Haffner Gasse 18, A-5020 Salzburg, Austria.
robert.bichler@sbg.ac.at, christian.fuchs@sbg.ac.at, celina.raffl@sbg.ac.at