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## The Internet in island communities in Croatia: between government strategies and reality

### Abstract:

The question of integrating Internet into the every day life of people living in isolated areas (e.g. islands and remote rural areas) has been of particular interest to the Croatian Government. It has addressed this issue in its basic strategic and action-plan documents which aimed to improve state economy and living conditions of Croatia's citizens. Also, adopted LIS professional statements have been aiming to increase library awareness, as one of the focal points to the equal access to information for all citizens regardless of their educational, social or economic background.

The paper will discuss Government initiatives related to the e-community building issues on islands and in other rural areas in Croatia. Related awareness raising initiatives of LIS professionals, aimed at professionals, governing bodies and citizens, will also be discussed.

### Agenda

Introduction

Croatian islands and the idea of an equal access to information

Legal context

The role of the Professional Association

Government strategies and initiatives

Conclusion

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## Introduction

Access to information is of vital importance to the inclusion of various groups of people into communities on the one hand, and providing a link with and nurturing traditions on the other. Internet undoubtedly affects community building in many ways: increasing the level of understanding the importance of information in a democratic society, strengthening educational system, stimulating entrepreneurship, etc. Thus, every attempt to improve conditions for a free access to the Internet facilitates citizen involvement in various aspects of the development of a democratic society and raises questions related to their equal opportunities to being informed citizens and experiencing the life in chosen places.

In isolated areas access to information is often aggravated by the insufficient infrastructure (schools, libraries, information and communication technology, qualified staff, etc). The attempts have been made lately in many countries to assure that equal access to information is made possible thorough a network of library services since libraries as places of learning, communication and exchange of ideas, can present, explain and support the complexity of modern societies. However, librarians face a real challenge when finding adequate methods in developing services for those members of society who live in isolated places, with different literacy and knowledge levels and have different needs for information and books. One of the most important tasks of the public library in the digital age is not only to provide access to various sources of information but also to educate information illiterate citizens on the grounds that this will make them equally capable to take part in different aspects of the development of a democratic society. The question of success of public libraries in accomplishing this task, while faced with a problem of the digital divide just as any other participant of the networked society, makes for a starting point of this paper: why and how to provide the Internet for the libraries in remote, rural and isolated areas in Croatia.

Although many public libraries in Croatia have been encompassed by the projects of the digital cooperation there are some substantial differences among them, mostly leading to the situation where urban libraries have the advantage over the small and rural libraries.

It is evident that new Information and Telecommunication Technology (ICT) has been improving almost every part of human life enabling communication worldwide, but also extending digital divide between developed and undeveloped countries or regions within the same country, rich and poor citizens as well as between educated and illiterate people. Castell's (2000, p. 141) statement that the global information economy is deeply asymmetric and regional, leads us to the issue of uneven access to information that is not only typical for the underdeveloped countries or regions but exists in developed parts of the world as well. Digital divide exists in the world of libraries as well.

To follow up widely accepted and legally protected rights for the equal opportunities to the free access of information, and of the desire to live in the knowledge based modern society, many European countries have recognized the potentials of public and school libraries as corner-stones to education, information literacy and solution to digital divide problems. Although governments in transitional countries, for example, have been aware of the importance of the implementation and use of ICT, the development of public libraries as one of the focal points for equal and free access to information has not always been of high priority to them. It is more than true that by reaching nearly all communities, library computers have been an effective way to reach the digital divide. (Towards equality of access, p. 4)

In Croatia, although some of the libraries in larger cities are well equipped and have trained personnel, this can not be said for libraries in rural and isolated places that lack premises, basic equipment and staff. Among traditionally disadvantaged groups (e.g. lower income families, disabled people, illiterate people) island inhabitants form a special group. It has to be pointed out that Croatian sociologists did not explore in depth the small island communities as the traditional rural communities, nor did they explain the notion of insularity as determinant of islandity<sup>1</sup>. However, several general observations can be made: the insularity is a specific phenomenon, marked with noticeable differences between islands that are better connected to the mainland and those more remote; ethno-cultural tradition is strong (the village organized as fraternity, the Cumune, and the State, identifying the mechanism of social integration and the Catholic Church as the basic integration structure) although some of the traditional values are disappearing (cf Zupanov, 2001, p. 170). Moreover, potentials in these areas for the development of the modern

information society are getting higher and more important every day (tourism, work from home, research parks etc.), but the government policy measures are needed to improve economy, the way of living and return of people to deserted islands.

A number of initiatives started in the European Union to overcome obstacles to the idea of free Internet access for less privileged members of society stimulated Croatian Government to introduce National ICT Strategy (Croatia in 21<sup>st</sup> Century, 2002), several projects and financial support for innovative ideas and cooperative programs. At the same time, legal framework has been gradually established and professional communities have taken over the responsibilities relevant to their particular role in the information society.

## Croatian islands and the idea of an equal access to information

Croatian islands differ from each other geographically by the insularity degree (distance to the next island or to the nearest mainland) and economically by the economic vulnerability i.e. by the quality of their own resources and degree of the recognized advantages. Recent research counted 1,246 islands, 79 of them recognized as island, 526 as islets and 641 as rocks and rocks awash. (Starc, 2001, p. 16)

By 1981, one fifth of the population left large size islands, more than a third left medium size islands and, disastrously, three fourths left small islands (Starc, 2001, p. 19). During the war period from 1991 to 1995 islands were a place of refuge for a number of refugees from Croatia and Bosnia and Herzegovina increasing the number of islanders. According to the 2001 census the population on islands grew to over 120,000. An average island settlement had 417 inhabitants, and the largest town, Mali Losinj on the island of Losinj, had 6,566 inhabitants. (Drzavni zavod za statistiku, 1992)

The development of islands has been considered as one of the biggest problem in Croatia since 1995 due to the fact that the island economy was not improving, the whole areas of economic activity non existant and people tending to leave for the mainland and foreign countries. The newly formed Ministry of Development and Reconstruction put island issue on its agenda and prepared Island Development Programme (IDP) in 1997. The Parliament passed it as the first development document of the Republic of Croatia that dealt with

a particular region. IDP scoped comparative advantages, detected limitations and deducted that the islands arrived at the development crossroads from which the path of sustainable development should be taken, based upon 'from the bottom' development management. The Island Act was produced and passed as a *lex specialis* in 1999 and several development measures were proposed – 22 island sustainable development programmes and 19 state infrastructure and superstructure programmes (cf Starc, 2001, pp. 28-33).

For the topic of this paper of particular interest are educational and cultural programmes that were proposed. Related to the education it was recognized that "deficient primary education on small island is an insurmountable short-term limitation. Newly started families of island inhabitants or newcomers are directly threatened when children reach school age and the island school, if any, does not provide a minimum of educational quality." (Starc, 2001, p. 26) Increase in the cultural level of islanders and presentation of cultural heritage connected with the development of tourism were seen also among important tasks.

It is obvious that the information age has brought new approaches to the problem of isolated areas. Since the information is seen today as a key factor for the successful economic development, the falling behind of some rural areas (decline in number of inhabitants, lower-paid workers, lower educational level, high number of retired people), nowadays is often explained by the lack or inadequate access to information. Intersection of the importance of information and difficulties of the living conditions on islands as well as specifics of mentality and culture in these areas, are seen as the biggest challenge for rural areas in the information age. Bearing in mind the fact that all rural regions have at least one public or school library, or are connected to the nearest urban library, the Croatian LIS professionals interpret the Government's strategic documents in such a way that public and school libraries can serve as access points to introduction and development of the concept of the Internet for all inhabitants. However, libraries require ongoing investments and support in several areas (e.g. hardware and software provision and upgrades, Internet connectivity, staff training, longer working hours) and current funding in library services, if not upgraded, might jeopardize the access and opportunities to the concept of 'information for all'.

## Legal context

The Island Act (Zakon o otocima, 1999), derived from the IDP rephrases most of its provision and requirements and assigns tasks to a number of ministries, government agencies, public enterprises and bodies of local administration and self-government in the six island/mainland counties and their 44 island municipalities/towns. The superstructure programmes deal with health care, social care, pre-school, primary and secondary education, scientific research, education of island entrepreneurs, culture, environmental protection and protection of cultural heritage to name just a few that are directly related to the subject of this paper.

Government Strategic Documents, especially those addressing ICT and education, also underline the importance of the special measures or government development policy to assure that islands get a chance to develop according to their potentials as well as fulfilment of basic rights of their inhabitants.

According to the Constitution of the Republic of Croatia (2001) all citizens are guaranteed the freedom of expression and access to information. Although libraries are not mentioned in the Constitution, other documents endorse their role in supporting the idea of the freedom of expression and free access to information, especially the ones accepted by professional bodies and governmental agencies, such as Croatian Library Association, Croatian Chapter of the IEEE, Croatian Journalist Association, Office for the Information Society, etc.

It is also important to mention that the Croatian Library Association's Code of Ethics (Eticki kodeks, 1992) affirms that librarians have to resist all forms of censorship, and that the Article 6 of the Library Act (Zakon o knjiznicama, 1997) states that library materials and information have to be provided to users according to their needs and requirements.

In Croatia, as elsewhere in the world, there is a number of obstacles to free access to information in libraries and they are related to inadequate funding, equipment and library premises, undefined criteria of state subsidies in library materials, buildings and ICT infrastructure, lack of the staffing policy as well as to the lack of the collection building guidelines.

A recent research (Nebesny, 2000) showed that smaller libraries in the country depend almost entirely on the state purchase of new titles, often lack qualified staff and have to employ non-professionals.<sup>ii</sup> These libraries often are not

equipped with ICT and Internet connections either. Thus, all initiatives toward e-society had to take into account these facts.

## The role of the Professional Association

At the beginning of 1990s the Croatian Library Association (CLA) adopted the first ever Code of Ethics. Following professional guidelines and responding to the incidents reported in the media that were connected to the unprofessional management of library collections, CLA established its Committee on the Freedom of Expression and Free Access to Information in 1998.

The IFLA/FAIFE Statement on Libraries and Intellectual Freedom has been translated and published in the CLA Newsletter in 1999. By doing so CLA emphasized the right to free access to information as a constitutional right of every Croatian citizen regardless of his/hers gender, age, nationality, religion or personal beliefs expressed in the Article 38 of the Croatian Constitution Act. The goal of the Commission is to seek any possible obstacle to the free usage of information in Croatian libraries and discover the best modes to wave them off.

In September 2000 the CLA Assembly adopted a Declaration on Free Access to Information prepared by the Committee on Free Access to Information. The Declaration has been modelled after the IFLA/FAIFE Libraries and Intellectual Freedom Statement. Its purpose has been twofold: to emphasize the responsibility of the profession to provide free access to information for their users and to provide a set of principles the profession can rely on. Professionalism is emphasised throughout the text as a main principle that regulates the behaviour of the CLA members. It is expected that the Declaration would help the Library Association and the profession in general in communication with the media and the public, as well as with the authorities (cf Horvat, 2002, pp 52-53).

In October 2000 the CLA published a new issue of its journal, Croatian Librarians' Herald (Vjesnik bibliotekara Hrvatske), dedicated to the topic of freedom of expression and free access to information, and in 2002 the proceedings from the Roundtable on Freedom of Access to Information in Service of Cultural Development were published (Slobodan pristup informacijama, 2002). The main purpose of these publications is to make the concept of free access to information more familiar to the Croatian librarians and other interested professionals such as members of Croatian Information and

Documentation Society, Croatian Chapter of IEEE, as well as to the members of the government and local bodies involved in policy making, students and teachers of LIS and citizens in general.

## Government strategies and initiatives

As already mentioned, Croatian Government accepted several strategic documents, one of them being the Information and Telecommunication Strategy, so called e-Croatia. In this document some of the recommendations are related to the topics of this paper and deserve further explanation.

To overcome falling behind and isolation of islands, in the Development Guidelines of the Republic of Croatia<sup>iii</sup> (that followed e-Croatia document) it is recommended that the regional policy should be gradually decentralized, at a pace which must be adjusted to the level of development and the ability of a particular region to ensure its own growth.

A substantial government investment in infrastructure, together with the direct intervention in the social sphere is provided for the development of island economy through improving traffic links with the mainland starting from 2002.

Having in mind the European experience with the development of ICT infrastructure in the geographically dispersed and isolated places, areas with a small population, bad traffic connections and bad economic situation that lead to the inequality of citizens, e-Croatia document recommended that priorities have to be chosen and they are expressed through the concept of the 'Internet in movement' – it is recommended that all citizens have right to participate in an information society and that ICT infrastructure should be built taking into account primarily the needs of children and young people, citizens with special needs, older citizens and those with lower income (Cf Croatia in the 21<sup>st</sup> Century, p. 41-42).

ICT has to be available to local communities through Internet centres that will enable the usage for local governing and personal needs of inhabitants when they are not able to use ITC from home or workplace. It is said that these Internet centres might be located in schools, libraries, or other local institutions. To be functional these centres have to be equipped, connected to the telecommunication networks and given appropriate technical support. Internet centres are of special value in rural and less

inhabited places where its main task is to support general education, facilitate opening of new working places based on the use of ICT and providing links to medical help and consultancy (Croatia in the 21<sup>st</sup> Century, p. 53).

Following these recommendations the Contract between Croatian Ministry of Education (today Ministry of Science, Education and Sport) and Croatian Telecom Company was signed in 2001 with a main goal to provide Internet access to all schools in Croatia at least with one access point per school. The computers and connections as well as certain number of free access hours were donated and in no time the technical prerequisites were set up to enable the use of the Internet sources in educational process. The idea behind the project was that the development of Croatia as the knowledge based society has to rely on the forthcoming generations, their ability to use different sources of information and knowledge and to be open to the idea of the lifelong learning.

Croatian Telecom donated schools with free hours to Internet (10 hours every working day to each school), 100 millions of free minutes for the Internet access of pupils from their homes. Croatia Telecom offered also to organize workshops for pupils and their teachers to improve their information literacy and develop info-portals for pupils and their teachers as central points of information and cooperation of all parties involved in educational system. In this way schools in rural and isolated areas received initial equipment and connections as well as the stimulation for access to modern technology and start of new programs such as distance learning for elementary and secondary school children or medical provision.

Furthermore, the pilot project was introduced in 2001 to connect six pupils from the island of Drvenik with their teachers in Split via Internet. From 2004 two more pupils will join in. The new ICT infrastructure on islands enables hotels to accommodate professional conferences, one of them being LIDA on the island of Mljet. The project of Telemedicine was introduced for the GP's on islands to get professional consultation when needed from larger centres such as Zagreb, Split or Rijeka.

In July 2004 the Government accepted new program 'The development of the communal and social infrastructure at Croatian islands' that will allow further development of these programs (based on the experience from pilot projects) and some new ones, such as access to government and local administration information.

With the support from the Open Society Institute's Network Library Program (<http://www.osi.hu/nlp>) some projects have been undertaken in regional libraries such as Library as a Local Community Centre in City Library Zadar. (<http://www.gkzd.hr>). One of the goals of Croatian public libraries is to provide free access to all citizens. However, each Croatian public library requires its members to pay annual fee (between 8 and 10 euro). In many cases, though, the non-users are welcome to use Internet free of charge. Library members' access to Internet is covered by the annual fee without any additional payment. As one of the traditional services for inhabitants of the remote rural areas the mobile libraries are delivering services to many isolated places, but the islands lack such library services (e.g. libraries on boats). With the development of ICT infrastructure the idea of delivering professional services to islands' inhabitants through Internet (such as Ask a Librarian or ordering books via main library) has been accepted by some librarians and first projects are put into working in Zadar and Dubrovnik. Having in mind that rural and small-town libraries are especially at risk because their funding is less reliable, their staff tend to be older and less comfortable with technology and they have trouble getting technical support (Toward Equality of Access, p. 5) it was planned to include students of LIS to volunteer during summer to help develop necessary skills of local staff and deliver special workshops for children and young adults aimed to improve their ICT skills.

The other step is networking of all libraries inside one region. Such a project has been developing by the Zadar City Library that aims to connect all libraries, including ones on nearby islands, in a way that the City Library is responsible for the bibliographic control and access to databases, document delivery, consultations, professional permanent education of all librarians, as well as those ones who work on small islands as volunteers or part-time workers.

There is also a potential in developing rural libraries as centres for life long learning. There are many reasons why citizens in rural areas did not get proper formal education (such as poverty, isolation from the centres for learning). Using the advantages of ICT the rural libraries can evolve into centres for distance learning (DE). Having this in mind the LIS department in Osijek has been developing DE programs for the students in Dalmatian region that will enable students to lead such educational programs once they start working in libraries. There are already several such librarians who work at

islands (Hvar, Korcula, Dugi Otok) and who are trained to use DE techniques.

The other emphasis is on the work with children by facilitating provision of the so called traditional services to children (e.g. storytelling, summer reading programmes) as well as introducing new services such as consultancy for parents, help with home assignments etc. The inclusion of volunteers, and especially students of LIS in these programs, has been one of the strategic issues of the LIS Department in Osijek and the newly established one in Zadar.

## Conclusion

In the last decade European Union has been supporting a number of projects (such as PUBLICA, PULMAN Networks of excellence and PULMAN XT as well as the new project CALIMERA started in 2004) related to the plan of the *eEurope* (Europe 2002) that include public libraries and their potentials in cooperating with other relevant institutions (such as local museums, archives). One of the main goals of such projects is the creation of Public Internet Access Points –PIAPs and opening of multimedia centres in all European countries. Croatia has been actively involved in these project although not a member of the EU yet.

Public libraries in Croatia in general have been challenged by the need to maintain and further develop their role in providing free access to Internet to all citizens regardless of their social, economic and cultural background, although this important public service is not always understood by the policy makers and local groups of library advocates hardly exist.

Although the Croatian Government, particularly through the Ministry of Culture or Ministry of Science, Education and Sport support public and school libraries (e.g. annual financial support for collection building, investments for buildings maintenance and protection of rare and valuable material), the main source of financing is the responsibility of local governments. As mentioned earlier, the Library Act requires that every municipality in the country establish a library a public service (Zakon o knjiznicama, 1997). However, many local government units are not in position to do so due to the weak economy. The economic emigration from Croatian islands or from some regions that were destroyed during the war at the beginning of 1990s is not stopped yet. The

structure of economy and citizens' age in these places has been a huge obstacle for the introduction of innovative ideas and programs for the rebuilding of the life. The conservatism of the islands' population and their unwillingness to cooperate even on the same island (e.g. when there are two or three towns they tend to cooperate rather with another town on the mainland than with their neighbouring islanders) are further problems that public libraries in Croatia face. Small towns and villages are often closed to newcomers and to new ideas, have their habits and beliefs and hardly accept any change at all. This is also true for the librarians working in such environments as well as to library committees that are not willing to change every day's routine.

To be connected through Internet in such circumstances might become a starting point for networking island libraries and introducing necessary changes more easily. Undoubtedly, ICT offers to islands new opportunity to get out of the isolation and yet leaving them the feeling that they stick to their habits and the way of living.

Since the infrastructure building has been supported by the Government, the first steps are much easier. Thus, the projects of the national ICT infrastructure building are of the highest importance for the introduction and usage of Internet in rural and isolated areas of Croatia.

And last but not least, the new service that is of particular importance to the inhabitants in rural and isolated places is the provision of business information. Many local politicians do not understand the value of such a service, but might appreciate professional help that will improve their leadership position and development plans for the local community as whole.

However, legal framework, ICT infrastructure and financial support from the Government are only partially contributing toward the solution of problems that Croatia faces on its way to becoming a modern society. The importance of the governmental support for the stimulation of the development of new cultural values, moral and ethical principles, that will form a base for further development of the responsibility and consciousness about general and personal advantages and disadvantages caused by the use of ITC, is also stressed in strategic documents approved by the Croatian Parliament. In this respect the contribution of public libraries could be of high value.

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<sup>i</sup> One of the exceptions is surely the special thematic number of the journal Sociologija sela (Rural Sociology) that is completely devoted to the life and development of Croatian islands. 39, 1/4(2001).

<sup>ii</sup> According to the present Library Act non-professionals employed in libraries should earn a professional degree but libraries on islands and small-town libraries often can not find a person to run the library at all.

<sup>iii</sup> This document was published by the Strategic Planning Office of the Croatian Government in 2004. URL <http://www.hrvatska21.hr>



Shifra Baruchson-Arbib

## **“Social Information Science” – as a concept for assimilating Smart Internet Usage in a Multi-Cultural Society : The Case of Israel**

### **Abstract:**

The present paper discusses Social Information Science, an innovative field of study, which can enhance assimilation of smart internet usage in multi-cultural countries such as Israel. Social Information Science (S.I.) deals with the development ,theory and applications relating to the retrieval and processing of social and medical information, training “social information scientists,” as well as the development of SI mediation services such as SI banks, SI sections in schools ,public libraries, hospitals, community centers, and private services. Together, these concerted efforts aim to establish a modern information-oriented climate in which stressful social and medical issues are handled through the retrieval and use of reliable information as the basis for knowledgeable decision making. Mediation services demonstrate the potential and risks involved in internet usage, as well as the importance of information-based decisions. Social Information Science will help train people to conduct their daily life decisions on the basis of information selection and self-responsibility- which is a step forward in the evolvment and empowerment the individual.

### **Agenda**

Introduction

The Internet and the Evolution of Individual: Options, Choices and Responsibilities

“Smart Internet Usage” in a Multi-Cultural Society: The Case of Israel

The Concept of “Social Information Science”

Social Information Science in Israel - Reality and Zeitgeist

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## Introduction

The present paper discusses an innovative assimilation service concept developed and implemented by the author at the "Department of Information Science," Bar Ilan University, in Israel. Israel is a multi-cultural state comprised of local religious and secular groups, Jews and Arabs, immigrants from western and eastern countries and foreign laborers. The present study is grounded in the premise that the assimilation of information technology in multi-cultural societies must be supported by a creative, multi-systemic perspective. One method to cultivate an information-oriented society is the establishment of social information banks and desks managed by academically-trained "social information scientists," possessing an understanding of "information behavior" language and mentality issues. In these times of a digital divide, there still is a need for a mediator who use face-to-face encounters to gradually expose individuals to information in areas relevant to their daily lives. An understanding of the potential of information and the internet is expected to empower individuals, train them to manage their lives based on knowledge-based decisions, enhance independence and responsibility and reduce the digital divide.

## The Internet and the Evolution of Individual: Options, Choices and Responsibilities

The internet emerged as a new communications tool with unique and distinct features in the last decade of the 20th century. For the first time, at our disposal is an interactive, global tool of knowledge, comprised of words, color and sound. This dynamic instrument, which is a repository of enormous amounts of information increasing from day to day, poses many challenges to humanity. The internet triggers changes in culture and leisure, modes of learning, commerce and social communications, and also raises the issue of nationalism in a global environment (Castells, 1996; Castells, 2004; Curran 2002 Howard and Jones, 2004 Winston, 1998). In order to understand the potential of the internet and assimilate its use in everyday life, three essential skills are needed, without which use of the internet is impossible: usage techniques, information skills and search techniques. However, the major challenge for humankind is how to bring the power and significance of information to the public's

awareness, and to develop its appreciation of the need for "smart internet usage." Relevant information potentially enhances individual quality of life by suggesting numerous options for life management. Smart usage involves information assessment techniques, awareness of the information overload problem and an appreciation of ethical issues such as intellectual property, privacy and the digital divide- all of which are important for being an equal citizen in the information society.

Any new communication tool introduced into human society poses new opportunities and challenges, as well as new risks. Underlying the present paper is the assumption that access to information representing new options and new alternatives constitutes a foundation for individual development and growth. Therefore, the internet has the unique potential to increase self-awareness, individual responsibility and individual independence. Exposure to the unprecedented abundance of information on the internet allows individuals to select the most appropriate information for his or her needs. This selection process is a conscious and responsible process that integrates elements of personal maturity with expressions of individuality and creativity.

In the absence of widespread appreciation of the power and uses of information, a very narrow stratum of the population may emerge as an "information elite." This elite may exploit information for its own benefits, while the majority of the population continues to play computer games, send emails and participate in on-line chats, with no real understanding of the "treasure" called information. This large group will not only fail to realize any benefits from the positive potential embodied in the internet, but may gradually become an information-impooverished social group, detached from one of the greatest challenges offered by the internet: the opportunity to lead a productive life grounded in informed decision making. If this forecast is realized, we will no longer speak of a digital divide, but of a mental divide.

Traditionally, information was controlled by elite groups: rulers, religious leaders, physicians, lawyers and experts in various fields. Individual decision-making was typically restricted to information which had been filtered, classified and released by monopoly owners. Now, for the first time in history, individuals have the opportunity to independently select information and knowledge, and consequently gain control over major portions of their lives. The internet, however, has created the challenging

situation, akin to that of a prisoner released after many years of incarceration, or a villager who encounters the big city for the first time. In this context, the words of Burckhardt (1958) remain relevant: "Man was conscious of himself only as a member of a race, people, party, family or corporation - only through some general category..." (p.143). The internet now allows man to perceive himself also as a member of a global entity, with the freedom and responsibility to make his or her own choices based on vast amounts of information.

To ensure that the opportunity for individual growth is realized, we must establish an "information climate" in daily life, through by education, public debates and special assimilation projects. For this task, regular methods of computer training and basic information skills acquisition are insufficient because assimilation training must emphasize broader issues, including the power of information, the liberty and responsibility which create lives based on informed decision making, ethical issues applicable to the internet, and exposure to the "information environment" comprised of books, journals, television, experts, acquaintances and family members.

Assimilating information technology such as the internet is especially difficult in a multi-cultural society, because social groups generally maintain distinct information channels, unique modes of appreciation of the significance of information usage, and unique views on individualism and personal responsibility. To ensure the success of the technology assimilation process, and provide a genuine opportunity for progress to the population at large, assimilation should be based, first and foremost, on an understanding of the mentality of each social group. Such understanding must be grounded in scientific research, and implemented by developing creative, modular assimilation programs suited to the unique language needs and awareness levels of each group. Such an assimilation process does not imply any modification of cultural mentality and beliefs, but only support for increasing access to the benefits of the new technology and the opportunity to join the information society equipped with all necessary knowledge.

Past media revolutions offer lessons on the importance of the assimilation process of new information technologies. One major communications revolution was prompted by the printing press, invented by Johann Gutenberg in the mid-15th century. Gutenberg printed the "42-line

Bible" (Mainz 1454-1455), in a large format (41.3 x 30 cm, 2 volumes, 987 pages), leaving margins for hand-made illustrations, yet was oblivious to the potential of his innovation and failed to foresee the development of pocket books, bureaucratic paperwork, newspapers or scientific journals. In fact, first to understand the possibilities of the printing press were religious authorities. The Catholic Church in Rome printed indulgences which generated revenues used to finance magnificent buildings, while the Church's opponents, the Reformers and supporters of Martin Luther, printed pamphlets and books in their campaign against the Church, ultimately causing the separation of the Protestant from the Catholic Church. Yet, at the same time, the invention had little impact on the literacy of the public at large: Four hundred years later, in 1840, one half of Europe's inhabitants remained illiterate (Baruchson, 1993; Cipolla, 1969; Eisenstein, 1979; Febvre and Martin, 1976).

Can we allow ourselves a similarly slow process of technological assimilation, which the French call "laissez faire laissez passer"? Over one hundred years of social science studies in the universities illuminate the disaster inherent in a slow assimilation process, in terms of equality and status among individuals. Since Gutenberg, the "play," "the actors" and the "stage" have changed and will never be the same. The "play" is no longer a printed book with fixed contents, the "actors" are no longer authors, printers and librarians, and the "stage" is no longer stable. Now, the leading "actors" are technology firms and hi-tech experts, the "play" is virtual and interactive and the "stage" is continuously moving in cybernetic space. In fact, "slow time" has ceased to exist and has been replaced by uncontrollable rapid, dynamic changes. In this new state of affairs, we are called to concentrate our efforts and creative energy to the development of a framework for assimilating new technology, a framework which is innovative, effective and efficient, operating simultaneously on multiple channels. Our realistic aim, then, is not to resolve all the problems of digital divide, but to alleviate them.

### **"Smart Internet Usage" in a Multi-Cultural Society: The Case of Israel**

Assimilation of internet usage skills touches upon several foundational questions, including the designation of the parties initiating and

implementing the assimilation process, as well as the manner of assimilation. In the context of a multi-cultural society, assimilation of internet usage becomes entwined with many additional factors including literacy, awareness of the power of information, technological knowledge, economic resources, openness to unfamiliar technological channels as substitutes for traditional information sources such as community leaders, parents and friends, and finally, openness to knowledgeable-based decision making, which is one of the most important opportunities offered by the internet. In a study on the information behavior of minorities, Chatman (1999) noted, "The role that a small world plays in formulating first-level information is quite simple. Primary conditions are trust and believability. For information to take on legitimacy it must be compatible with what members of the social world perceive to be plausible" (p. 215). In her theory of "life in the round", Chatman explains: "When people seek information only from others much like themselves....their world has limited range of possibilities" (ibid, p. 215).

Two main methods are used to assimilate new technologies. The first entails the gradual and random exposure of the population to the new technology, for example, through the dissemination and sales of computers and short training programs focusing on uses of the new technology. This is obviously a limited method when applied to groups whose economic situation and/or cultural worldview prevents them from using the new technology. As this method is dependent on general competencies, it also entails the risk of promoting the formation of a new elite comprised of the owners and experts of these technologies.

The second method employs initiatives of educational systems. Despite its advantage, assimilation through this method is limited to individuals attending such institutions due to its nature as a structured and controlled curriculum. Furthermore, some planned educational efforts fail to take into account the specific needs of different social and cultural population groups, ethical issues or attention to the significance of the informed decision-making. Although some international programs for technology assimilation, such as the ECDL (European Computer Driving Licenses), have been developed in recent years, these programs generally target an already aware and interested group, and are also limited to the technical aspects of the assimilation process (Munnely & Holdan, 2000).

The State of Israel illustrates the problematics involved in assimilating information technology in a multi-cultural society. Israel is comprised of diverse cultures of Jews, Moslems, Christians, and more recently, foreign workers especially from the Philippines, Romania and China. Even the country's Jewish population is varied, comprised of Israeli-born and immigrants from Eastern Europe and North Africa, with a minority from central Europe and the English-speaking countries. In the last thirty years, large waves of immigrants from Ethiopia, Russia and other Former Soviet Union states have arrived. The Jewish population is also segmented by religion: The majority of the population is secular, although many respect, honor and wish to preserve ancient Jewish traditions. Religious Jews are further divided into several sects: Orthodox, Modern Orthodox, Conservative and Reform Jews, while Orthodox Jews themselves are divided into several streams. The languages spoken in Israel are Hebrew, Arabic, Russian, Yiddish, Amharic and English. Although the information behavior of the various population groups has not been studied to date, different mentalities and perspectives are clearly involved. This is especially prominent in Orthodox and other conservative groups, where most decisions follow the religious leader opinion, and access to other information channels such as the television or the internet is frequently forbidden. Internet usage rates in Israel are relatively high. According to January 2004 data, of 6,700,800 inhabitants, 29.8% (2 million) individuals use the internet (Internet Worldstats, 2004), most of them are concentrated in high socio-economic status cities in central Israel (Eitan,2001).

## The Concept of "Social Information Science"

Even if a considerable share of the population uses the internet, the question is whether the majority of this diverse population understands or is ready to understand the options embodied in access to information and information sharing. In this complex reality, the cultivation of an awareness of information-based decisions requires special-personalized- information services and special qualified professionals. To this end, the author developed a new scientific discipline for MA and PhD students in the field of information science, designated "Social Information Science." Service delivery is planned to be conducted through social information banks or desks, and characterized by its one-on-one format relating to the individual's unique circumstances. Social information services are based

on the belief that information provided by a mediator in an area which is highly important to the client, indirectly exposes clients to information sources and the need for informed decision-making based on a rational selection process. The present paper focuses on the underlying rationale of this new field rather than the contents of its curriculum, which are discussed elsewhere (Baruchson-Arbib, 2000a) and are updated on an annual basis to incorporate changes in the field of social information in Israel (Department of Information Science, 2004).

The field of Social Information (SI) addresses several areas: theory development and the application of all aspects of retrieval and processing of social and medical information, including primary information (names and addresses of organizations, websites, relevant articles, etc.) and supportive knowledge (belle letters, stories, movies, etc.). The field also addresses information needs, ethical and legal issues, information seeking behavior in multi-cultural societies, and the development of special institutions and services, such as SI banks, SI sections in school and public libraries, SI desks in hospitals, SI sections in community centers, and private SI services (Baruchson-Arbib, 1996b).

The goal of this new field is not to establish additional information services, but rather to create an atmosphere in which individuals become accustomed to solicit the assistance of an independent consultant to obtain information concerning social and medical problems. The consultant-mediator helps the client chart his or her information needs and identify solutions to actual problems or dilemmas. This method offers the following benefits: Individuals are exposed to the practical significance of information, new information sources and technologies, as well as the need for knowledge-based decision making. A substantial effect is anticipated as a result of the exposure to information and to the potential of technology, due to the very personal and vital topics involved and the highly motivated state of the individual seeking information.

In many societies, individual routinely consult mediators in many dimensions of life. We recognize our need to locate information and consult mediators such as investment counselors, travel agents, real-estate brokers or school counselors. However, faced with a social or medical problem, especially an unfamiliar or ambiguous condition, no familiar routine exists. The path of locating appropriate information is paved with anxiety, to say nothing of expenses. A person who retires from his

job, for example, can benefit from information on his social rights, options for work or volunteering, information on leisure activities, support groups, senior citizen homes, self-help organizations and social clubs, to say the least. If the individual has a medical condition, he will also need information on his illness, including treatments options, technical devices, and support. In the absence of a possible cure, he will need to know how to maintain his optimal state of health. He might also be interested in the latest science news relating to his condition, on a continuous basis. He would probably appreciate a book or film about a person his age coping with a similar condition, and enjoy similar sources of support or insight. The inclusion of supportive knowledge in the new service was based on an appreciation of the major role on individual's mental state and coping, in the context of social and medical problems. To efficiently and effectively find, access and utilize all this information, individuals require basic preliminary competencies in information technology applications, knowledge of information sources, data retrieval skills and strategies, and assessment rules for selecting credible information. In addition, individuals should be capable of planning search strategies by outlining aims and research sources. Individuals would also be advised to familiarize themselves with the appropriate literature as a source of insight. In addition, individuals must be fluent in the language of the sources and familiar with related ethical issues, such as the problem of junk mail or free information that could lead him to misguided decision making.

As internet technology assimilation proceeds in the current transition period, mediation services rendered by academically-trained professionals are required to enable the aforementioned retiree, or any other individual who lacks adequate information skills, to function productively and enjoy the benefits of access to information. Such professionals should be well-trained in conducting "helping interviews," and familiar with information sources, ethical problems and issues of diversity pertaining to information transmission and sharing. By simultaneously establishing socially-oriented information services in multiple community institutions such as libraries, schools, community centers and hospitals, we can create a climate in which the majority of the public comes to recognize the significant role of information.

The rationale of Social Information Science goes beyond the traditional perspective of librarianship that aims to disseminate information and help

people obtain relevant data. More than a program for supplying information, Social Information Science is an educationally-oriented concept that uses information delivery as a mean to gradually expose all population segments to the process of information selection and informed decision making, and gain an appreciation of how direct information and supportive knowledge can enhance the quality of life.

The implementation of this concept requires the integration of the following five elements:

1. The Mediator or the Social Information Scientist- a professional holding a BA degree in the social sciences and a MA degree in social information science. On the basis of his or her knowledge and understanding of information sources and information behavior, the Social Information Scientist delivers information from a neutral, unbiased perspective. Even internet-oriented individuals can benefit from information mediators: When a social or medical crisis strikes, individuals' anxiety and apprehensive state of mind undermine their ability to plan a search rational strategy or calmly evaluate large amounts of information. Secondly, as many reliable internet-based information sources have shifted to a fee-based business model, reliance on an expert information mediator may become the most cost-effective method of obtaining reliable information.

2. Diversity of Location - The simultaneous establishment of SI banks, desks and sectors in a wide range of community institutions and private sector resource centers, will expose the majority of the population, members of diverse age and status groups, to the significance of information and transform knowledge-based information search needs into an integral part of everyday life in the 21st century.

3. Service Delivery – SI services are grounded in an empathetic, compassionate approach, based on in-depth interviews, to offer options, alternatives and assistance to individuals in planning a logical step-by-step process and ultimately, conduct evidence-based decision making. From this perspective, SI services constitute an informal learning process, which some users will hopefully adopt and independently apply in the future. Assimilating the terminology of information society would be considered significant progress and a first step in attaining equal status in the emergent virtual world.

4. Information sources – In-depth knowledge and familiarity with available printed and electronic

information sources in relevant languages and appropriate levels of literacy for each population group, in addition to familiarity with both primary information and supportive knowledge sources. This concept is based on the rationales of psychoneuroimmunology and bibliotherapy, which claim that support and understanding reduce stress and allow individuals to make decisions in a rational and calm, rather than stressful and anxious, state of mind. This in itself is a not insignificant achievement in our stressful, anxiety-ridden society (Baruchson-Arbib, 1996b; Hynes McCarty and Hynes Berry, 1986; Vollhardt, 1991). In addition, use of literary sources as illustrated through bibliotherapy, for example, ensures that modern society remains linked to the sources of human culture in literature, poetry and cinematography. This would be a significant contribution to the sought-after balance between technology and humanity.

5. Marketing and Image - Our aim is to establish a – prestigious- yet accessible service for all population groups, by creating a unique 21st century climate in which obtaining information through mediation is a common procedure. This fee-based service is expected to generate respect for informed mediators, for the power of information and, especially, for the users. Although graduated fees should be offered to accommodate economic need, the service provided should be uniform in quality for all users who enjoy equal access to information.

The integration of these five components will help cultivate a mature, rational audience of information users and responsible decision-makers who have a deep understanding of the significance of information. By promoting awareness-based engagement in information in the context of personal issues, we will be able to prevent digital and mental divide. The social information approach is an additional layer added to previous attempts at formal and informal assimilation projects. As these efforts, activities and discussions proliferate, we will make progress in building a more aware, responsible and equal information society.

## Social Information Science in Israel - Reality and Zeitgeist

Our students are encouraged to apply their social information skills in their workplaces: school and public libraries, community centers and hospitals. Many of these institutions already have the infrastructure for SI services, and the development of a full-service SI desk requires no more than minor

investments. Our students are also trained in the preparation of the infrastructure for such services, including building websites for a variety of social and medical needs, and conducting information interviews, taking into account differences in language, beliefs, attitudes and customs.

In the past 8 years, our department has also been extensively engaged in theoretical and experimental studies conducted by members of our academic staff and graduate and post-graduate students. Most studies aimed to examine whether the State of Israel has a genuine need for individual mediation-based services to promote information technology assimilation. Studies initiated by our department have found that very few community based information centers exist and public libraries generally fail to realize their potential in this field. A study conducted in Hertzliya confirmed the public's thirst for human contact in the context of information. The study conducted in this city, characterized by a relatively high socio-economic profile, found that when solving problems, most of the population refers to newspapers (36%), the internet (24%) and personal contacts (18%). However, when asked how they prefer to receive information, most participants noted the telephone and one-on-one conversations. (Shemesh, 2002; Shemesh, Baruchson-Arbib & Shoham, 2003). Additional studies found that the Israeli public is eager for self-help literature. There is a steady increase in this literature every year, especially in psychology-related topics, confirming a high level of self-awareness and desire for independent problem-solving tools (Baruchson-Arbib & Kivity, in press). Other studies found that health-related web-sites in Israel fail to meet multi-cultural needs, as most are in Hebrew rather than other spoken languages (Baruchson-Arbib & Megidov, in press). A similar situation was found in hospital websites which service the majority of the public in Israel (Booch, 2003). Hassin (2002) found that most of the employees in five Israeli Health Information Centers for patients had no training in information science or librarianship. These information services also lack the financial resources to support adequate advertising.

Another study (Baruchson-Arbib, 1998; Baruchson-Arbib, 2002b) focused on the establishment of a "self-help section" in a special corner of a school library, located in a low socio-economic community. The "self-help section" was a great success and attracted students who had never previously shown any interest in reading books or accessed internet sites about social problems (relationships, drugs,

and other problems of adolescence). Although average readership rose by 32%, the most impressive increase was noted among young boys who never previously visited the library (123%). With its innovative, original design, the "self-help section" maintains maximum privacy and has evolved into an extremely popular place for the youngsters. Completion of this study, which has been extended to several schools, is anticipated this year. If similar results are obtained, it will be clear that libraries can be effectively used as a means of educating adolescents - our society's future - in the significance of information. Findings of other studies (Baruchson-Arbib, 1998; Baruchson-Arbib, 2000b) indicated that "aid organizations" are highly interested in developing information services with the assistance of a professional social information scientist, yet lack the resources to do so.

Another study, focusing on the introduction of computers into religious communities, found that the modern orthodox population has even introduced computers into yeshivas (schools concentrating in religious studies) (Hiller Daum, 1996), reflecting their adaptation to modern times. Some religious communities also adapted the internet to their needs by creating various filters to restrict access to "immodest" or "immoral" websites. Several websites as "Kipa" and "Moreshet" are administered by members of the religious population, and include a "Responsa" section (Q &A) directed to Rabbis. Although the process is virtual, the rabbis are well-known figures in the modern Orthodox community (Zarfati, and Bleis, 2002). Notably, Bar Ilan University, a religious institution, initiated the Responsa Project, based on its understanding of the significance of a digital repository of knowledge. The Responsa CD is a digital database of the entire foundational literature of the Jewish people, including the Old Testament, Talmud, legal literature, customs and Responsa literature.

These studies confirm the desire of the Israeli public to adopt information technology, on one hand, and the need for a mediator to provide individual service and customize information sources to the spoken languages in Israel. It is equally clear that Israeli society is prepared for this new scientific and practical discipline of "social information science".

New ideas become established when society is ready for them. Although social information banks do not yet exist, the "Zeitgeist" is clear. Israeli society is gradually attaining an appreciation of the need to establish personal information dissemination

services alongside the internet. In recent years, we have witnessed activities outside the academia, which reflect theories of social information science. One national initiative to bridge the digital divide is "Lehava", a project financed by the Israeli Ministry of Finance. "Lehava," which operates a large number of free internet training centers, was conceived with the aim of delivering social information, especially on citizens rights, and the intention of having the young pupils bring their family members to the center (Lehava, 2004). The J.D.C. (The America Jewish Joint Distribution Committee) for example, supports the need for a "welfare information scientist" and intends to train handicapped persons as social information scientists for other handicapped individuals (Ben Natan, 2002). The recently established "Shamir Project" is a national center for medical information, designed to offer services by representatives who speak several languages, with the appropriate background and familiarity with the health-care system. The initiators of the project noted "Although information is available on the internet, the abundance of data makes it very difficult; Furthermore, most people prefer to obtain information from a skilled individual with access to authorized information" (Levkoviz, 2004).

The current "zeitgeist" is directed to the need for life management on the basis of knowledgeable decisions grounded in relevant information. In the USA and Europe, this has been evident for several years, and is reflected in the development of fields such as "preventive medicine", and "patient education," as well as the extensive efforts of the European Union to establish outstanding social websites (Europa 2004). As Gann (1992) noted: "People are no longer content to be told what is good for them: They want to access to information which will enable them to weight up risks and benefits and to make informed choices between options in health care"(pp. 545-555).

We have come a long way from Gutenberg's printing press to the world wide web. In the past, literacy was the key to reduce social divides. The internet, however, highlights the potential to raise awareness beyond literacy, or the use of computers. The huge amounts of information now available to modern man may point to a new phase in human evolution: the evolution of individuals who manage their lives on the basis of knowledge, information, moral and ethical values and personal responsibility. To provide an equal starting point for the majority of individuals in our information society, it is not sufficient to provide technical training. Our aspiration should be

to bridge not only the digital divide, but to prevent potential mental divides, through smart usage of the internet and the development of personal information services as suggested in this paper.

In assimilation projects, no uniformity is either intended or desirable: The aim is to create a situation in which individuals have a similar starting point in life, which enables them to operate in a knowledge-based world. "Social information science" is one of several concepts which can expand opportunities for individuals to join the information society with equal skills and prospects.

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Robert Beckett

## Communication ethics and the internet: intercultural and localising influencers

### Abstract:

In the information-technology powered twenty first century a general demand for more effective communication is driving people to question the present, examine the past and to prognosticate the future. The 'unique global media-information system' - the Internet- is the central fact of a vast new complexity of communication (mediated and unmediated) that is driving social-economic-political-religious- technological change (see <http://www.5systems.net>) at a rate never experienced before. The premise of this paper is that the Internet can be better understood as the first complex global media with both democratic and authoritarian possibilities, the full extent of which are still emergent. In respect of the symposium question, this paper suggests that Internet embedded communication theory can be used progressively as part of a widening and deepening approach to intercultural conversation, dialogue and debate. In theory, the localising nature of the Internet can be read as part of a greater movement towards communitarian and community centred self-governance, local democracy and social self-sufficiency. There is considerable scope for a new theory of society founded in localised 'in-community communication' practice supported by international human rights and effectively responsive to the asymmetric global information environment and congruent with newly democratised local structures of self-governance.

### Agenda

The Internet

Localising and cultural influencers

Conclusion

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## The Internet

This paper seeks to outline a theory of communication founded in the human ability to communicate and international human rights. The 'community of communication' (K.O.Apel 1972) offers an identity for all human being, communication being the most significant skill humans each possess and the essential fact of human collectivity (McQuail 2000.) The elision of the key human skill with the world's most powerful communication technology is more than significant; it is defining of a new global civilization, potentially linking all people through the Internet. Total estimated population of world wide internet users is presently 400m; source Nortel Networks 2000. This new global-virtual community at once links numerous and emerging 'communities of interest', while also identifying old communities of 'self interest'. The 'digital divide' is the counterpoint to this reality, with the democratic rights to communicate efficiently, electronically and globally of nearly 90% of humanity limited by the unavailability of Internet technology. However, the digital divides also offers a benchmark from which a renewed commitment to local and international democracy can be judged.

The 'Age of Information' can be traced to the invention of the computer in 1946 but it is also connected to the end of the industrial age, brought about by an illegitimate philosophy of domination and imperialism captured in the events of two World Wars and the subsequent rejection of industrial-modernist values by leading thinkers (Foucault 1966, Habermas 1990, Ormorod 1994 ). 1946 incidentally is the year of the appointment of the first Chair in communication; Wilbur Schramm, Professor of Communication at the University of Illinois (USA). In the subsequent sixty year move towards 'informationalism', great shibboleths of the past have been successfully challenged or even overturned. From the certainty of science, to the consumption model of economics, from the inequality of race and gender to their equality, from basic human rights to inclusion of diversity as a centre plank for legislation. As Henry Boisot makes clear;

"The second half of the twentieth century will be remembered as the period in which information came to replace energy as the central fact of life in post industrial societies." (1995:9)

In the teaching model(s) below, some of critiques of modernism are laid out, which due to space, are not pursued in description or analysis. The 5systems model allows for a systematic structuring of information to enable the elaboration of complex arguments, sometimes at the expense of detailed conceptual development in the present.



**Figure 1 Information age concept analysis © ICE 2003**

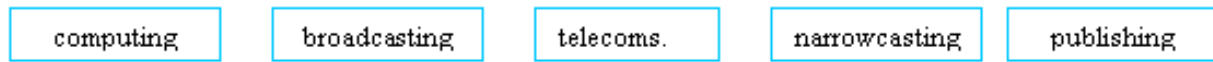
New ideas, however, challenge authoritarian structures that solidify 'information control' and 'ideological orthodoxy' built and secured in another era (Habermas 1990). The information age, it is argued, cannot be subject to the partisanship and exploitation that troubled the previous industrial era, or face potential meltdown of a new global society, limited in potential through group and self interest. Terry Bynum and Simon Rogerson (1996) have identified computing as the key technology for which a new information theory is required. According to Bynum and Rogerson, such a theory should recognise the fundamental impact of technology on people's lives;

*"We are entering a generation marked by globalisation and ubiquitous computing. The second generation of computer ethics, therefore, must be an era of 'global information ethics'. The stakes are much higher and consequently considerations and applications of information ethics must be broader, more profound and above all effective in helping to realise a democratic and empowering technology rather than an enslaving or debilitating one."*

The powers of control held by authorities, institutions and corporations, it can be argued (Kennedy 2004) have been exponentially increased by convergent communication technologies, even while citizens have greater access and communication power through the 'interlinked

media'. Still, the imbalance in the favour of institutional power is significant, even while citizen

power is the unique centre for democratic legitimacy in the information age.



**Figure 2 Internet enabled convergent communication technologies © ICE 2002**

The importance of history to the analysis of local uses of the internet should not be reduced. Political, economic and personal self interest have often predominated in the design, development and use of communication technologies (Winston 1986). Misused, these technologies are central to various forms of undemocratic and uncivil exploitation. In this respect the Internet is liable to become part of an 'apparatus of control' rather than a 'liberating democratic technology', unless that is, the human rights to communicate are protected and upheld against powerful self, group and class interests.

In the UK, the extension of security and police powers (Terrorism Act 2000 and the 2001, Anti-Terrorism, Crime and Security Act) covers the use of personal records and the interception of electronic media. According to Liberty, the UK's leading Human Rights organisation, in the 2000 Act:

*"The polices and security services are now authorised to go through personal information held by public authorities (such as medical records, bank statements, school records, tax returns or inland revenue) even though no crime has been committed. Disclosure is allowed "for the purpose of any criminal investigation whatever" "*

The BBC's (British Broadcasting Corporation) rather dry analysis of the implications of the 2001 legislation also cause concern for civil rights:



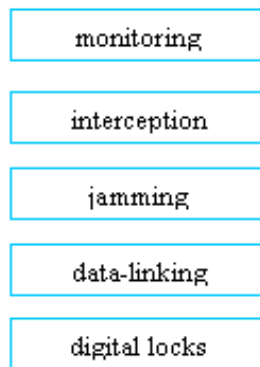
**Figure 3 Geo-continental groupings linked to internet © ICE 2002**

For instance, the newly legitimised 'security state' appears to be a central commitment by western some governments, which has serious implications for cultural and local democracy. It is the erosion of civil rights in the name of 'free states' that appears both paradoxical and a crunching low point in the struggle for emancipation by free citizens, founded in human rights. Allowing that liberal governments have given themselves powers to monitor, intercept and employ electronic means to routinely subjugate

*"The UK is the only European nation to have suspended article five of the European Convention on Human Rights which prevents arbitrary detention without trial."*

It is a grand paradox that in the name of freedom, the 'Mother of Parliaments' has given itself such powers as to so reduce a key principle of its formation. The right to protection from the State is one of the founding principles of all democratic societies (Kennedy 2004). In the information age, power, for so long concentrated in the hands of a few, is becoming more concentrated, due not only to powerful interests using information-communication technologies themselves, but because these same interests are also able to control the debate to achieve their goals.. If extrapolated over the global dimensions of the Internet, the size of the issue becomes clear. Which of the Geo-Continental groupings does most to protect not only existing rights, but new rights founded in new technologies? And which have tendencies to concentrate power though institutions possibly founded in an earlier age and unable or unwilling to reflect new information age democratic realities? At present, the questions of inter-cultural perspectives at the level of global Internet issues are to say the least academic, at least until common international law protects all citizens against unilateral harm by national states.

their citizens, the question occurs, what hope for the local the cultural and the personal realms? Everything in the public realm, using 'ubiquitous information technology' is or will apparently become state governed, state controlled or, more disconcertingly, controlled by those interests close to the state, i.e. private corporations?



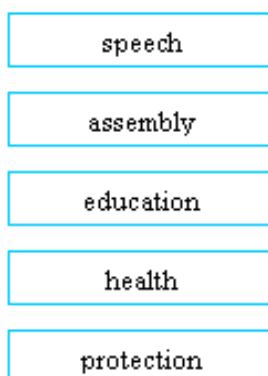
**Figure 4 Features of the security state © ICE 2004**

The Postmodern Information State is therefore in danger of de-stabilising the deepest principles of democracy, not because it is right in the sense of just (ice), but because the agglomeration of power through technology enables the State to achieve outcomes commensurate with its own ideology of power, resource control and class interest.

In the thoughtful words of Antonio Pasquali (1997);

*"We live an age of communication devoid of a morality of communicating." (1997:32)*

To offset this deeply troubling trajectory, requires all citizens to remonstrate and demonstrate to protect their fundamental human rights, through action, through speech and through continued critique of the powers that operate across our interlinked electronic lives.



**Figure 5 Summary of fundamental rights © ICE 2004**

In the discipline of communication ethics, it is recognised that only through inter-human communication, can such fundamental claims as human rights, be addressed and resolved.

*"Only those norms and normative institutional arrangements are valid, it is claimed, which individuals can or would freely consent to as a result of engaging in certain argumentative practices," Benhabib 1992:24*

To meet this condition, citizens require empowerment through democratic-argumentative processes, used either with technology or in unmediated environments, i.e. through face-to-face dialogue. The potential problem here is that for such activity to be legitimised and effective enough to be democratically justifiable and thereby to encourage genuine participation by citizens, it requires some support though institutional or legal mandate. This sets up a second troubling paradox. Can the forces of authority, control and power cede to 'democratic assemblies of citizens' their own decision making power and resource authority? Clearly, for localising and cultural issues there is a significant tension. If the localising and cultural factors are to be protected and allowed to emerge, the global-national and even regional dimensions of government will have to be proactive in this move, a shift which recent history suggests is unlikely to occur without certain restrictive caveats on the rights of communities to self-expression. This fundamental dilemma focuses the present debate on inter-cultural and localising influence of the internet. Can free citizens use the internet as part of a wider communication process that liberates them from powers and authority that seek to undermine and restrict fundamental rights, while they are also engaging in communicative communities that support and grow new cultural understanding and diversity founded in these same principles?

## Localising and cultural influencers

The implication of a 'non governable distributed media' that no single organisation or authority can control, or own, is liberating, although ideal, as argued above. Giving local communities, marginalised groups, and most importantly individual citizens, the power of assembly and free speech through an interactive global media should be a great democratic achievement. However, a tension exists between the powers that operate and the formation of new local powers that might emerge through the electronic networks. Only local communities and assemblies can respond to these 'strata of control'. In the information age, only the level of local democracy is sensitive enough to the wishes of citizens to be in a regular and socially founded theory of rights. National politics founded

on five yearly cycles in age of 24/7 information, now appears outdated and unlikely to reflect the increasing democratic demands of educated citizens living in millions of independent communities. Clearly the nation state has a role in connecting

agendas to the regional and sub-regional strata of 'democratic demarcation (in the model below) but no longer can it hold to itself such enormous power, thereby restricting the rights of citizens to govern themselves.



Figure 6 Demarcation and flow of power in the information age © ICE 2002

The widespread use of the internet by 'cyber-citizens' implies and enables a new level of self-education that should support communities wishing to cede the principle of self-governance back to themselves, ensuring self control through self governance within a framework of universal human rights.

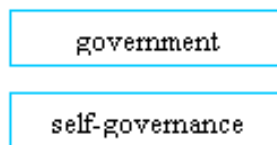


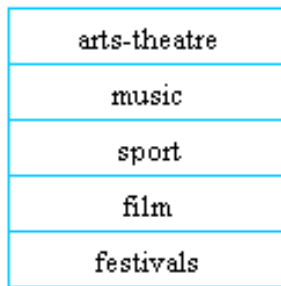
Figure 7 Old and new principles of democratic participation © ICE 2003

This paper argues that only by allowing all citizens to govern themselves, can 'cultural and localising influencers' be established, protected and retrieved. Understanding that civil and human rights encode citizen participation in the key dimensions of the informational age (see model below) in effect communities can provide their own solutions to all sorts of democratic debates, thereby re-empowering cultural diversity and local integrity. For instance, in the domain of education, why should individual schools participate in national education frameworks, unless it is in the interest of local citizens to do so? Why cannot local curricula be developed to enhance local community activity, i.e. in trade and industry or cultural pursuits, or in the teaching of language which may have significant implication for local people due to geography for instance?



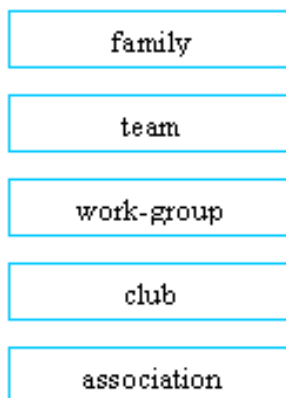
Figure 8 Community rights in the information age © 2002

From self-governance we can extrapolate, self-education, local welfare, local health solutions and even local entertainment – something that many in the western world particularly, may see as a positive aspect of 're-culturalising community' and a rebalancing of local culture in response to the perceived dominance of 'global capitalist culture'. Clearly, there are aspects of culture that support local tradition, history and economic circumstance, all of which can be linked to global-regional or national strata within the ICE model of the 'electronic society'. In actuality, there need be no loss to local communities by being 'out of touch' or through becoming isolated. Strengthening local democracy should additionally lead to more focussed activity at the national and regional levels, offering support to local community diffusion and cultural diversity as well as international exchange and trade.



**Figure 9 Culture as tension between global-local © ICE 2004**

A critical question might be framed, how can the local dimensions of culture to enriched through he internet and its informational possibilities? In answer, it may be useful to identify different groups within local communities who can benefit from use of the internet and then to postulate what benefits they may each derive. The model below identifies a number of local groupings, including the fundamental social unit, the family. It is possible to suggest different uses for the internet, by each group and thereby to identify new and valuable cultural developments. For instance, self-help for families in health or self-education can surely improve family life and well-being. Sports clubs can and do administer themselves more efficiently through the Internet, aiding one of the fastest growing dimensions of cultural activity, the locally founded but internationally financed sports industry. And so on.



**Figure 10 Community groups © ICE 2002**

In considering cultural diversity, it might also be worth considering the economic value of culture which has for many years been exploited by international capitalism, but which the Internet should encourage as a form of local economic development. The complementary aspect of this argument, is that post modern capitalism

increasingly understands value in terms of intangible assets, which culture embodies in many ways (Beck 1992). The local recipe for the Lincolnshire sausage is now, not merely a protected economic asset of the people and area of Lincolnshire, it is a cultural-economic artefact around which to build trade, tourism and local community pride.



**Figure 11 Intellectual property as cultural influencer © ICE 2004**

The internet also offers new capabilities to many groups, capabilities that increase cultural and social activity by improving their efficiency in several ways | (see model below).



**Figure 12 Enhanced capabilities for internet communities © ICE 2004**

There is much hope for the strengthening of local communities through economic activity, enabled via the internet, that build economic value for communities that have otherwise been marginalised, out of favour, or geographically isolated. The Internet holds out value for the integration of numerous old and new communities into a formal structure of locally based governance and local economic-cultural prosperity, without either the weight of national government, or the limits

imposed by geographic locality. The Internet can and should enable both strong localism and links to international networks that support local diversity.

## Conclusion

The internet is a unique media, sharing qualities and values that are essential to a UNIVERSAL-RELATIVE democratic future founded in the debate on human rights. Potentially, all people can be included in democratic discourse and self-governance using a media which is interactive and dialogic – offering at once the means to communicate and to resolve informational complexity through its unique ability to construct meaning in communicative process. Think of the difference between television and the Internet, the former being single minded and monological, the latter being many-minded and dialogic, i.e. capable of refining meaning through interaction in the process of communication. The

Internet's ability to achieve immediate or instantaneous response also indicates a future where cultural diversity is respected because the great systems of media can respond to individual-local initiatives and to changing local circumstances. Such responsiveness can also support an egalitarianism that the Internet promotes, while identifying areas of inequality where there exists a lack of communication and a reduced information environment.

The Nation State is the central political reality of a previous era and is slow to diminish its own role in the face of new distributed information realities, because it is tightly bound in with an older reality of 'domination by elites' rather than principles of self-governance. However the new reality is citizen power, where the internet can and should offer a new means of self-governance and self-democracy that are the bedrocks of cultural diversity and diffusion.

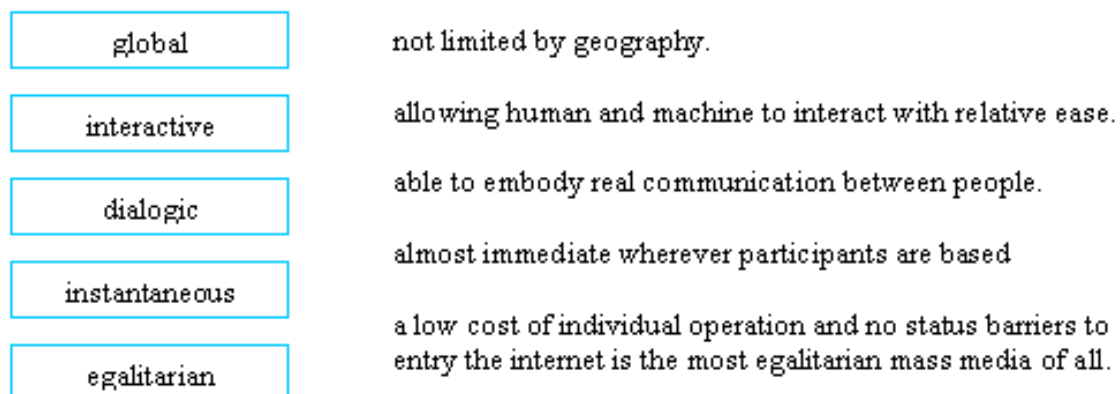


Figure 13 The key benefits of the internet (proposed) © ICE 2004

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Peter Bittner

## On Professional Informatical<sup>i</sup> Action

### Abstract:

Our patterns of thinking and acting (as “computer professionals”) must be out in the open, so as to expose informatical action to criticism by the society as a whole. We are responsible for the provision of knowledge about these patterns. This article criticizes the (defining) use of the trait approach and the functional approach to “profession” in the debate on professionalization in the field of computer science (informatics). An attempt is made to show how informatical action might be better understood by examining the concept of profession in a multidimensional approach, sensitive towards the various perspectives. For this purpose it becomes necessary to examine first of all the various perspectives on the concept “profession” and secondly the debates on professionalization in other disciplines.

### Agenda

Preliminary Remarks

Trait approach and functional understanding of “profession”

    Critics from within Computer Science

    Critics from within Sociology of Professions

A Multidimensional Approach towards the Problem

    Sociology of Professions: Anglo-American Approaches

    Sociology of Professions: German Approaches

    The Debate on Professionalization in Pedagogics

Closing Remarks

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*"Our head is round so our thinking can change direction." (Francis Picabia)*

## Preliminary Remarks

This article<sup>ii</sup> criticizes the (defining) use of the trait approach and the functional approach to "profession" in the debate on professionalization in the field of computer science (informatics). An attempt is made to show how informatical action might be better understood by examining the concept of profession in a multidimensional approach, sensitive towards the various perspectives. For this purpose it becomes necessary to examine first of all the various perspectives on the concept "profession" and secondly the debates on professionalization in other disciplines.

## Trait approach and functional understanding of "profession"

The debate on professionalization in the field of computer science frequently follows a *trait approach* [indikatoretheoretischer Ansatz] (Cogan, 1953; Greenwood, 1957; Millerson, 1964; Hesse, 1968) or a *functional approach* [funktionalistischer Ansatz] (Parsons, 1939, 1951, 1968; Goode, 1957, 1972) to "profession". Profession is defined as an occupation requiring academic preparation with long specialized schooling and a notable increase of rationality when pursuing action goals. Competencies are limited clearly by the task the client assigned and are oriented towards important individual or collective problems. Personal interests (such as likes or dislikes) are not supposed to have a bearing on professional actions. According to Goode the required high autonomy expresses itself in (a) the right to teach and educate junior staff, (b) the right to exercise professional self-control, and (c) the (autonomous) structuring of professional routine. Also included is a specific ethic, protecting clients with self-incurred obligations by all members of the profession.

### Critics from within Computer Science

Schinzel & Kleinn (2001) and others have thoroughly examined the lack of compliance with the traits (which were said to represent the common core of professional occupations) in the field of computer science.

- "Core of the discipline", frequently insisted on for professions: Neither computer science knows, what its "core of the discipline" should be – nor it's clear whether this core can be created at all, exempting perhaps Theoretical Computer Science.
- A clearly defined work area is insisted on for professions: Currently computer science is continuously opening new actuation areas. On the other side, application fields draw nearer towards computer science.
- Extensive autonomy is insisted on for professions: However, IT-Professionals experience strong pressure to comply with schedules in many projects. This haste results in unreliable analyses, products that are prematurely handed over to the customer, incomplete compliance even with legal obligations (among others Hornecker & Bittner, 2000; Ford & Gibbs, 1996).
- Professions require a "long" academic preparation: Nowadays access to jobs in the ICTs does not call for university or college education; no (formal) education may even be required. There is no "knowledge monopoly", and it is debatable whether closing the field is to be desired. Outsiders "crossing over" can be important whenever they introduce their practical knowledge of the application's working environment into projects.

### Critics from within Sociology of Professions

The trait approach and the functional approach have been often criticized (among others Johnson, 1972; Waddington, 1996). Some points of criticism are:

- Within the trait approach no underlying selection and structuring principle for the definition of professions are recognizable (cf. Johnson, 1972).
- Due to stricter self- and peer-control, professions are less sensitive to social control and criticism by non-professionals. We should avoid this kind of seclusion for computer science by all means.
- It is hardly feasible to register the complex identities of groups that interact with a multitude of addressees, their sustainers, and society as a whole by lists of attributes (traits).
- Both approaches provide little insight on the activities of professionals and their

corresponding patterns of thinking and acting.

Furthermore the international discussion is made more difficult by the fact that obligations in the USA usually professionalize bottom-up, in German-speaking countries top-down (Koring, 1999: part 6.4). Due to these structural differences it is not viable to simply adopt Anglo-American terms of profession.

## A Multidimensional Approach towards the Problem

This criticism becomes even more convincing in my opinion, once traits are used (purely) for definition. The *profession* attribute is then used or becomes pertinent only in case of a sufficient number of verifiable attributes.

This is not an adequate view in the contexts of informatical action. Neither does it contribute to our understanding of informatical action, if we use this as positive attribution. I therefore propose a different view on "profession", one that is multidimensional and open for various perspectives. On the one hand I want to undertake an "expedition"<sup>iiii</sup> through existing research, based on articles by Pfadenhauer and Mieg (Mieg & Pfadenhauer, 2003; Pfadenhauer, 2003). On the other hand I would like to demonstrate by means of examples, how the debate on professionalization in pedagogic can be made fruitful for our understanding of professional informatical action.

### Sociology of Professions: Anglo-American Approaches

I have already mentioned the *trait approach* and the *functional approach*. It is the main idea of the functional approach that professions take care of central social obligations, as for instance medicine being responsible for the citizens' health. Undertaking a similar task (within an occupational community) is linked to special obligations (considering the public welfare) as well as to special privileges (e.g. autonomy or a higher than average income). It may well be asked whether the profession is a necessary pre-requisite to carrying out this specific service, and, whether all professions are to be considered as fulfilling central social tasks (cf. Mieg, 2003).

Using the *power approach* [machttheoretischer Ansatz] (Johnson, 1967, 1977; Larson, 1977),

professions are understood as holding power in the economic and societal area, public welfare being ideology, which conceals the fact that professions define customers' desires and provide the services to fulfill them. The power approach and the functional approach only appear to be controversial:

*"We have always known, from sociological and general literature as well from everyday experience, that professionals and professions act with a dual motive: to provide service and to use their knowledge for economic gain."*  
(Krause, 1996:ix – quoted after Evetts, 2003: 50)

Evetts (2003:50) states, that "the key issue which this dual character raises, both for theories of professions as well as for considerations of aspects of professional performance, is how to maintain this balance."

Focusing on informatical action the *interactional approaches* [interaktionistische Ansätze] and their methodologies may well be very valuable. They concentrate on the professional's relationship with the client, analyzing the interaction between professional and audience (client, society). Professionals claim to know more about certain specifics and especially about what promotes the clients requirements (cf. Hughes, 1965). Upon consideration of the special relationship between client and professional, however the processes of professionalization may easily be forgotten about.

### Sociology of Professions: German Approaches

Based on Mieg (2003) three important German approaches shall be briefly described.

Oevermann's *structural approach* [strukturtheoretischer Ansatz] (1978, 1983, revised 1996) is similar to the *functional approach*. It presumes central functions for professions in society. However, only the provision of truth, consent and therapy are considered as central social tasks, crisis-handling as a general function of professional activities being required exclusively in these areas. In order to cope with a problem successfully, scientific as well as hermeneutical and case-specific competencies must be connected in a manner that makes available practical interpretation and strategies for action [realisierte Professionalität]. In addition to this interpretational competence [Vermittlungskompetenz] professionals are required to comprehend the specific logic of interaction pertinent to their profession. Barristers, e.g., need

to understand the logic of court procedures, this being their professional arena. Oevermann's methodology *Objective Hermeneutics*, is used by Hofer (2002) to interpret the consulting component of software development in the conflict between technical problem-solving and vicarious crisis-handling.

Stichweh (e.g. 1992, 1994) explicitly applies Luhmann's *system theory* to professions [systemtheoretischer Ansatz]. He emphasizes the transitional character of professions: "Professions are a mechanism of transition from the society of estates of early modern Europe to a functionally differentiated society of modernity" (1997:95). Society's functional systems experience the formation of performance roles and complementary roles (clients, mandatators). However, we do not find roles for professions in all functional systems. Stichweh states that professionalization takes place

*"wo eine signifikante kulturelle Tradition (ein Wissenszusammenhang), die in der Moderne in der Form der Problemperspektive eines Funktionssystems ausdifferenziert worden ist, in Interaktionssystemen handlungsmäßig und interpretativ durch eine [...] spezialisierte Berufsgruppe für die Bearbeitung von Problemen der Strukturänderung, des Strukturaufbaus und der Identitätserhaltung von Personen eingesetzt wird" (1992:43).*

*(where a significant cultural tradition (a context of knowledge), elaborated in modern times in the contour of a functional system's perspective on a problem, is used by a specialized occupational group acting and interpreting within a system of interaction in order to cope with problems of structure, structural change, and the preservation of personal identities – D.B.).*

He places the interpretational competence (which is similar to Oevermann's vicarious crisis-handling) in the center of his theory on profession and considers it as the core of the reality of professional action.

Fritz Schütze (1992, 1996, 2000) is a prominent representative of an *interactional approach* [interaktionistischer Ansatz] in the sociology of professions. By means of interactional analysis he intends to reveal "das Paradoxe, das Zerbrechliche, das Fehlerhafte" (the paradoxical, fragile and error-prone quality) of professional action (cf. Schütze, 1996:187). Problems

*"treten immer dann auf, wenn eine Profession nicht mehr systematisch an der (Selbst-)*

*Bewußtmachung und der permanenten Berücksichtigung der unaufhebbaren Kernprobleme des professionellen Handelns arbeitet" (Schütze, 1996:187).*

*(arise, whenever a profession ceases to consider systematically its (self-)consciousness and permanent deliberation of undissolvable principle problems of professional action – D.B.)*

Schütze names several undesirable developments amongst others in this context:

*"gefährliche Vereinfachungstendenzen bei der Anwendung abstrakter Professionskategorien auf Einzelfälle, die Mystifizierungstendenz professionellen Wissens und Handelns, die Tendenzen zum Vergessen der Interaktionsbasis zwischen Professionellem und Klient [...] sowie die Tendenz zur Aushöhlung der Interaktionsreziprozität in der sozialen Beziehung zwischen Professionellem und Klienten [...] durch Verführungen, die mit der Machtposition des Verfahrenswalters [...] gegeben sind" (1996:187).*

*(dangerous tendencies to simplify when abstract professional categories are applied to a particular case, a tendency to mystify professional knowledge and action, tendencies to disregard the basis of interaction between professional and client as well as a tendency to undermine the reciprocity of interaction during social relations between professional and client due to the temptations offered by the power position of being in control of the process – D.B.)*

Amongst the paradoxicalities of professional action, Schütze counts the prognosis of project development on an insecure empirical basis, the interpretation problem [Vermittlungsproblem], and the choice of the moment for intervention (cf. Schütze 1996:194).

Another approach should be especially pointed out within the interactional approach: the staging approach [inszenierungstheoretischer Ansatz] (amongst others Pfadenhauer, 2003a, 2003b), who considers professional achievement primarily as the presentation of performance. Mieg (2003:36) states, that Goffman's "The presentation of self in everyday life" (1959) is an important basis for this approach. Goffman's distinction between stage and backstage may help in the attempt to examine the detachment in time, space and personnel between requirements analysis (customer involved) and software production (customer not involved)

## The Debate on Professionalization in Pedagogics

Two works of Koring (1996, 1999) should demonstrate how the debate on professionalization in pedagogics provide impulses for our discussion on the professionalization in computer science.

Koring's (cf. 1999:part 6.8) understanding of professional pedagogics (as "tackling" with Oevermann's work) is based on two regulating ideas that can be applied to computer science:

- Computer scientists should aim to empower clients to self-acting and autonomy.
- They should aspire to the structure of a maieutic (or Socratic) computer science, e.g. computer science that takes up existing competences productively.

Computer scientists should provide situated arrangements that facilitate self-acting or advance it. The client must be able to deal productively with the (computer-)system-to-be and the cultural changes it will entail – otherwise the computer scientist's task as an "advocate" is not feasible. Acting professionally, the computer scientist structures and accompanies the process in which the clients articulate, for instance, problems and preconditions of their work processes. Computer scientists interpret this newly articulated significance concerning the relation to the subject, person and the design process itself. Those informatical interpretations provide the addressees with a current point of reference within the design process.

Originating from the discussion in General Educational Science, Koring (1996:314ff.) offers an insight into the argument on pedagogical professions within the discussion of educational scientists. Similar questions arise for computer science, once we endeavor to build bridges between computer science and research on professions in order to better understand professional informatical action.

- A profession-related computer science may come somewhat closer to professional contexts of informatical actions by focusing on certain topics, such as a connection between empirics and reflection in computer science, general structures of informatics, a grammar of informatical action (using Koring's arguments).
- The task-oriented variety of a theory of profession (related to computer science)

grapples with the question how far specifics of informatical professionalism have been elaborated up till now (using Hornstein & Lüders' arguments, 1989). At the core lies the hermeneutics of informatical problems, in order to discover a material definition of what informatical professionalism might be.

## Closing Remarks

A multidimensional approach towards the "profession" problem with sensitivity for the various perspectives provides (new) impetus for the theoretical discourse in computer science, raising questions<sup>iv</sup> such as:

- How are the orientation towards public welfare and economical actions linked in informatical actions?
- Which structures exist for the interaction between computer scientists and the audience (clients and society)? Which "mechanisms of interaction" dominate? Which way to go towards interactional analyses?
- How complete is our understanding of informatical action in the conflict between technical problem-solving and vicarious crisis-handling?
- How do we, in our role as instructors, "construct" competence in translation and interpretation?
- What is our approach towards the paradoxical, the fragile and erroneous in informatical action?
- How do we reach good quality situational arrangements? What guides us in our informatical action when we have to intervene?

Quite consistent with a General Computer Science (cf. Wille, 1999; Bittner, 2003), I am convinced that our patterns of thinking and acting (as "professionals") must be out in the open, so as to expose informatical action to criticism by the society as a whole. Research on the boundaries between computer science, (sociological) research on professions and pedagogics led us to these fruitful questions and give a fresh impetus to our research on professional informatical action. We should bridge the gap between these disciplines for more findings!

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<sup>i</sup> The unusual term informatical is based on the analogy: mathematics – mathematical, informatics – informatical.

<sup>ii</sup> elaborates on the preliminary work in (Bittner, 2003a) and (Hornecker & Bittner, 2003)

<sup>iii</sup> This will be a cursory "expedition", as for instance Abbott's approach yet remains unconsidered. Please note publications in the context of the



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PROFI project under the direction of Prof. Schinzel, IIG Freiburg.

<sup>iv</sup> Pursuing these questions we find assistance by the methodical instruments within the respective theories.

Elizabeth A. Buchanan

## The Internet as Friend or Foe of Intellectual Freedom

### Abstract:

What a long strange trip the Internet has had. From its inception and use by the American military to the billions of users world-wide who log on daily, the Internet is both the promise of access to information and the peril of surveillance and a means of curtailing intellectual freedom. This paper will review this continuum, paying close attention to recent developments in the United States that fuel the dichotomous debate surrounding intellectual freedom.

### Agenda

Introduction and Context

Pro-Anas as a Case in Point

Pornography, Intellectual Freedom, and Beyond

Dilemmas for Information Professionals

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## Introduction and Context

Definitions of intellectual freedom reveal consistency across global boundaries: The Universal Declaration of Human Rights, Article 19, states "Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media, regardless of frontiers" (CDT, 2000); the European Convention for the Protection of Human Rights and Fundamental Freedoms, Article 10, asserts "Everyone has the right to freedom of expression. This right shall include freedom to hold opinions and to receive and impart information and ideas without interference by public authority and regardless of borders" (CDT, 2000). In the United States, intellectual freedom is best codified in law under the First Amendment to the Constitution, stating, "Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the Government for a redress of grievances," while intellectual freedom itself is articulated by, for instance, the American Library Association as the "right of every individual to both seek and receive information from all points of view without restriction. It provides for free access to all expressions of ideas through which any and all sides of a question, cause or movement may be explored. Intellectual freedom encompasses the freedom to hold, receive and disseminate ideas" (ALA, Office of Intellectual Freedom, 2002). Showing the cohesiveness surrounding the principle of intellectual freedom among the library and information professions, many other library associations worldwide have similar statements (IFLA, 2002).

In many ways, these statements typify the Internet and its plurality of ideas and expressions, which has notably evolved from its early days of a few isolated nodes at military institutions and institutions of higher education to its current status as a global marketplace of ideas. Nearly every conceivable idea, ranging from the highly controversial to the most mundane, can be found online. This is the Internet's promise—and its peril, perhaps. Tensions exist in light of this diversity and freedom to express oneself freely: Where does one's right to expression violate another's right to privacy, or to not be offended, or to be safe from harassment or violence or worse? These tensions are mounting as nations embrace the Internet; tensions between law and

ethics within nations constitute one parameter, while tensions between and among nations themselves exist surrounding the exercise of intellectual freedom online.

Intellectual freedom must be considered along both legal and moral grounds, and the two may not always be in sync. Lipinski, Buchanan, and Britz (2004) have reviewed the discrepancy between legal and moral liability in and of ISPs, and concluded that a higher moral standard than what the current US law provides is indeed necessary when considering, for example, dangerous, threatening, or libelous speech online. A similar moral framework for discussing intellectual freedom in general may be requisite. Are we as a body of information professionals ready to embrace this challenge? On its surface, this question seems fairly simple and straightforward. Intellectual freedom has been and continues to be the bedrock of our professional identity, and it remains a cause worth championing. Yet, once this question begins to unfold, moving from the theoretical to the practical, great complexity abounds. A goal of this paper is to encourage a global discussion of intellectual freedom online; this meeting of international information ethics scholars (ICIE) is a prime meeting point from which this discussion can continue.

## Pro-Anas as a Case in Point

An interesting example of this tension between what is legally permissible and morally responsible in terms of intellectual freedom online has arisen with the so-called "pro-ana" web sites. This vast array of sites created by individuals who embrace anorexia as a life style choice, not a disease, have exacerbated the tension between one's right to expression and one's right to access all expressions to violating one's safety through dangerous information. While one is never forced to view these sites, of course, should there be a right to provide "dangerous" information? Many pro-anas, for instance, provide "tips" or "strategies" on how to reduce caloric intake, how to hide one's food, how to conceal one's "choices" to be anorexic (Pro-anas encompass all eating disorders, not just anorexia.). Many provide "thinspiration," in the forms of photographs of both overweight and severely underweight individuals.<sup>1</sup>

While legally, under the First Amendment in the United States, such information is permissible, the moral implications of such sites blur the line. It would unlikely be a First Amendment issue, as seen

by the courts, if someone did in fact die, or otherwise suffer, from using the information on such a site; most likely, any case would fall under US Tort law. Perhaps in an attempt to protect themselves, many pro-anas now include disclaimers, such as the following:

**Disclaimer**

*If you are currently in recovery from an eating disorder or if you are offended or otherwise disturbed by the existence of pro-ana, I suggest you go no further. XXX is not responsible for the content of the sites linked in this listing. Nor are we responsible for what you do with any of the information you may find here. Only you, yourself, are. ....We are also not interested in talking to reporters or researchers. Thank you for understanding and respecting this.<sup>ii</sup>*

Too, perhaps ISPs are considering their roles more seriously in light of such information as the pro-anas, or hate sites, or gay bashing sites provide, as many remove these sites in a form of industry self-censorship, or self-regulation<sup>iii</sup>. Oftentimes, accessing a pro-ana or a hate site becomes a maze of broken links, redirections, forced downloads, and dead ends. Oftentimes, one must use "insider language" to find such sites in a search engine, while moreover, many require "membership" or registration.

Pro-anas are but one growing example of information found online that can deeply challenge one's thinking about intellectual freedom—it is easy to accept the premise of free expression and access, as we in the information professions often defer to the "slippery slope" argument. The oft-cited slippery slope, "if we curtail that sort of information, what is next," prominently rises yet again to the fore in this discussion, though perhaps the stakes are even larger in the Internet's domains, given the global implications and complexities. What would a moral framework for intellectual freedom online in a global context resemble? We are in the midst of creating a global narrative through the Internet, and the plot is taking many twists and turns, challenging not only information professionals to think critically about our professional core values but also all of us as individuals contributing to this narrative. Could we borrow from James Moor's principles, or his set of shared core values to which society or a group of people adhere in formulating a framework to describe specific acts of expression online as "good" or "bad," "right" or "wrong," "responsible" or "irresponsible?" Moor, for instance, names life and happiness, ability, freedom, knowledge, resources,

and security<sup>iv</sup> in his goal to find core values that apply internationally and imply mutual acceptance. But, as Moor identified, a significant problem surrounds the identification and acceptance of this set of core values/norms that can be used to regulate the Internet. Law gets us no closer to resolution, as we shall see further.

## Pornography, Intellectual Freedom, and Beyond

Ranging from pornography to hate to violence, Internet sites can be regulated anywhere from industry self-censorship to national laws. In the United States, most recent discussions and concerns surrounding intellectual freedom online are focused on pornography. In particular, the two major cases in which the ALA, the ACLU, among other entities, were involved dealt with children and potential access to pornography (The Communications Decency Act, 1997, and the Children's Online Protection Act, 2002). While the former was struck down as unconstitutional, with Justice John Paul Stevens asserting that speech on the Internet is entitled to the highest level of First Amendment protection, similar to the protection the Court gives to books and newspapers (not broadcast or cable television, which have stricter enforcement), the CIPA was carefully interjected into a spending bill and turned less into a discussion of intellectual freedom than of funding priorities and the role of congressional oversight: Ultimately, the CIPA decision held that "the First Amendment does not prohibit Congress from forcing public libraries - as a condition of receiving federal funding - to use software filters to control what patrons access online via library computer" (Hilden, 2003). Libraries in the United States have worked to balance CIPA with the First Amendment, often having different sets of computers for adults and children, with filters installed only on those accessible by children.

It is unfortunate that the US discussions about intellectual freedom focus almost solely on pornography: in one sense, this obsession sets the United States apart from other countries that focus their concern on different and some would (rightly) contend more socially significant issues, such as hate sites and the promotion of racial, religious, or sexual discrimination. The Simon Wiesenthal Center (2004), which tracks hate sites alone, found over 4000 hate sites in 2004. Such sites as the World Church of the Creator, Stormfront, and the Christian Gallery, expound hate speech which borders on harassment, and threatening or dangerous speech<sup>v</sup>,

in addition to the latest use of intimidation and privacy violations documented on the Christian Gallery of "abortion cams," which take still and video images of health clinic workers, patients, and others, and post them online, sometimes with names, vehicle license plates, and other forms of personal information. While legally protected in the US, many ISPs have begun to shut down sites such as the Nuremburg Trials (its latest iteration states it has been shut down 43 times since 1998).

And, the Anti-Defamation League explains:

*In most countries, hate speech does not receive the same constitutional protection as it does in the United States. In Germany, for example, it is illegal to promote Nazi ideology. In many European countries, it is illegal to deny the reality of the Holocaust. Authorities in Denmark, France, Britain, Germany and Canada have brought charges for crimes involving hate speech on the Internet.*

*While national borders have little meaning in cyberspace, Internet users who export material that is illegal in some foreign countries may be subject to prosecution under certain circumstances. An American citizen who posts material on the Internet that is illegal in a foreign country could be prosecuted if he subjected himself to the jurisdiction of that country or of another country whose extradition laws would allow for his arrest and deportation. However, under American law, the United States will not extradite a person for engaging in a constitutionally protected activity even if that activity violates a criminal law elsewhere.*

Are hate sites, or pro-anas, new ethical issues for us as information professionals? Are they simply old forms of "questionable" expression available to a wider audience? As information professionals, our ability to select or acquire materials has certainly changed in light of the Internet, and if we maintain an absolute commitment to intellectual freedom, such sites should not give us pause. Maybe.

## Dilemmas for Information Professionals

Where does this leave information professionals in light of the globalness of the Internet? What standard should we uphold? Is an absolute freedom of speech or expression a world-wide goal worth striving for? What about conflicting laws and the

transparency of Internet communications? In the US, we are seeing more discussions and debate concerning the First and Fourteenth Amendment, which guarantees equal protection under the laws, and the contention is "how can an individual feel equal in the face of racism, hatred, or harassing words?" One may also ask, "if there is hate speech, does that mean there is hate?" What is the value of *speech* itself—or *expression* itself? While some scholars (eg, MacKinnon) equate speech with action, and therefore, consider certain types of speech harmful to society, use of the equal protection amendment tends to break down legally in most cases. When we consider the Internet and its many-to-many communicative mode, assigning responsibility (either legal or moral) becomes complex. It is debatable whether use of the Fourteenth Amendment to eliminate certain types of speech or expression is a significant step away from the First Amendment and its guarantee of expression and access. It could be, however, a step towards a more just Internet environment. Canada, France, and Germany are but three countries that have firm national laws disallowing materials that incite racial violence and hatred, and these laws include Internet materials. While an international legal consensus seems unlikely, could a moral consensus be reached?

In many ways, the discussion surrounding intellectual freedom on the Internet is stuck in a descriptive mode—we assign labels to certain sites, whether in the form of PICS, or industry self regulation, or filters, etc. A more significant discussion lies in the normative realm, where also great complexities reside. With this brief discussion, this author hopes we as information ethics scholars can look for some resolution. The Internet is truly a global phenomena and its strengths may also be its weaknesses.

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<sup>v</sup> But are legally different from "fighting words," which Peck defines as words "which by their very utterance inflict injury or tend to incite an immediate breach of peace" (2000, p. 8).

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<sup>i</sup> Under the heading "Hardcore Thinspiration," one site shows a 41 year old woman weighing 48 pounds, among other images (<http://angelana.bravehost.com/xtremethinspiration.html>). On the opposite extreme, another site shows excessively overweight women: <http://broken-bits.tripod.com/id23.html>.

<sup>ii</sup> To protect this site from excessive research, according to their wishes, I will not list the web address.

<sup>iii</sup> One report states that Yahoo and AOL have shut down all pro-anas on their hosting services, starting in 2002.

<sup>iv</sup> J. Moor, "Reason, Relativity, and Responsibility in Computer Ethics," in *Readings in Cyberethics* (Eds. R. Spinello and H. Tavani), Boston: Jones and Bartlett, 2001.

Maria Canellopoulou-Bottis

## **A different kind of war: Internet databases and legal protection or how the strict intellectual property laws of the West threaten the developing countries' information commons**

### **Abstract:**

This paper describes intellectual property legislation in the European Union, the US and the Draft Treaty on the legal protection of unoriginal databases, usually available in the Internet. I argue that this type of legislation, if enforced upon developing countries and countries in transition through international 'agreements', could in effect deprive them of their own information commons, their own public domain. With examples from China, India, Africa and Iceland, I argue that this deprivation in the case of developing countries is, morally, equal to a virtual war against them by the West, wholly unjustified and dangerous-an example of virtual imperialism.

### **Agenda**

A few notes on the nature of databases

A forceful first attack: the European Directive on the legal protection of databases

The American efforts: bills for and bills 'against'

The WIPO Draft Treaty of 1996

The position of the developing countries

A country's information commons and control

Conclusion

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The primary function of the law used to be, and still is, up to a great point, the peaceful resolution of human disputes<sup>i</sup>. Where law was, war was not<sup>ii</sup>. A second role, increasingly important as the world's countries developed after the Industrial Revolution, was to serve as a 'tool', facilitating the most efficient<sup>iii</sup> production and allocation of resources<sup>iv</sup>-as a road, or as an instrument. However today, if we examine the way particular laws of the West rule developing countries and how globalization proceeds, we may conclude that law is war: the West does not enter the developing countries' domains and does not typically insult their sovereignty, under pretext of some reason-*casus belli*, with fighter planes' attacks and soldiers, but nevertheless, the West uses law as means of war. It is not a war aiming at destroying and then owning; it is a war about complete, unsaid, subtle, control-in the name of global progress, prosperity, harmonization and equality. And if this is so, what war could be most dangerous than this one?

The war, then, of the past seems to have altered its nature. Not that 'real' wars are not fought anymore-they are-but, there is another, more dangerous war, in evolution. It is one thing to conquer and control another country's lands and seas and air and pavements-it is quite another thing, perhaps much more important in financial terms, to control another country's rights to its commons, its right to its own public domain<sup>v</sup>. Usually, the notion of the public domain, the 'information commons', in relation to information and data, is not analyzed as something every different country 'has', as part of its intangible treasure. In this article though, I will deal with the notion of public domain in relation to information, which morally, and for concrete reasons, 'belong' to this particular country and not another (just as, in terms of property, this country enjoys sovereignty over its lands and natural resources). This is about information, which under certain circumstances should 'belong' to the people of particular countries and which should not come under another country's control, because of global intellectual property rights combined with immense financial power. Indeed, such control, the 'death' of a country's information commons<sup>vi</sup>, is degrading for its people and deeply immoral. It is important to carve out what public domain is, in general and what a certain country's (developed or not) information commons is, in particular-a difficult task. But whatever 'commons' is, whatever 'public domain' is, as there have been some debates about this<sup>vii</sup>, a special kind of information certainly belongs to it.

## A few notes on the nature of databases

Science, business, education, economy, law, culture, all areas of human development 'work' with the constant aid of data. Databases<sup>viii</sup> play a crucial role within science research: the body of scientific and technical data and information in the public domain is massive<sup>ix</sup> and factual data are fundamental to the progress of science.<sup>x</sup> But the progress of science is not the only process affected by the way people use databases. Stock exchange data are absolutely necessary to any analyst; access to comprehensive databases of large scale is an everyday activity of a teacher, an educator, an academic or a lawyer. There are databases collecting all sorts of different data: nuclear structure and radioactive decay data for isotopes (the Evaluated Nuclear Structure Data File) and genes sequences (the Human Genome Database), prisoners' DNA data ('DNA offender database'<sup>xi</sup>), names of people accused for drug offenses (NADDIS<sup>xii</sup>), telephone numbers<sup>xiii</sup>, legal materials<sup>xiv</sup> and many others.

Most databases are now offered on line, so their use presupposes the use of the Internet<sup>xv</sup>. Besides paying the cost of using the Internet, a cost extremely different depending on where someone lives- 0,12 for 20 hours of use for a citizen of Sweden and 33,07 for a citizen of Uruguay in 2001 (268 times more)<sup>xvi</sup>-one has, some times, to pay an additional fee to enter the database-unless the database is offered in the Internet for free, or someone else has paid for the user (for example, the University for a student). As proven in part, I think, by the above disparity in numbers, access to the Internet in developing countries is limited, although growing rapidly in most of them<sup>xvii</sup>.

Whether one has or has not access to the Internet is already a kind of law, determining the use of an online<sup>xviii</sup>'s database by a prospective user. After this crucial, for the developing countries especially, starting point, there are other laws<sup>xix</sup>, regulating how and how much one can 'take' from a database. These laws were (and still are, but not exclusively) usually contract<sup>xx</sup> (private arrangements between the owner and the user of a database) and copyright<sup>xxi</sup> (general arrangement of how much can be taken, under the doctrine of 'fair use'). Quite apart from these two controls, internationally there is now a trend towards privatization of information, for the benefit of database owners, who in their almost absolute majority, come from the West.<sup>xxii</sup> It comes naturally, then, that the West is the place



where the discussion about strong database legal protection begun.

## A forceful first attack: the European Directive on the legal protection of databases

After the Information Age digital revolution, and because copying in the digital world is indeed easy, the threat of piracy has lead, at least allegedly<sup>xxiii</sup>, the European Union to the adoption of a Directive<sup>xxiv</sup> for the protection of databases. After abandoning the humble starting point of implementing a regime of unfair competition remedies<sup>xxv</sup>, in case of wholesale unauthorized copying and using in commerce of another's database, the Directive presented<sup>xxvi</sup>, as its most important innovation<sup>xxvii</sup>, a *sui generis* right of the maker<sup>xxviii</sup> of a database. This *sui generis* right means that, its holder (the maker) may prevent the extraction and/or the reutilization of the whole or of a substantial part evaluated qualitatively and/or quantitatively, of the contents of that database (Art. 7, 1). The repeated and systematic extraction (and reading only) of insubstantial parts of the protected database is also forbidden (Art. 7, 5). As forbidden re-utilization, Art. 7b defines 'any form of making available to the public all or a substantial part of the contents of a database..' and this covers the situation in which material is made available on the Internet<sup>xxix</sup>. What is irrelevant is the nature of the information 'trapped' by the maker in her database: whether they are original works of authorship, 'entitled' to copyright protection in their own 'right', or simple 'synthetic'<sup>xxx</sup> data as telephone numbers, codes, real estate or job listings, dates of football games, radiobroadcasting listings or other data in the public domain, as the texts of judicial decisions of a country.

The Directive contains no exceptions for government-made databases, leaving European governments the options of charging citizens for the use of databases made at the public's expense and the dilemma whether such a law conflicts with the norms of an information society, offering in theory a general right to know<sup>xxxi</sup> to its citizens. The Directive, also, offers no mandatory public-interest exceptions, such as usually contained in a copyright statute, of national or international application. The academic, scientific and library communities were startled to learn that exceptions in their benefit were an option for the European states<sup>xxxii</sup> and that, moreover, no allowance was made for the re-

utilization of data-a normal and absolutely necessary scientific activity. The Directive plainly forbids, in essence, the re-utilization of data from a protected database, even for scientific purposes. And the usual 'fair use' copyright exception (or some form of it), which these communities already used at their peril, simply was no more. An older article, allowing compulsory licenses to data, in cases of abuse, was in the end completely eliminated. The *sui generis*' right 'life' was 15 years, however, database updates equally extend the protection-practically, forever.

The Directive suffered important criticism from almost the very beginning; both imminent EU<sup>xxxiii</sup> and US<sup>xxxiv</sup> scholars wrote 'dreadful' things about it, or at least were firmly positioned against it. The main arguments against were, mainly, that a. there was no problem to solve (danger from database wholesale piracy) b. the Directive was not a solution to the alleged problem c. the Directive enforced intellectual property kind protection to data, something which was inappropriate, clashed with the history and philosophy of intellectual property laws and had never happened before e. the Directive implemented a perpetual exclusive right to data belonging to the public domain (and so, 'privatized' the public sphere, to fortify private financial interests) f. the Directive insults the freedom of speech and harms scientific research and academic freedom.

Nevertheless, the Directive is now fully implemented in Europe (even if many countries missed the deadline). The case-law (there was a lot of litigation-yet another problem) we have from these countries in fact confirmed the fears of the scholars who published comments etc. against the Directive; the most important cases, which reached, as a cluster, the European Court of Justice, were the *British Horseracing Board v. William Hill Organization*<sup>xxxv</sup> and the *Fixtures Marketing Limited v. Organismos Prognostikon Agonon Podosfairou* (Greek case, referred<sup>xxxvi</sup> to the ECJ, together with the other two *Fixtures Marketing Limited* filed in Sweden<sup>xxxvii</sup> and Finland<sup>xxxviii</sup>).

On the 8<sup>th</sup> of June, 2004, Advocate General Christine Stix-Hackl issued her Opinion<sup>xxxix</sup>, after the extensive hearings on the matter some months before. The Opinion fully justifying the fears of the opponents of the Database Directive. The cases were, in essence, cases where *Fixtures Marketing Limited*, the organizer of English football matches, claimed (in fact) ownership of the fixtures lists, because of database right, so sued to forbid the free use of the dates/games/times and places of the games

information by various national betting agencies. The betting agencies had alleged that they had not obtained the information from the *Fixtures*' database itself, but from public sources, such as the newspapers etc, that their use was insubstantial and that a database, which was in essence a 'spin-off'<sup>xli</sup> of *Fixtures*' activities (a by-product of investment not primarily aimed at its production, but at the organization of the games itself), did not qualify for protection under the true meaning of the database Directive; in order to encourage and protect investment in databases, there was no need to enforce a law in the case where a database would be created *at any event*, like the *Fixtures*' lists.

Advocate General Stix-Hackl firmly rejected all arguments against database protection under these circumstances and proposed (influentially, of course), *inter alia*, that a. it is irrelevant whether a database is 'a spin-off' or not b. that indirect extraction of data, which also happen to constitute part of a a database from publicly available sources, is also forbidden c. the term 'database' is to be construed widely d. the databases' purpose is irrelevant as to its protection and e. the term 'obtaining data through substantial investment' is not the same as the creation of data, but when creation coincides with collection and verification then the condition of 'obtaining though substantial investment' is fulfilled. Lastly, and very importantly, dynamic databases (those which are updated usually) are protected *as a whole* for the Directive's 15 years term (in fact, forever, as most of them are constantly updated), and no new time limit starts for every new addition of data in the database. It is indeed hard to imagine an interpretation of the Directive, which could better justify its criticism or stronger protect the database producers' interests. Until the end of the year, we expect the European Court of Justice's final ruling, but Opinions by General Advocates re influential-there is no substantial reason to expect a deviation from this Opinion at this particular moment.

## The American efforts: bills for and bills 'against'

Soon after the European Directive was enacted, intense pressures in the States lead to the deposition of a (first) bill for the protection of databases, HR3531, the *'Database Investment and Intellectual Property Antipiracy Bill'* of 1996. The 'unkind' reciprocity clause of the European Directive, that databases were to be protected in European territories as far as the country of their origin

provided for the same protection as the Directive, was a constant argument of the bills' favorers, noting also the alleged gap of protection left by *Feist*<sup>xlii</sup>. This first bill, drafted after a strong exclusive rights model, aimed at enforcing a *sui generis* right, on databases, which would be the result of a quantitatively or qualitatively substantive investment of human, technical financial or other resources in the collection, verification, organization or presentation of the database contents<sup>xliii</sup>. Protection lasted for 25 years (ten more than the European Directive's term of protection). No exception for fair use or fair dealing existed in the bill, which also prohibited the importation, manufacture or distribution of any device that had as its primary purpose or effect the circumvention of database protection systems (this was also not included in the Directive). All contractual provisions stood as such, as there were no minimum rights for users and all other regimes possibly protecting databases stood as well, untouched by the bill.

There was intense opposition against the bill, especially from the academic and scientific worlds<sup>xliiii</sup>. Soon another bill followed, HR 2652, *'The Collections of Information Antipiracy Bill of 1997'*, which was slightly different from the first one, and modeled closer to an unfair competition approach. In 1999, another bill was introduced, HR 1858, *'The Collections and Information Antipiracy Bill'* of 1999 (HR 354), in opposition to which the communities opposing strong database protection introduced an alternative bill: *The Consumer and Investor Access to Information Bill of 1999* (HR 1858). The alternative bill proposed a right to prevent the sale or distribution to the public of a duplicate of a database in circumstances where the sale or distribution was in competition with that other database. The alternative bill also contained broad exceptions for scientific and other related purposes. There was no question that this minimalist protection would never satisfy the demands of the database publishers, urging for strong protection. All these bills just lapsed.

The latest (February 2004) opposing bills are HR3261, *'Collections of Information Antipiracy'* and HR3872, *'The Consumer Access to Information Act 2004'*. HR 3216 is a 'classic' pro-protection bill, which supposedly has faced the criticisms of the interested communities (but in essence, it has not) and HR3972 is a (second) bill of good faith, supported by the academic and library communities. It contains only five paragraphs, and it prohibits in essence, the misappropriation of the contents of a database. The act is recognized as a practice which

causes market confusion, under par. 5(a)(1) of the 15 USC 45(a)(1). The value of the misappropriated information must be crucial, as time-sensitive and its use by another person equals to the free riding of another's efforts. The parties must be in direct competition and the act must reduce so much the incentive to produce the database in question, so as to threaten its existence or quality. There is no right for a private suit; the bills' execution rests with the Federal Trade Commission (sec 4b). It is given that no consensus is going to be achieved, due to the vast difference between the proposed bills of the two sides of this important debate.

This American debate started from a *sui generis* right and ended with the proposal for an unfair competition approach-both unacceptable to those who fight against new legislation. Therefore, in the States, the course was opposite to the one in Europe, where a humble unfair competition regime was transformed into a strong exclusive *sui generis* right to data (*per se*, as proved by the Stix-Hackl Opinion of 2004<sup>xliv</sup>). But we do not know today what will happen with the proposed bills and what will be the effect of the final decision of the European Court of Justice, if the Court will, as expected, accept the Stix-Hackl interpretation of the Directive (which is highly probable, as no voice in Europe as powerful as the voice of the US Academies has been raised against the Directive or against this particular interpretation of its rules). It could go both ways in the US; one, supporting that if the European Court of Justice 'sees' the *sui generis* right as so strong, then 'reciprocal' legislation, able to protect the interests of US publishers in Europe, has to be at least comparable ('feeble' protection will do no good); or, as the worst fears (rights in pure data) of the database legislation opponents will have been realized, it is equally 'crazy' to insist on offering same protection in the US (and so, 'please drop the entire discussion'- highly improbable as well).

## The WIPO Draft Treaty of 1996

In November 1996, soon after the adoption of the European Directive, a Draft Treaty for the protection of databases was put to the Diplomatic Conference of WIPO<sup>xlv</sup>. The date of the document marks also its substance; it comes not only after the European Directive, but also after the first bill presented in the States for the protection of databases. In essence, the Draft Treaty is the same as these two instruments; for example, the definition of a database is as broad as the Directive's<sup>xlvi</sup>. The Draft Treaty incorporated a *sui generis* right approach<sup>xlvii</sup>,

containing two alternative proposed terms of protection (Art. 8), for 15 or 25 years. Any substantial change to the database, evaluated qualitatively or quantitatively, including substantial change resulting from the accumulation of successive additions, deletions, verifications, modifications in organization or presentation or other alterations, which constitute from such investment, would qualify the database resulting from such investment for its own term of protection (Art. 8, par. 3). It is easy to notice at the outset that clearly, any new substantive investment in the database means a new term of protection for the whole of the database, and not (only) of the new material. Therefore, the Draft Treaty was explicit in aiming at the implementation of a perpetual protection of databases-no matter what their contents may be (for example, pure facts). So, one may argue emphatically how extremely long the term of protection of 15 or 25 years is, while in fact, the Draft Treaty meant a protection forever. On exceptions, individual countries were allowed in theory to provide for exceptions and limitations to rights, but not if these exceptions and limitations conflicted with the normal exploitation of the database or unreasonably prejudiced the legitimate interests of the rightholder<sup>xlviii</sup>. The obvious vagueness of the wording of these limitations means that the individual countries would not be able to ascertain when an exception they would wish to implement could clash with the above provisions.

## The position of the developing countries

The Draft Treaty never matured into a Treaty. The overwhelming majority of comments on the draft was against it, especially in the US, where the debate on the proposed bills had already begun. The developing countries were also very concerned; there were reports<sup>xlix</sup> on the economic impact of a special legislation protecting unoriginal databases, supporting that the developing countries would be harmed by any new legislation<sup>l</sup>. For example, the study on China, which is detailed and full of empirical evidence, clearly concludes that the new legal protection for unoriginal databases means that one would always have to pay for facts and that freedom of speech and thought could be seriously restricted<sup>li</sup> and it also means a decrease of data entering the public domain<sup>lii</sup>; it means that end users would need more time and license fees to obtain useful information<sup>liii</sup>; that 'piracy' of Chinese databases (of *Tongfand* and *Yinghua*) by many websites did not generally bring direct economic

success to the party responsible for the infringement, ‘..who just published these pirated materials on their rarely visited homepages or websites for free access..none of them made profits by pirating other persons’ materials..the strict protection provided by the Treaty would deter them from so doing.<sup>liv</sup>; that the lack of provision in the Treaty for library, research and education exemptions supported an extremely bleak view of how members of the academic and research community and the public will access information resources in the future<sup>lv</sup>; and that the new legislation would increase the costs of China’s college education, which is already very expensive<sup>lvi</sup>.

All this happens to a country in transition to a free-market economy, which is advanced in its technological capabilities<sup>lvii</sup>. But developing countries and countries in transition are far from homogenous and they vary immensely in their social and economic structures and their inequalities in income and wealth<sup>lviii</sup>. The impact of legislation protecting unoriginal databases, and in effect ‘closing’ the public domain and privatizing facts, which were always supposed to be ‘free as the air to common use’<sup>lix</sup>, is bound to be much harder in countries which do not have any distinct benefits of technological capacity and suffer enormously, from the financial (among others) point of view. These are the developing countries, which can only be database users and not makers<sup>lx</sup>; the countries, which are mainly consumers and importers and not producers or exporters<sup>lxi</sup>. In these cases-and they are many-it is almost irrational to speak of the need of intellectual property laws as incentives, as tools, towards a greater production of, say, inventions, literary works, or more modern works such as on line databases<sup>lxii</sup>. The need to stimulate production through incentives is the main argument for intellectual property, as we know it. Instead, what a stronger intellectual property regime means for these countries is an increase in costs of obtaining new foreign technology necessary to meet their national economic development objectives<sup>lxiii</sup>. ‘Tighter intellectual property protection only strengthens the monopoly power of large companies that are based in industrialized countries to the detriment of developing countries.<sup>lxiv</sup>. And the increase in costs results in a further widening of the gap in access to scientific knowledge<sup>lxv</sup>.

## A country’s information commons and control

The question of access to scientific knowledge and to databases now absolutely necessary to any meaningful research is not the only issue, though, alerting scientists all around the world. Another distinct question is *who* exactly will have the ‘control’ of facts, once these have been made part of a protected, by intellectual property laws, database. Returning to the matter of a country’s information commons, one wonders whether it is indeed moral for the developed world to press<sup>lxvi</sup> developing countries and countries in transition into international agreements of dubious benefit to them<sup>lxvii</sup> (TRIPS is an obvious example here) and then let its own enterprises make, *inter alia*, databases on this country’s traditional knowledge, for example, ‘lock’ the contents of the databases through database protection laws (lasting in effect forever-remember Advocate General Stix-Hackl’s opinion in the EU<sup>lxviii</sup>) and therefore, controlling this country from access to information which may very well ‘belong’ to it. One can easily imagine, I think, a company as giant as Reed Elsevier starting business for example in Egypt, compiling large legal databases with all the judicial decisions and the laws of Egypt included and presented most efficiently. Egyptian companies may not be able to compete with this; certainly, no Haitian entities could (if we were talking about Haiti) and no companies in most developing countries could either. If this is possible and if Egypt had adopted, say because of an international WIPO Treaty on databases, a protection as strong as the European Directive’s, then people from Egypt could forever be obliged to pay for access to their own jurisprudence, to facts free in theory for the taking by anyone<sup>lxix</sup>-and especially, from a moral point of view, by an Egyptian.

It is true that relevant concerns have been raised; for example, in an influential and frequently cited Report<sup>lxx</sup>, the UK Commission on Intellectual Property Rights (CIPR) stated in 2002 that developing countries may not be sharing appropriately in the benefits from commercialization of *their*<sup>lxxi</sup> knowledge or genetic resources when they are patented in the developed countries; also, that most developing countries have genetic resources and traditional knowledge that are of value to them. *Vadrevala*<sup>lxxii</sup>, in his Report for WIPO on India and databases emphatically stressed that Indian ‘traditional knowledge’ is a sector of tremendous financial potential. ‘Owing to India, being one of the most ancient civilizations in the

world, it has tremendous reserves of traditional knowledge such as traditional medicinal knowledge, folklore, art etc..<sup>lxxiii</sup> *Vandrevala* noted that the Indian government had compiled a Traditional Knowledge Digital Library (TKDL) program and that a *sui generis* regime could protect its unoriginal aspects<sup>lxxiv</sup>. *Vandrevala*, lastly, also referred to Indian genomic databases, containing genomic data from a country with one fifth of the world's population, were possibly half of the world's genetic mutations occur<sup>lxxv</sup>. *Braunsteir*<sup>lxxvi</sup>, in his Report on the economic impact of database protection in developing countries, offered as an example of a database worthy of protection the database with African alphabets by *Saudi Mafundikwa*, the director of the Zimbabwe Institute of Vigital Arts. *Mafundikwa's* database contains symbols, scripts and signs used in a number of African languages. *Braunsteir*<sup>lxxvii</sup> also refers to the question of the database of genetic information of the Icelandic people (rights to this database belong to the firm deCODE<sup>lxxviii</sup>).

It is, indeed, a crucial point whether a country has 'a right to its own', and that within 'its own' one may enumerate information and facts such as those concerning people's genetic data, legal opinions by its courts<sup>lxxix</sup>, traditional knowledge and such. A lot of research is necessary, I think, in order to articulate a clear theory why particular facts and information should belong to a country, just as its mountains belong to it. But we have evidence that the above classes of information should probably belong to a country's information commons, in the sense that it is immoral for another country (especially a developed one) to take away the developing country's control over 'its own'.

What *Vandrevala*<sup>lxxx</sup> and *Braunsteir*<sup>lxxxii</sup> may perhaps have missed, in their discussion, is that what is now controlled by the Indian government (case: Indian traditional knowledge database) or by an African prominent researcher (case: African alphabets) and what may, therefore, seem at the outset as worthy of special protection in their benefit, may very well tomorrow belong, in terms of rights, to a company of another, developed country (or not<sup>lxxxiii</sup>). An American researcher, generously funded by a US grant, may 'lock' the African alphabets into a protected database, and control the access of those who are entitled to it in Africa, just as an American company may set a subsidiary in Brazil and start 'locking' Brazilian traditional knowledge into yet another database. If the legal protection of unoriginal databases in the African country or in Brazil is similar to the European Directive's, then the

contents of these databases will forever belong to its rightholders, under the minimal requirement of a usual update and, moreover, under the *Stix-Hackl's* interpretation, no one-Indian, African, whatever-may by herself use information which happen to be parts of a protected database, no matter where one obtains this information.

The case of Iceland's genetic information is a clear example of the immorality of a country's information (mis)appropriation. As Iceland had meticulous medical records, dating from World War I and stored DNA samples since, in 1996 a professor at Harvard Medical School raised 12 million dollars, founded the deCODE company and asked for an exclusive license to explore the country's genetic information. A relevant bill was passed, but there were protests not only from the Icelandic Association for Ethics and Science, but also from around the world<sup>lxxxiii</sup> about the morality of the program. Except severe problems with securing true consent of 270.000 people to the use of data and with providing true confidentiality, the question of who will benefit from the project was powerfully raised as well: there did not seem to be any real benefit to the Icelanders, who nevertheless were the source of the extremely valuable information, as part of the stock (70%) of deCODE was in the hands of Icelandic *banks (not the people's)* and the rest had nothing to do with Iceland. 'It is simply not believable that any significant part of the world's pharmaceutical or biological research facilities will move to Iceland..the most significant benefit for Iceland appears to be the promise of jobs created from a database that 'cannot be exported'...seems more a cruel joke than a reality..<sup>lxxxiv</sup>. Lastly, the abdication of control by the Icelanders was spotted out as in need of a very careful consideration<sup>lxxxv</sup>. It follows that the genetic information of Iceland properly belonged to its public domain; even if Icelanders lacked the 12 million dollars and the technical infrastructure to carry out this project, if they wished to carry it out, this did not mean that another country had the moral justification to do it, and enjoy its fruits. DeCODE's argument that in this case, it was *Iceland* who had an obligation to benefit humanity<sup>lxxxvi</sup>, allowing the use of the data from somebody who could do it, cannot hide the company's financial interests in the project, or cover its profit orientation behind a moral 'duty to the world'. If this were indeed the case, all developing countries would be morally bound to release their information commons to the financially powerful nations, for the benefit of humanity<sup>lxxxvii</sup>. Quite the contrary is true: the developing countries may indeed be morally entitled, in particular cases, to 'cheat'

and obtain access to information 'locked up' by the West and otherwise restricted to them, with self-defense as justification<sup>lxxxviii</sup>.

## Conclusion

The end of this harsh road is the end of a country's public domain; just as it has been noted, in case of the West itself, that 'all sorts of information presently unprotected-data, statutes, case-law, government information, 'expired' works etc-may disappear from the public domain'<sup>lxxxix</sup>. But it is one thing to 'extinguish' a developed country's public domain, through apparently democratic laws, voted by the representatives of this country, and quite another to impose, in fact, the same laws upon a practically defenseless developing country.

The question 'who owns information' has usually been dealt with as a matter to be resolved between private parties-individuals. Cases have been brought to court because a plaintiff believes that a particular piece of information belongs to her and not to the defendant (for example, disputes about who is entitled to know a software program's code, who is entitled to know whether a doctor has an AIDS infection, who is entitled to use a telephone number for marketing purposes etc<sup>xc</sup>). In private law, we have devised special mechanisms to redress inequalities of power and abuses. The more powerful entities are treated as burdened with special obligations to protect their feebler contracting parties. Those who are able to exercise undue influence over others are legally treated very strictly. Perhaps, also in view of the extended pressures towards greater database legal protection, the time has come to consider in detail the application of the same legal principles in the cases between countries.

We should determine, in particular, in which cases individual countries have the right to own and control particular pieces of (their) information. In the case of developing countries, which are technologically impaired and lack fundamentals as basic goods for survival (food; water; basic pharmaceuticals), the control by the developed world of their intangible domains of sovereignty, through the pretext of 'consensual' international agreements and laws, and by invoking the fallacious argument that (legal) harmonization and globalization is 'good for them'<sup>xcii</sup>, appears at least as morally repugnant as a total war against them<sup>xcii</sup>-an example of virtual imperialism.

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<sup>i</sup> On the concept of law, see *HLA Hart*, *The Concept of Law*, Oxford University Press, June 1997.

<sup>ii</sup> Law, as a regime ordering human activities and relations through systematic application of the force of politically organized society, naturally incorporates implementation by force, this is true; however, this is not 'war', as war means in this text the implementation of what one thinks is right or necessary with private forces, outside a legal system.

<sup>iii</sup> On efficiency, as a concept used in the economic analysis of law, see *Posner R.*, *Economic Analysis of Law*, 1986, Little, Brown and Company.

<sup>iv</sup> And other areas-contract, property and tort have been subject to the analysis from the perspective of economics, see *Kronman & Posner*, *The Economics of Contract Law*, Little, Brown and Company, 1979, *Ackerman B.*, *Economic Foundations of Property Law*, ed. 1975, *Rabin R.*, ed., *Perspectives of Tort Law*, 1976. Besides, corporation law is what I primarily had in mind, when speaking of law as a 'road' or instrument towards efficiency.

<sup>v</sup> Note the dual nature of public domain as seen by *Lessig*, *Open Code and Open Societies*, Keynote address, *Free-Software-a Model for Society?* June 1, 2000, Tutzing, Germany, <http://cyber.law.harvard.edu/cc>, p. 6: '...now among commons, among public domains, we might distinguish two categories. We might think about the public domain of real things, and the public domain of intellectual things. The public domain, for example, of streets and parks, and the public domain of ideas or created works. These commons serve similar functions but they are importantly different..'

<sup>vi</sup> For a detailed analytical account of the *commons* concept as an emanation of freedom, especially in the Internet communications, see *Cahir*, *The Information Commons*, working draft of 23<sup>rd</sup> July 2003 on file with the author, pp. 1-47.

<sup>vii</sup> See National Research Council, *The Role of Scientific and Technical Data and Information in the Public Domain*, Proceedings of a Symposium, 2003 and *Benkler*, *Free as the Air to Common*

Use: First Amendment Constraints on Enclosure of the Public Domain, N.Y.U.L.Rev. 74, 354, 356 (1999), ‘..information is in the public domain to the extent that no person has the right to exclude anyone else from using the specified information in a particular way. In other ways, information is in the public domain of all users are equally privileged to use it...’, at 360. See also detailed analysis of what the public domain is in *Litman J.*, *The Public Domain*, 39 Emory L.J. 965 (1990), who described public domain as a commons, that includes those aspects of copyrighted works which copyright does not protect., id. at 975. The notion of ‘public domain’ has also been (unfairly, I think) dismissed, *Samuels*, *The Public Domain in Copyright Law*, (1993) 41 *Journal of the Copyright Society* 137.

viii The term ‘database’ is standard in legal discourse; a better term is, I believe, ‘information system’, as database has come to signal everything, from a website to a list of telephone numbers. On the term ‘information system’ see *Brown M.*, *Bryan R.* & *Conley J.*, *Database Protection in a Digital World*, 6 *Rich.J.L.&Tech.2*, (Symposium 1999), <http://richmond.ed/jolt/v6i1/conley.html>, part II, *The Nature of Databases*.

ix National Research Council, *The Role of Scientific and Technical Data and Information in the Public Domain*, *Proceedings of a Symposium*, 2003, preface, v.

x See generally, *Reichman JH & Uhler P.*, *A Conceptually Reconstructed Commons for Scientific Data in a Highly Protectionist Intellectual Property Environment*, 66 *Law and Contemporary Problems* 315 (Winter-Spring 2003), hereinafter *Reichman & Uhler*, *Reconstructed Commons*, id.

xi DNA Act, 42 USC 14135, 2000.

xii Narcotic and Dangerous Drugs Information System, US federal database.

xiii *Feist Publications v. Rural Service Co.*, 499 U.S. 340 (1991).

xiv LEXIS/NEXIS, or West legal databases, examples from the Western world, also see ‘Collection of China’s Computer Laws’, *Zheng Shengli*, *The Economic Impact of the Protection of Database in China*, WIPO Standing Committee on Copyright and Related Rights, Seventh Session, Geneva May 13 to 17, April 22, 2002, p. 31.

xv China, for example, has online databases of legislation and policies (11% of the total), of

financial and stock information (2%), of scientific and technical information (15%), of newspapers and periodicals (12%) and products (60%), <http://www.cnnic.gov.cn/tj/2.shtml> - 2.1.4, see also footnote n. 11. Wolters Kluwer, a leading multinational publisher and information services company offers electronic databases in sectors as health, tax, corporate, financial services, legal and regulatory and education and operates across Europe, North America and Asia Pacific, see *Annual Report 2003*, p. 5. Reed Elsevier, another world leading publisher and information provider, with principal operations in Europe and North America, offers electronic databases in the science and medical sector, legal, education and business fields, and others. Wolters Kluwer and Reed Elsevier are private; many electronic databases are governmental, with data collected, organized and maintained through the use of taxpayer’s money, in different countries.

xvi As a percentage of GDP per person, see *Lopez*, *The Impact of Protection of Non-Original Databases on the Countries of Latin America and the Caribbean*, SCCRR/8/6, Oct. 15, 2002, <http://www.wipo.int/>, p. 10, Table A3, p. 3 of the Appendix.

xvii CIPR, *Integrating Intellectual Property Rights and Development Policy*, London, September 2002, ch. 5.

xviii There are many off line databases for sale, but by far the most important are the dynamic, constantly updated, on line databases.

xix And besides these other laws (contract and copyright), we must keep in mind the technological capabilities of software codes, disallowing access to the contents of a database-codes, whose circumvention has, in the US and Europe been outlawed, threatening very severe penalties (Digital Millennium Copyright Act, US; comparable measures for the EU). This is why *Lessig*, id, refers to ‘codes’ as laws, ‘..we should understand code as kind of law, because code can restrict or enable freedoms in just the way law should....in the anticircumvention provision of the DMCA, Congress has turned my metaphor into reality...’, p. 9.

xx See how contract was stronger than copyright in the controversial decision *ProCD v. Zeidenberg*, US Court of Appeals, Seventh Circuit, 86 F.3d 1447 (1996). In this case, Judge Easterbrook held that a shrink-wrap (contractual) license to use an electronic database (the terms of which license

were not known to the buyer of the box with the database CDs in it before he bought it) was enforceable against the buyer, irrespective of copyright law (under which, the copying of the database's material-3.000 telephone numbers-was legal, as the database was not original enough to deserve copyright protection).

<sup>xxi</sup> In the US, copyright does not cover unoriginal databases (see *Feist*, id, footnote 11); databases containing data in the public domain (for example, telephone numbers, scientific data, names of roads, texts of legal decisions etc.) are usually compilations not original enough to deserve copyright protection (but, under *Feist*, id, footnote 13, in the US, the standard of originality is quite low). In Europe, the rules of copyright on databases are mainly contained in the Directive on the legal protection of databases, which is now implemented in all European countries. The well-known fair use exception is not part of the Directive.

<sup>xxii</sup> Major database rights lobbyists are Reed Elsevier and Thomson publishing, giant West world corporations, see, among many others, *Zittrain J.*, *New Legal Approaches in the Private Sector*, in *National Academies, The Role of Scientific Data*, as above, p. 169, 171, footnote 3. See also <http://www.ala.org/> ('who is pushing for database protection').

<sup>xxiii</sup> See the Directive's (many) *Recitals*. However, there had been no real problem with database piracy in Europe before the implementation of the Directive (virtually only one case in the Netherlands-see <http://www.ivir.nl/>).

<sup>xxiv</sup> Directive 96/9 European Parliament and the Council of 11 March 1996 on the legal protection of databases, 1996 O.J. (L77)2.

<sup>xxv</sup> See the first version of the *sui generis* right in (unoriginal) databases of Art. 2 (5), First Draft, Directive on the legal protection of databases, which was a right of the maker of a database to prevent the unauthorized extraction or re-utilization from a database, or its contents, in whole or in substantial part, for commercial purposes. The right was, then, limited to 'unfair extraction', and 'unfair' meant then, a use for commercial purposes (this right could perfectly cover the case, for example, of *ProCD v. Zeindenberg*, footnote 20, and no need to seek protection from contract law would then accrue).

<sup>xxvi</sup> Art. 7(1) of the Directive.

<sup>xxvii</sup> The Directive also contains provisions, before the *sui generis* right, on copyright protection of the original (in the selection of arrangement of the material- the author's own intellectual creation) databases, but the significance of these provisions, in front of the extremely stronger protection of the unoriginal databases with the *sui generis* right, is almost 'extinguished'. No database producer would care to prove originality etc, when it is, in fact, less effectively protected and when 'substantial' in investment, to give rise to the *sui generis* right, has been accepted so easily.

<sup>xxviii</sup> Note how 'the author', a classic notion of the intellectual property world has now disappeared and has been replaced by 'the maker', whose definition is now the person (legal, natural) who has spent substantial investment (human, technical, financial) in creating a database, *Recital 41*, Directive ('the maker of a database is the person who takes the initiative and the risk of investing..'). It is difficult to justify protection of intellectual property type, traditionally rooted in the cause of rewarding creativity and thereby, stimulating production of intellectual works, where the rightholder is a maker and not an author.

<sup>xxix</sup> See detailed analysis in *Davison M.*, *The Legal Protection of Databases*, Cambridge University Press, 2003, p. 88-89. On the Directive's implementation in Europe see also *B. Hugenholtz*, 'Implementing the Database Directive', in: *Jan J.C. Kabel and Gerard J.H.M. Mom* (eds.), *Intellectual Property and Information Law - Essays in Honor of Herman Cohen Jehoram*, The Hague/London/Boston, p. 183.

<sup>xxx</sup> Such have been very expressively and accurately called the data which one makes and does not find in nature (for example, a telephone number or the date/time/place of a film's show or the date/time/place of a football match), see *Maurer et al.*, *Europe's Database Experiment*, (2001) 294, *Science's Compass* 789-790. In the case where the one who makes the data is also the only one who makes them (for example, a telephone company with a monopoly over a certain territory, or the organizer of the English soccer games who produces the games' fixture lists), then we have a sole source provider of synthetic data, which no one can obtain from anywhere else.

<sup>xxxi</sup> Note, for example, how the Directive on freedom of environmental information, under which European citizens have the right to access



environmental information, certainly clashes with the Directive on database protection in relation to the (free?) access of citizens to environmental data 'trapped' in a governmental database. Council Directive 90/313/EEC, 1990.06.07, Freedom of access to Information on the Environment. Austria was the first European country to enforce in practice the protection of governmental databases, when it sued a citizen for the use of the country's company registry and asked for a fee for this use, see ADV Firmenbuch, Austrian Supreme Court (Oberste Gerichtshof), 9 April 2002. The argument that there is a copyright exemption for governmental information, allowing free use, was rejected because of the database Directive; the defendant ordered to pay a (reasonable) fee. So now, in Austria: permission needed, reasonable payment necessary, to access public domain, taxpayers' funded, information. Same, essentially, solution by the Icelandic Supreme Court, Hoyesterett, 19 September 2002, where a citizen used data (aerial lines, water and roads data) from maps bought by the State Geographic Institute and made new maps, to sell in commerce. Copyright exemptions allegations overruled. See <http://www.ivir.nl/>, 'the database rights file'.

xxxii Which Greece, France and Italy, lamentably ignored altogether and other countries interpreted differently. See (amended, to incorporate the Directive's provisions) L. 2121/1993, for Greece and Book II, Intellectual Property Code 1992, for France and for Italy, see Law on Copyright and Neighboring Rights 1961, as amended, n. 633 of 22 April 1941. So much for uniformity as the purpose of European Directives.

xxxiii See as examples, *Cornish W.*, 1996 European Community Directive on Databases (1996) 21 Columbia-VLA Journal of Law and the Arts, 1, [P.B. Hugenholtz](#), 'Program Schedules, Event Data and Telephone Subscriber Listings under the Database Directive. The 'Spin-Off' Doctrine in the Netherlands and elsewhere in Europe', paper presented at *Eleventh Annual Conference on International IP Law & Policy*, Fordham University School of Law, New York, 14-25 April 2003, *Stephen M. Maurer*, [P. Bernt Hugenholtz](#) & *Harlan J. Onsrud*, 'Europe's Database Experiment', *Science*, vol. 294 (26 October 2001), p. 789-790, [P. Bernt Hugenholtz](#), 'Code as code, or the end of intellectual property as we know it', *Maastricht Journal of European and Comparative Law*, Volume 6 (1999), No. 3, p. 308-318 (a more

general account on intellectual property matters), *Davison M.*, id., *Koumantos G.*, Les Bases des Données dans la Directive Communautaire, RIDA 1997, 85, *Adams J.*, 'Small Earthquake in Venezuela': The Database Regulations 1997, EIPR 1998, 2004), 129-134, *Colston C.*, Sui Generis Database Right: Ripe for Review? 2001, 3 JILT.

xxxiv *Reichman JH & Samuelson P.*, Intellectual Property Rights in Data? Vanderbilt L.R. vol. 59, no 1, January 1997, pp. 51-166 (a seminal account and standard text), *Reichman & Uhler*, Reconstructed Commons, id. National Research Council, Bits of Power: Issues of Global Access to Scientific Data, National Academies Press, Washington DS, 1997. *Band J.*, Testimony of Jonathan Band on Behalf of the Online Banking Association before the Subcommittee on Courts and Intellectual Property of the United States House of Representatives Committee of the Judiciary on the 'The Collections of Information Antipiracy Bill of 1999, HR 354, 106<sup>th</sup> Congress. Testimonies of experts in hearings for the various US bills on database protection, who were posed against new legislation, or for a limited type, typically contain rejection of the European Directive. <http://www.house.gov/>.

xxxv HC 2000, 1335, judgment of February 2001.

xxxvi Reference for a preliminary ruling by the Monomeles Protodikio Athinon by order of that Court of 11 July 2002 in the case of Fixtures Marketing Limited against Organismos Prognostikon Agonon Podosfairou AE, Case C-444/02, (2003/C 31/17), Official Journal of the European Union C 31/12, 8.2.2003.

xxxvii Fixtures Marketing Ltd v. AB Svenska, Spel, T 99-99, 11 April 2001.

xxxviii *Vantaan Karajaoikeus* (District Court, Vantaa), 1 2002, (Case C-46/02) (2002/C 109/46), OJ 4.5.2002.

xxxix Press Release n. 46/04/EN-full text in the Opinion of Advocate General Stix-Hackl in Cases C-46/02, C-203/02, C-338/02 and C-444/02, Fixtures Marketing Limited v. Oy Veikkaus, The British Horseracing Board Lts and Others v. William Hill Organization Ltd. Fixtures Marketing Ltd. v. Svenska Spel AB, Fixtures Marketing Ltd v. Organismos Prognostikon Agonon Podosfairou (OPAP), see <http://www.curia.ru/int/>

xl The 'spin-off' argument had been successful in lower European courts, and is a totally reasonable argument: the aim of the Directive was to protect

a database, which was the result of substantive investment, not a database which would be produced anyway, as a by-product of other activities. That *Fixtures Limited* wants to share some of the enormous profits of national betting agencies is of course understandable from a pure financial point of view, but this was simply not the kind of database which was in danger of elimination from piracy, should a law as the Directive not 'rush' to 'save' it.

<sup>xii</sup> Id.

<sup>xiii</sup> Section 3(a) of the bill.

<sup>xiii</sup> See, e.g. National Research Council, *Bits of Power, Issues of Global Access to Scientific Data* (National Academies Press, Washington, DC, 1997), pp. 157-160.

<sup>xiv</sup> See above, p. 8.

<sup>xv</sup> Basic Proposal for the Substantive Provisions of the Treaty on Intellectual Property in respect of Databases considered by the Diplomatic Conference on Copyright and Neighboring Rights Questions, Geneva, December 1996, CRNR/DC/6.

<sup>xvi</sup> Draft Treaty, Art. 2.

<sup>xvii</sup> The act of 'extraction' was the 'permanent or temporary transfer of all or a substantial part of the contents of a database to another medium by any means or in any form', while the act of 'utilization' was the making available to the public of all or a substantial part of the contents of a database by any means, including the distribution of copies, by renting, or by on-line or other forms of transmission, including making the same available to the public at a place and at a time individually chosen by each member of the public. A substantial part was any portion of the database, including an accumulation of small portions, which is of qualitative or quantitative significance to the value of the database.

<sup>xviii</sup> Art. 5. The protection of governmental databases was left to the states' discretion.

<sup>xix</sup> WIPO commissioned in 2001 five studies on the economic impact of the protection of non-original databases in developing countries and countries in transition. Reports were therefore filed in April 2002 by *Yale Braunstein*, Economic Impact of Database Protection in Developing Countries and Countries in Transition, 4 April 2002, SCCR 7/2, *Sherif El Kassas*, 'Study on the Protection of Unoriginal Databases', 4 April 2002, SCCR 7/3, *Thomas Riis*, Economic Impact of the Protection of

Unoriginal Databases in Developing Countries and Countries in Transition', 4 April 2002, SCCR 7/4, *Phiroz Vandrevala*, 'A Study on the Impact of Protection of Unoriginal Databases on Developing Countries: Indian Experience', 4 April 2002, SCCR 7/5, *Shengli Zheng*, 'the Economic Impact of the Protection of Databases in China', 4 April 2002, SCCR 7/6, *Andres Lopez*, The Impact of Protection of Non-Original Databases in the Countries of Latin America and the Caribbean, October 15, 2002, SCCR 8/6.

<sup>i</sup> Not all the reports came to this particular conclusion; for example, the study by *Braunstein*, id, sustained that the protection could benefit the developing countries. However, 'this position (*Braunstein's*) is based to a large extent on the application of theoretical tools developed originally for trade in goods. Unfortunately, these tools assume, among other restrictive assumptions, the absence of economics of scale, making their applicability to databases very limited...' (*Lopez*, id., p. 18). Also, the study on India by *Vandrevala*, id., contains some elements on the potential of India to commercialize governmental databases and therefore, possibly earning income by developing a database industry. But *Vandrevala* also points that there is a drawback of the new legislation, the problem of access to the protected works by the academic and scientific community (id., p. 29), a drawback which he proposes to address by specific exceptions for research etc. Quite another problem is, under *Vandrevala*, (id), that the '...psyche of the social and economic thinkers (in India) has always been against the grant of intellectual property rights...the recognition of new forms of intellectual property rights still remains a very contentious issue...'. (No proposal exists in the study to face this particular problem, not any attempt to explain why this general, as mentioned, distrust, may be wrong).

<sup>ii</sup> *Zheng Shengli*, id., p. 44.

<sup>iii</sup> Id., p. 58, : '...Driven by the profits and under budgetary pressure, the Government will be inclined to cooperate with private entities. As a result, the data which should have been publicized by the Government is now not accessible free of charge to the public. There will be less and less data in the public domain and the information already in the public domain will be available to the public in a restrictive way...'.  
<sup>iv</sup> Id., p. 47, a case of 'information Samaritans'.

<sup>iii</sup> Id., p. 46.

<sup>iv</sup> Id., p. 47, a case of 'information Samaritans'.

<sup>lv</sup> Id., p. 48.

<sup>lvi</sup> Id., p. 48. ‘..the national average annual college costs of China is comparatively very high.. in the year 2000, tuition and mandatory fees, costs of room and board and total costs of American public colleges are 3,510, 4,960 and 8,470 respectively, while per capita GDP for the US is 29,326 US dollars. However, the corresponding numbers for China are about 600, 20, 620 and 780 respectively. In the US, the total costs of public colleges is about 28% of its per capita GDP; in China, the corresponding number is about 94%. Therefore, Chinese students would have much less money to pay for the said license (to use protected databases) fees...’, id., p. 48. The Report from *Sherif El-Kassas*, from the American University of Cairo, id., concludes that any new *sui generis* protection of database would detract from the public domain and thus significantly reduce the availability of free information and data, may create counter productive perpetual monopolies by allowing owners of databases to indefinitely expand the period of protection, will be harmful to the free flow of information in the scientific communities of the world, will be harmful to the development of the Internet and the software industry because many components of the software industry will become protected and hence will no longer be available for free use and utilization and will hamper many aspects of development in the developing and under developed world. Id., p. 10 (conclusions).

<sup>lvii</sup> Note the rapid expansion of Internet users in China and the immense increase in the number of databases, id., p. 6.

<sup>lviii</sup> Commission on Intellectual Property Rights, Report, Integrating Intellectual Property Rights and Development Policy, London 2002, p. 1. ‘..What works in India will not necessarily work in Brazil or Botswana..’.

<sup>lix</sup> See *Benkler*, id.

<sup>lx</sup> For example, under the Gale Directory of Databases, cited by *Braustein*, id., only 0,2% of all databases in existence worldwide in 2001 came from ‘Southern America’ (only 21 listed, see *Riis*, id., p. 22, who maintains that the number is not true-‘the number of the databases in the region is clearly underestimated’, but also that the same is true in other regions and countries, ‘the countries of Latin America and the Caribbean are much

more ‘importers’ of databases than ‘exporters’, id., p. 22).

<sup>lxi</sup> See for example, *Wade R.*, What Strategies Are Viable for Developing Countries Today? The World Trade Organization and the ‘Shrinking of Development Space’, Review of International Political Economy, v. 10, n. 4, 2003, ‘..the North is a net producer of patentable knowledge and the South a net consumer....’, p. 4.

<sup>lxii</sup> Note, for example, that Haiti is not even reported as having any PC per 100 inhabitants (same for Antigua, Puerto Rico, Aruba and others. Haiti is also not reported as having any server per 10.000 inhabitants and the Internet users per 10.000 inhabitants in Haiti are 24,54-same number in the US is 4.506, 96 and Europe, 1359, 48-see *Riis*, id, Annex I, page 2, Table A.2.

<sup>lxiii</sup> See Report by *Riis*, id., p. 19. ‘In order to enjoy the full (dynamic) benefits of intellectual property protection of databases, a developing country must have an effective and wide-spread information technology infrastructure; otherwise, the incentive effect is comparatively lower in developing countries than in industrialized countries’, id., p. 23. See also World Bank (2001), ‘Intellectual Property: Balancing Incentives with Competitive Access’ in Global Economic Prospects and the Developing Countries 2002, Washington DC.

<sup>lxiv</sup> *Riis*, id., p. 19, referring to a view by *Almeida (1995)*, ‘The political economy of intellectual property protection: technological protectionism and transfer of revenue among nations’, 10 International Journal of Technology Management, pp. 214-229. *Riis*’s conclusions include that there is a strong case that optimal intellectual property regime in industrialized countries is not optimal in developing countries and that, in the short run, developing countries which typically are technology-importing countries will lose social welfare by enhanced intellectual property standards, because higher intellectual property standards in the long run will lead to an increase in royalty payments to foreign right owners. ‘The empirical evidence that we have collected from Latin America and the Caribbean..does not seem to support the argument in favor of introducing IPRs for non-original databases, in that we have not observed that the incipient industry that exists in the region, apparently concentrated in the more advanced countries, is being damaged by the absence of *sui generis* legislation..’, id., p. 29.

<sup>lxv</sup> *Wade*, id, p. 5, ‘...research libraries around the world paid out 66% more for scientific monographs in 2001 than they did in 1986 and got 9% fewer monographs for their money and paid out 210% more for 5% fewer periodicals.’.

<sup>lxvi</sup> On the immense pressure of the US in particular towards the adoption of TRIPS, exercised upon developing countries see *Shadlen K.*, *Patents and Pills, Power and Procedure: The North–South Politics of Public Health in the WTO*, *Studies in Comparative International Development*, vol. 39, n. 3 (Fall 2004) on file with the author. ‘In the 1980s and the 1990s the developed countries led by the US pushed for stringer enforcement of a less flexible set of regulations regarding intellectual property protection. The increased prominence of IPRs in US foreign policy is a story of sectoral politics in which well-organized industry groups representing the chemical, pharmaceutical, entertainment and software industries pushed the US government to use trade sanctions against countries that were argued to be lax in protecting their copyrights, patents and trademarks...business lobbying had made TRIPS a high priority for the US in the Uruguay Round negotiations, and considerable pressure was used to generate consent. Indeed the unilateral strategy was used as a tool to gain acceptance of the multilateral strategy, as the US explicitly used Special 301 provisions to coerce larger developing countries, such as Korea and Brazil, into accepting the inclusion of IPRs in the ..negotiations..’ given a choice between America sanctions or a negotiated multilateral agreement, the TRIPS agreement began to look better’....’ (p. 7/8). On pressure, see also Commission on Intellectual Property Rights, Report, id, ‘there is sustained pressure on developing countries to increase the levels of IP protection in their own regimes, based on standards in developed countries..’.

<sup>lxvii</sup> On why TRIPS handicaps developing countries both economically and politically see *Wade R.*, id, p. 4-5 (economically because TRIPS raises prices for these countries, which are only buyers and politically because obligations towards developing countries under TRIPS are unenforceable-‘no developing country has taken a developed country to the dispute settlement mechanism for not transferring technology.’, p. 5).

<sup>lxviii</sup> See above, b.

<sup>lxix</sup> There can be no intellectual property rights to the texts of judicial decisions, as these are of course

not the original creations of the compiler of a legal database. No matter how simple this may sound, there has been extensive litigation in the US by West Publishing (Thomson enterprises-giant publisher company) related to its legal databases (claiming intellectual property rights to their star pagination system etc).

<sup>lxx</sup> Commission on Intellectual Property Rights, id.

<sup>lxxi</sup> Emphasis added.

<sup>lxxii</sup> See above, note 49.

<sup>lxxiii</sup> Id, p. 11.

<sup>lxxiv</sup> Id, p. 12. ‘..it becomes critical that the existing copyright regime be supplemented by a *sui generis* system, so that all traditional knowledge databases are protected; this would facilitate the commercialization and trading of such data..’.

<sup>lxxv</sup> Id., p. 13. ‘..The potential use of this vast and varied genomic data could bring in substantial revenues for the country..’ However, he also notes that the Indian government, in keeping with the norm of facilitating scientific research through open sharing of data, begun making its genomic data public.

<sup>lxxvi</sup> Id, p. 23.

<sup>lxxvii</sup> Id., p. 24.

<sup>lxxviii</sup> On decode and Icelandic genetic information, see next paragraphs.

<sup>lxxix</sup> On ownership of legal information in the UK, in general and in connection with the database Directive see *Leith*, *Owning Legal Information*, *EIPR* 2000, 22(8), 359-365.

<sup>lxxx</sup> Id, note 49.

<sup>lxxxi</sup> Id., note 49.

<sup>lxxxii</sup> Note, for example, the case on Mongolian wool, cited by *Wade*, *On the Causes of Increasing World Poverty and Inequality, or Why the Matthew Effect Prevails*, *New Political Economy*, vol. 9, No. 2, June 2004, p. 163. In this case (p. 181), after the break up of the Soviet Union, Mongolia adopted a full-scale liberalization package; people were driven back into agriculture and herding; a special export tax on raw wool was removed, because of threats by the Asian Development Bank and in the end, the Chinese process virtually all of Mongolian wool. This is a case where a country’s tangible resources is controlled by another country and which is cited, obviously, as wrong. The same wrongfulness would emerge, had the Chinese

managed to control, for example, a database with all Mongolian geographic indicators and exclude the Mongolians from it. This would be a case of unjustified control of another country's information commons (intangible resources).

<sup>lxxxiii</sup> See [http://www.mannvernd.is/english/articles/greely\\_&\\_king-e/html](http://www.mannvernd.is/english/articles/greely_&_king-e/html), letter by Dr. Henry Greely, Professor of Law, Stanford University and Dr. Mary King, Professor, University of Washington.

<sup>lxxxiv</sup> Id.

<sup>lxxxv</sup> Id. See also *Garfinkel*, Database Nation, The Death of Privacy in the 21st Century, O'Reilly, 2000, pp. 193-186.

<sup>lxxxvi</sup> *Garfinkel*, id, 194. Note also the comment by the CIPR, id., on traditional knowledge and geographical indications, '...Even if patents are granted for valid inventions derived from genetic resources or traditional knowledge, it may be that the communities that provided such resources or knowledge did not give their informed consent, and no arrangements for sharing any benefits from commercialization were agreed upon...'

<sup>lxxxvii</sup> A partly similar case of immoral appropriation of information in developing countries was the very well known case of the AZT trials on AIDS, by American researchers, in situations where the same trials in the US would be illegal. See *Marcia Angell*, The Ethics of Clinical Research in the Third World, *New England Journal of Medicine*, vol. 337, no 12, September 18, 1997 and *Lurie P. & Wolfe S.*, Unethical Trials of Interventions to Reduce Perinatal Transmission of the Human Immunodeficiency Virus in Developing Countries, *New England Journal of Medicine*, vol. 337, no. 12, September 18, 1997. The trials took place in Sub-Saharan Africa and Thailand and used randomized, placebo-controlled methods to test the effectiveness of interventions in preventing perinatal transmission of human immunodeficiency virus (HIV). All trials were funded either from the US government or from foreign governments-only one was funded by the United Nations Program on AIDS (UNAIDS). The main objection to the trials was that the trial subjects, women from developing countries carrying the HIV virus (and certain to die at some point) were deprived of a therapy known to be effective. Therefore, human subjects were given different protections in the sponsoring countries and in the countries where these trials took place. *Annas G.J. Grodin MA*, An Apology is Not Enough, *Boston Sunday Globe*

1997, May 1, *Angell M.*, Ethical Imperialism? Ethics in International Collaborative Clinical Research, *New England Journal of Medicine* 1988, 319, 1081.,

<sup>lxxxviii</sup> On self-defense as justification for a lie see *Bok S.*, Lying: Moral Choice in Public and Private Life, 1983. A lie is, of course, to use another person's legal password as your own, to gain access to a protected database. In an e-mail by Chris Simon, member of the PapersInvited (US company) Team, answering my query why I had, as a legal subscriber to the database 'papersINVITED', only access to the database for six times each month, and not constantly, Chris Simon said (22.7.2004): '...the reason we placed a limit of six logins per user per calendar month is because of abuse (creating one login and sharing the same with multiple users) particularly in developing countries (emphasis added). Without such restrictions, quite a few organizational subscribers would not even consider a subscription...'. The annual cost of using the database for me, as an offer, 45\$ per year. This is not negligible, even in Greece, as payment for 6 times a month access to one single database for professional reasons. I cannot help but sympathize with researchers from developing countries, who may share a password from time to time-I also think that these people would either share, or not have access altogether (they would not be able to pay these amounts and papersINVITED is not really losing money, because they would not receive these subscriptions anyway). It is not surprising, then, why it is the developing countries, who engage in such 'abuse'.

<sup>lxxxix</sup> *Hugenholtz B.*, Code as Code or the End of Intellectual Property as We Know It, [www.ivir.nl/publications](http://www.ivir.nl/publications), p.10. *Hugenholtz* interestingly cites Pr. Phillips, who compares the extinction of the public domain to the whittling away of the mighty rainforests of South-America (again, probably due to Western policies).

<sup>xc</sup> See for example *Branscomb A.*, Who Owns Information? From Privacy to Public Access, Basic Books, 1994.

<sup>xci</sup> On serious and detailed doubts whether globalization is, as claimed, reducing poverty and inequality see *Wade R.*, Is Globalization Reducing Poverty and Inequality? *World Development Vol. Xx*, No x, pp. [www-wwww](http://www-wwww), 2004, 2004, on file with the author (see also <http://www.elsevier.com/locate/worlddev>).

'...world income distribution has become rapidly more unequal, when incomes are measured at market exchange rates and expressed in US dollars; world PPP-income polarization has increased, with polarization measured as richest to poorest decile; between-country world PPP-income inequality has been constant or falling since around 1980, with countries weighed by population; several serious studies find that world PPP-income inequality has increased over a period within the past two to three decades, taking account of both between-and within-country distributions; pay inequality within countries was stable or declining from the early 1960's to 1980-1982, then sharply and continuously increased toward greater inequality in manufacturing pay worldwide...absolute income gaps are widening and will continue to do so for decades...Aside from the moral case against it, inequality creates a kind of society that even crusty conservatives hate to live, unsafe and unpleasant...higher income inequality within countries goes with higher poverty....slower economic growth, higher unemployment and ..higher crime...'. See also *Wade R., On the Causes of Increasing World Poverty and Inequality, or Why the Matthew Effect Prevails, New Political Economy, vol. 9, No. 2, June 2004.*

<sup>xcii</sup> And perhaps in the end, hinders the interests of the powerful nations as well. See *Wade R., Globalization, id., '...the interests of the rich and powerful should objectively line up in favor of greater equity in the world at large, because some of the effects of widening inequality may contaminate their lives and the lives of their children...'*.