Ethics and Information in the Digital Age

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Abstract

Ethics is concerned with critical thinking on social structures and traditions that shape the lives of societies. It aims at questioning moral biases and at opening new choices. Digital libraries belong to an emerging digital culture. New questions concerning production, collection, classification and dissemination of knowledge arise. How can a democratic right of access to knowledge be guaranteed? Creating digital libraries may be an answer to this question. But how do they merge into existing traditional libraries? What kind of public services should they offer? What kind of digital collections should they create? How is the integrity and sustainability of these collections economically, technically and culturally guaranteed? Who are the *de facto* beneficiaries of these value-added services?

Introduction

Ethics in a broad sense — i.e. as a discipline that includes individual ethics, politics and economics and which was called by his founder, Aristotle (384-322 BC), *practical philosophy* — is concerned with critical thinking on social structures and traditions that shape the lives of individuals and societies. It aims at questioning moral biases and at opening new choices. Information ethics as a *descriptive theory* explores the power structures influencing attitudes towards information and traditions in different cultures and epochs. Information ethics as an *emancipatory theory* develops criticisms of moral attitudes and traditions in the information field at an individual and collective level. It includes normative aspects.

Both aspects, exploration and evaluation, belong together. Information ethics explores and evaluates:
- the development of moral values in the information field
- the creation of new power structures in the information field,
- information myths,
- hidden contradictions and intentionalities in information theories and practices,
- the development of ethical conflicts in the information field.

The study of information ethics within different social traditions is an open task. In the Western tradition information ethics has its roots in the oral culture of ancient Greece. *Agora* (marketplace and meeting place) and freedom of speech (Greek: *parrhesia*) were essential to Athenian democracy. The cynics cultivated freedom of speech as a special form of

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expression. Socrates (469-399 BC) practiced his thinking in public places and never published his arguments in a written form. Plato (427-347 BC) discusses in his dialogues the transition from an oral to a written culture. Under the influence of Christianity a book culture was developed which was mainly centered on one book, namely the Bible. The invention of printing by Gutenberg in 1455 and the Reformation, which profited from it, brought back, in the Modern period, the idea of freedom of communication, which implied the freedom of communicating ideas to others not just in a written but in a printed form. The French Revolution brought about the transformation of the private libraries owned by nobility as well as by the church into common property. Projects like the one of the French *Encyclopédie* and the public access to libraries created a new awareness of freedom of information which culminated in the principle of freedom of the press as one of the foundations of modern democracies. The Western tradition of information ethics from ancient Greece until the beginning of the 20th century is characterized by two ideas, namely *freedom of speech* and freedom of printed works, particularly *freedom of the press*. A third ethical challenge arises now in a networked world, namely, *freedom of access*.

A basis for ethical thinking in the information field are the following articles of the *Universal Declaration of Human Rights* (UDHR): Respect for the dignity of human beings (Art. 1); Confidentiality (Art. 1, 2, 3, 6); Equality of opportunity (Art. 2, 7); Privacy (Art. 3, 12); Right to freedom of opinion and expression (Art. 19); Right to participate in the cultural life of the community (Art. 27); Right to the protection of the moral and material interests concerning any scientific, literary or artistic production (Art. 27).

Electronic information is based on information and communication technologies (ICT) such as: personal computers, laptops, interactive devices: e-mail, chat, mailing lists, teleconferencing, servers, multimedia devices, search engines, integration of 'old' media (TV, radio, telephone) into 'new' media (Internet), mobile access to the Internet.

The massive diffusion of ICT causes radical changes in public and private institutions in general as well as in national and international information and communication policies in particular. This may concern:
- the creation of specialized (regional) knowledge markets
- the development of (national and/or regional) digital libraries and archives
- the development of electronic commerce
- the publication and diffusion of scientific knowledge through the Internet
- the creation of services for public access to the Internet
- the creation of educational services based on ICT (at different levels: schools, universities, research)
- the promotion of local cultures in the digital medium
- the development of communities and interest groups, independently of geographic boundaries
- the participation of individuals and groups in the political (communal, regional, national, international) processes

There are several kinds of barriers that may cause the exclusion of users from the benefits of the new technology such as:
- Economic barriers: energy, telephone, servers, hardware and software
- Technical barriers: costs of acquisition, use and updating
- Cultural barriers: information illiteracy (Bawden 2001), biases, dominance of English.

Justice and fairness in the information field — following the *contractarian* approach to ethics — concern the creation of a *social information and communication economy* as the core of a social market economy. In other words, digital capitalism should be ethically seen as a challenge to creating (legal) conditions in order to surmount the so called *digital divide* (US Department of Commerce 1999). Public libraries may play a key role allowing free access to the Internet to persons that for different reasons cannot use ICT but are dependent of these kind of devices for shaping their lives. Libraries can become an agent of social change — following the *ethics of care* approach —, promoting educational, social, and economic activities at all levels of a society. This is the perspective within which I ask the *ethical* question concerning the creation and use of digital libraries (Capurro 2000).

Ethical Challenges of Digital Libraries

Production, collection, classification and dissemination of digitized knowledge and information give rise to ethical challenges such as: How can a democratic right of access to knowledge be guaranteed? Creating digital libraries may be an answer to this question, but how do they merge into existing traditional libraries? What kind of public services should they offer? What kind of digital collections should they create? How is the integrity and sustainability of these collections economically, technically and culturally guaranteed? Who are the *de facto* beneficiaries of these value-added services?

Let us start with the last question. Some of the value-added characteristics of digital libraries are:
* access to documents independently of time and space: think, for instance, about the problem of access to documents stored in libraries and archives far away from the place where these documents are needed,
* combination of documents of different types in different (digital and/or classic) archives,
* search for documents and non-digital information on the basis of search engines and online catalogs,
* combination of information and communication processes.

Key technical and organizational problems related to the creation of digital libraries concern:
* Formats (such as pdf, HTML or gif)
* Content (special collections)
* Sustainability (preservation of the digital material; surrogates for originals that are in a fragile condition)
* Copyright (producers, institutions, users)
* Fair Use
* Financing
* Cataloging
* Search capabilities.

Information specialists must be educated in order to design and maintain digital libraries. They must be able to structure, represent and update all kinds of information in different media (Lesk 1997, Borgman 2000).

Ethical questions concerning *collection and classification* of information refer to censorship and control. The answers to these questions vary historically according to the interests of

political, economic, religious and military powers. Cultural and moral traditions play also an important role concerning, for example, what is considered as offensive. The main ethical question in this area may be formulated as follows: Are there limits to intellectual freedom? The will to exclude 'bad' information is itself an ethical paradox as far as any exclusion that would limit intellectual freedom should be avoided. There is a tendency in liberal societies to less control. But this leads to ethical as well as moral and legal conflicts (Froehlich 1997, Frické/Mathiesen/Fallis 2000).

The particular protection of the *intellectual property* is one of the most important and difficult ethical, moral and legal questions in the information field particularly. Different moral and legal traditions have lead to different protective laws in different regions of the world. The European tradition emphasizes the moral rights of the authors (*droit d'auteur*). These are related to the person of the author and concern the integrity and authorship of her/his work as well as her/his reputation. The Anglo-American tradition emphasizes the property or economic rights (copyright). Conflicts arise when national and international laws and moral traditions protect different aspects of various media. Ways of harmonization are the *Berne Convention* (1886, revisions) and the *Universal Copyright Convention* (1952) (UCC). Both treaties are administrated by the *World Intellectual Property Organization* (WIPO). Digitizing makes copying and re-making easier. Internationalization via the Internet changes the dimension and prospective of national legislation and control. This new situation gives rise to questions such as:

- Should information always be regarded as a property?
- Should the notion of knowledge-sharing become predominant with regard to the notion of ownership?
- How can the public access to electronic information be guaranteed?

These questions must be carefully analyzed when creating digital libraries in order to protect the interests of producers, mediators and users.

Ethical questions concerning *information dissemination* are related to problems of public access and reference/brokerage services. The question of access can be studied as an individual as well as a societal issue. Individuals and societies are interested in free and equal access to information. At the same time it must be acknowledged that information is a product of work and has an economic value that should be protected. The question is then, What information for whom should be free. The problem of user education is also connected to this question. The question of access as a societal issue concerns the problem of creating equal opportunities of access avoiding the gap between the information rich and the information poor (*digital divide*). It is controversial how for the discourse on the digital divide may lead to a (theoretical and practical) confusion between what can be seen as a societal need but not as a (human) right. The last assertion would eventually expand government power and legitimate its control and ruling activities (Foster 2000). With regard to reference/brokerage services ethical conflicts may arise regarding, for example, the right to confidentiality. Organizations may ask information professionals to break confidentiality. Information professionals are supposed to inform their users about the limits of their sources and methods. Finally there is the question of misinformation (or information malpractice) that can cause great (economic) damages to the users.

Let us now turn to the question about how digital libraries can merge into existing traditional public libraries and what could be the prospects of this process. Public libraries can be conceived as information centers, as education centers and as communication centers (Hernández Sánchez 2000). A digital culture focused on what has been called *information literacy* (Bawden 2001) may affect their services as follows:

1) Public libraries as information centers:
- Online catalogues at national and regional levels
- Production and access to their own digital (multimedia) documents, particularly to special collections
- Digital information services in cultural, social and governmental areas
- Development of intranets for specific purposes.

2) Public libraries as education centers:
- Training users in order to get information from the network (particularly in case of users engaged in the educational field)
- Training users in order to use the network for personal communication purposes. This may include the creation of personal web sites and/or the use of e-mail.
- Training users in order to use the network work for social communication purposes such as creating user groups.

3) Public libraries as communication centers:
- Taking care of users, their information, interests and ideas
- Providing individual communication services (e-mail, forum, chat)
- Providing social communication services at the local level (town, city, region) and national level.

These value-added services imply the modernization of traditional equipment as well as a program of information literacy (Bawden 2001). The content of digital library projects may be oriented towards the preservation and use of local cultural heritage as well as to projects related to social and industry related fields. These projects may be conceived as *joint ventures* in order to create new sources of work and support local industry (See Annex).

Conclusion

A *digital culture* does not mean that, say, the culture of the book will disappear. Different media having different qualities do not *replace* each other, although they may *displace* their use for specific purposes. Thus, oral culture did not disappear with the invention of writing or with the massive diffusion of printed works. Today we are particularly aware that virtual communities and distance learning make more evident the specific value of meeting people face-to-face.

Digital libraries within public library services can be considered not only as an important cultural and social service but also as a support for a growing *information economy*, their creation being supported by a *utilitarian* ethics, with its maxim of improving welfare independently of the degree and the ways of using digital information, economic growth is basically knowledge dependent. Intellectual capital, either externalized in any kind of artificial media, or, which is a crucial aspect, tacit in the heads of people, is a key aspect for economic and social development. And *vice versa*: companies have a social responsibility and should not see themselves exclusively from the shareholder point of view. A culture of *corporate citizenship* should be based on mutual information sharing. This by no means excludes legitimate interests of information protection (patents, licences, customer

information, proprietary knowledge, know-how, etc.) as it is also the case of the protection of personal data by individual users or, more generally, of any kind of copyright protected product.

A prudent national and regional information policy must create, on the one hand, the technical and social conditions in order to meet the challenge of digital capitalism, i.e. to actively help the individuals and groups, particularly those who are already marginalized. A way to do this is to promote grass-roots projects in order to help people develop their own ideas and projects and to build socially and economically a self-supported existence. This finally can only be done through educational efforts, from which not only the industry but the society as a whole may profit. Information professionals, on the other hand, should learn through dialogue and mutual criticism:

- How to recognize and articulate ethical conflicts in the information field.
- To activate their sense of responsibility with regard to the consequences of individual and collective interactions in the information field.
- To improve their qualification for intercultural dialogue on the basis of the recognition of different kinds of information cultures and values.
- Basic ethical theories and concepts and their relevance in everyday information work.

The *International Center for Information Ethics* (ICIE) offers a forum for information and communication about questions (ICIE 2001).

Digital libraries — what for? We should not rely too quickly on a *moral* answer like 'for the sake of democracy and general welfare', not only because digital libraries are not an end in themselves but also because a one-sided view — I call it *informatism* — makes us blind to the real needs. Disconnecting the discourse on digital libraries from the traditional library community creates another kind of divide that narrows the view for instance with regard to the question of preservation. David Levy summarizes the question of the purpose of digital libraries as follows:

> "Libraries, digital or otherwise, carry a strong symbolic charge. On the face of it, they are just one element in the larger circuit through which information travels from production to ultimate consumption. In this respect, they are on a par with the other elements in the circuit: authors, publishers, distributors and communities of users. But libraries have to come to symbolize and to exemplify the values we impute to the entire circuit. What we say about digital libraries and how we understand them embodies and signals our attitude toward the place of information in our culture. To this extent, it is potentially of great consequence not only how we construct digital libraries but how we talk about them and whom we include in the conversation.
> "Would you tell me, please, which way I ought to go from here?" Alice asks the Cheshire Cat. "That depends a good deal on where you want to get to," the Cat replies. "I don't much care where-" Alice says. "Then it doesn't matter which way you go," the Cat replies. "-so long as I get somewhere," Alice adds. "Oh, you're sure to do that," says the Cat, "if you only walk long enough." Here is where the parallel between Alice in Wonderland and digital libraries ends. For those of us involved in digital library research and development care very much about where we're trying to get to. Whether, or however, we articulate it, most of us are greatly concerned with the societal consequences of the work we do. It is my belief that more explicit attention to this direction - and a broader, more inclusive debate about it - will lead to a stronger and more focused research agenda." (Levy 2000)

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Annex

I. Digital Libraries in Germany (selection)

1) List of digital libraries from the "Verein der Diplom-Bibliothekare an wissenschaftlichen Bibliotheken": http://www.bibliothek.uni-regensburg.de/vddb/Fundgrube/vddb_dig.htm
2) Germanistik im Internet (Universität Erlangen-Nürnberg): Comprehensive digital library on German literature http://www.phil.uni-erlangen.de/~p2gerlw/ressourc/eltext.html
3) Die Digitale Bibliothek Nordrhein-Westfalen: http://www.digibib-nrw.de/Digibib
4) Elektronisches Volltextarchiv der Universität Karlsruhe: http://www.ubka.uni-karlsruhe.de/eva/index.html
5) Voll-Texte Online der Buchhändler-Vereinigung: http://www.volltexte.de/index.html
6) Göttinger Digitalisierungszentrum: http://www.sub.uni-goettingen.de/gdz/index.var
7) Bibliotheca Augustana (includes: Bibliotheca Latina, Bibliotheca Graeca, Bibliotheca Germanica, Bibliotheca Anglica): http://www.fh-augsburg.de/~harsch/augustana.html

II. Digital Libraries in the USA (selection)

1) University of California at Berkeley: www.lib.berkeley.edu
2) Stanford University Libraries: www.sul.stanford.edu
3) Carnegie Mellon University Libraries: www.library.cmu.edu
4) University of Michigan (Ann Arbor): www.lib.umich.edu
5) Columbia University: www.columbia.edu
6) Cornell University, Ithaka, NY: www.library.cornell.edu
7) Yale University Library, New Haven: www.library-yale.edu
8) University of Virginia, Charlottesville: www.virginia.edu
9) San Francisco Public Library: http://nova.sfpl.lib.ca.us
10) New York Public Library: www.nypl.org
11) Library of Congress: www.loc.gov
12) Research Libraries Group: www.rlg.org
13) Online Computer Library Center (OCLC): www.oclc.org
14) Project Gutenberg Fine Literature Digital Re-Published (ZIPped) http://promo.net/pg
15) Berkeley Digital Library http://sunsite.berkeley.edu
16) Digital Library.net http://www.digitallibrary.net

III. Other

1) Internet Public Library: http://www.ipl.org
2) Gallica.com: http://gallica.bnf.fr
3) Biblioteca Virtual Miguel de Cervantes http://www.cervantesvirtual.com/index.shtml