UNESCO, ethics and human rights in the information society: Towards an ethical space

This paper pulls together the threads of the ethics of information and communication technologies, from computer manufacturers and engineers to educators, media producers and citizens, to argue for a coordinated global approach. It envisages UNESCO playing a central role, not so much in devising codes of ethics or other regulatory measures, but in monitoring state and commercial appropriation of cyberspace, reconciling different cultural traditions and championing the perspectives of citizens. At stake, the paper argues, is the quality of the global commons.

Keywords: UNESCO, ethics, human rights, information society

Introduction
The following reflections attempt to answer the questions: Why are global ethical principles necessary for conducting our information society in an appropriate manner? And what role might UNESCO play in that context? Information and communication technologies (ICTs), with their ubiquitous and universal characteristics, are drastically modifying our environment as well as our economic and social relationships. This trend will increase in the future in a way which is now only partially predictable.

ICTs are used in an increasing number of contexts and offer us a place without limits where we are better able to express ourselves and where we have access to more and more personal services, but also where the physical or social barriers which separated the various visions of the world tend to disappear. In this sense, ICTs create a unique opportunity to develop ourselves and to enter into a dialogue founded on the recognition of a wide diversity of opinions. This might contribute to the cultural, economic, intellectual, democratic and human enrichment of global society. The development of the information society increases the chances not only for individuals but also for communities to freely express opinions in cyberspace and to receive information necessary for the exercise of their rights as citizens, as a community, as a state. Blogs and web 2.0 services have recently contributed to the increase of the capacity for everybody to participate fully in democratic discussion within the public space of the internet.

Nevertheless, if we are not cautious, this dream – which is inherent in the potential development of the information society – could turn into a nightmare. The way in which the technologies are presently designed and applied can severely affect the development of our liberties and of our democracies. ICT technologies, due to their ubiquitous character and their omnipresence in our daily life, allow public authorities and private companies to trace, spy on and guess our behaviours and choices even when we are enclosed within the four walls of our homes. Privacy is dead and freedom of information and other liberties are at risk when we are so spied upon and surveyed. Would I dare to sign a petition in favour of a worthy cause if I knew that tomorrow a powerful search engine would offer a potential employer the means to stigmatis me for my standpoint?

In addition, the fact that information sources are filtered, ranked and sometimes made inaccessible by what we might call the ‘gatekeepers’ to cyberspace, including web 2.0 platforms and search engines functioning on the basis of opaque and uncontrolled systems, raises further concerns about citizens’ liberties and the risks of manipulation. Finally, the reality of a global communications network considered as a universal place, where each person expresses his or her specific expectations, convictions and values, puts our society at the risk of these expressions clashing, or, worse, not being heard. Within traditional national borders such confrontations were rare. They will become a more common reality tomorrow and some, disappointed at not being respected or heard, could withdraw altogether from this place of dialogue. To summarise, it was easier
in 1950 to proclaim the universality of human rights and in particular freedom of expression than today, when we receive these different visions of the world within the precincts of our private homes and lives.

It is hardly enough, therefore, to proclaim the unity and universality of the infrastructure to avoid the risk of its being torn apart. Our conviction is that if the internet is to remain, according to the World Summit on the Information Society (WSIS) assertion at Geneva in 2003, a worldwide public resource, that assertion will be realised only through dialogue and, more precisely, through the discovery and implementation, including by legislation, of common ethical principles respecting the fundamental otherness of one's neighbours. So, it is the role of UNESCO first to recall the fundamental ethical principles to be observed in cyberspace; and second to analyse how these ethical principles could come into effect and therefore to put into place the appropriate means to realise them.

What ethical principles have to be reasserted?

Recent debates and studies have without a doubt shown the overwhelming interest there is in recognising two essential ethical principles: the first lies in human dignity and the pre-eminence of individual autonomy, that is to say the capacity for personal development; the second consists in a moral, even legal, obligation for solidarity and social justice.

Autonomy and dignity

Dignity, according to Kant, means the assertion that a human is an end in him/herself and can never be viewed as a simple means to an end, be it economic profitability or efficiency or security (private or public). This ethical principle is at the foundation of UNESCO's Constitution, as expressed in the UNESCO Treaty preamble. Can we speak of human dignity when, in the rarified world of the internet, the value or rather the status of the person in the networks, the functioning of which she or he cannot control, reduces that person to that of things surrounding him/her and with which he/she interacts? Can we speak of respect for persons when the systems function in a non-transparent way on data, or metadatabases, which are remote from the individual's role and which reduce people to their 'profile' construed on the basis of statistics? The same question arises with regard to applications such as those known as 'one-to-one marketing' which are based on a person's autistic vision, confined by her/his preliminary choices.

Finally, how can we avoid mentioning the addiction which certain games engender and the perpetual control practised, in particular but not only, by the video surveillance systems which inhibit each and everyone and prevent people from expressing themselves freely? Education to real autonomy implies the knowledge of the way the internet works, its actors and the purposes of the processing. Right to a transparent functioning of the surrounding information systems and right to access to the data or logic used in that processing are without doubt an essential condition for maintaining our dignity and autonomy in cyberspace.

If the recognition of each person's autonomy and the respect for his/her uniqueness is, without doubt, the supreme ethical principle, as shown in the example of the child in the library, we can easily conceive that the right to privacy, which translates this ethical principle, must be recognised as a two-fold basic right. For, on the one hand, it sanctifies a fundamental principle, the subject's capacity for autonomy, and on the other, this recognition conditions the exercise of all the other rights and fundamental liberties, be they concerned with the freedom of expression, of association, of religion and so on... So, the recognition of privacy has to be considered as a preliminary requirement for the exercise of the freedom of expression.

This claim for an internet, at the service of autonomy, is to be understood not only on at the level of the individual but equally at a collective level for entire nations. That the internet allows each community to express itself, to enrich and extend its own culture is to recognise the right of each language to be present on the map and for each nation to have at its disposal the means for its very own forms of expression. Is this not an important sense we should give to UNESCO's Convention on the protection and promotion of the diversity of cultural expressions?

Solidarity and social justice

Solidarity and social justice are two other principles closely linked to these. Solidarity implies, according to them, our concern to include our neighbours in all our actions, be they individual, collective or entrepreneurial. It means firstly that we are invited to express ourselves on the internet as though we were speaking to Mother, recalls the importance of courtesy and our concern for others, even those who are unknown or invisible to us in our communications. Our consideration for handicapped people who cannot find any satisfaction in
existing cyberspace is another topic we have to take into account. What we have to do, as recalled in the WSIS declarations, is to take care to include each and everyone in the information society, by putting at their disposal appropriate software and services in order to make them able to fully participate in our virtual world. The assertion of these principles can be found in the movements of open source and open document, welcome extensions which should be encouraged. Furthermore, this same assertion enables us to fight arguments of exclusion inherent in the functioning of some computer programmes.

The obligation for private or public authorities to take into consideration the potential exclusionary impact caused by the introduction of certain technologies has to be underlined. Increasingly, access to services (for instance, e-ticketing for access to public transport or the use of electronic cards for access to public services) are conditioned by the use of technologies which might be considered by some in the population as a barrier, or where the cost of their non-use might create unjustified price discrimination. Profiling methods might be used for avoiding certain consumers or discriminating on prices according to their supposed economic value.

Lastly, we find here the need to proclaim the principle, if not the right (that is to say the possibility to validate before ad hoc authorities, the implementation of this principle) of universal access, which implies not only access to the infrastructure but, moreover, access to certain contents judged essential and access to the usage capacity of new technologies. This broad conection of universal access to services in our information society has to be asserted. It refers to the right of each citizen to an education which renders him or her capable of expressing him or herself in cyberspace. That justifies the various components of the universal service. Universal service means not only a non-discriminatory and accessible access to an infrastructure of quality including the development of public access points, such as libraries, schools and government but also the right to be educated how to use internet services, in other words computer literacy. Computer literacy has to be understood broadly as asserted by the Council of Europe not only as the computational aspects of the use of internet services but overall as a critical and ethical education in the use of these new services by a better understanding of the societal impact of those services. Network neutrality is a concept quite important to recall in this context. This policy principle implies a non-discriminatory treatment as regards access to online content services. It means, for network operators, prohibiting them from blocking or degrading access, submitting users to unreasonable or discriminatory conditions, or even prioritising between different online service providers who provide similar services.

This principle prohibits any control of the data flows and imposes a rule of equal treatment of each data flow. It meets the initial so-called ‘internet end-to-end principle’, which was enacted for ensuring maximum efficiency of the transmission to minimise the cost of the network and in the case of insufficient network capacities to impose the ‘first-come, first-served’ rule. That rule creates problems while dealing with delay-sensitive internet applications such as, most notably, services such as voice over Internet services or streaming videos. Engineers have developed technologies which permit traffic prioritisation and thus solve the quality of service (QoS) problem raised by these time-sensitive applications.

At the same time, it introduces the possibility for a network operator to prioritise and shape traffic at the router level by automated recognition of the identities of the sender/receiver of a data flow and/or of its content. Beyond that, it introduces the possibility of a two-tier internet – an internet with high performance and great capacities of transmission for certain information providers and/or rich customers and another one with degraded performance accessible to others. This possibility requires certain legislative actions beyond the application of competition law in order to ensure the transparency of the usage and purposes of technologies of prioritisation and perhaps to ensure that a minimum quality of service is guaranteed to all internet users, which implies a constant re-evaluation of the provision of universal service.

**How UNESCO might promote and ensure the effectiveness of these ethical principles in cyberspace**

Without pretending to be exhaustive, I would like to cite a number of ways in which UNESCO might help to play a role in the promotion of an ethical cyberspace. It is quite clear that to achieve that aim, UNESCO needs allies. Amongst these allies, the Council of Europe seems to be a priority since this public international body proclaims many similar values, including those around the defence of liber-
ties. The fact that in the past they have organised jointly a certain number of activities in the context of the WSIS follow-up is promising but their cooperation must be still strengthened. Having said that, we propose to organise our reflections on future UNESCO actions along two main avenues of thought. The first one is definitively the idea to promote ethical discussions amongst cyberspace actors and stakeholders. The second one pinpoints certain specific topics where action has to be undertaken in order to ensure an ethical cyberspace can develop.

Promotion of ethical discussions and codes of conduct

The ethical principles underlined above are quite abstract and must be translated into precise statements according to the diversity of the problems we have to face. On condition that the editing of these statements follows certain procedural rules and that they really are the translation of the pragmatic and concise ethical principles which we have just pinned down, they represent an important added value to allow for the implementation of these fundamental ethical principles. It is the duty of UNESCO to promote ethical discussions about ICT applications and technologies and the drafting of various codes of conduct. Perhaps some places must be identified because they represent potential risks which have to be identified. As, in my opinion, this discussion must be undertaken at the outset of the development of a technology, it means research laboratories need to be able to develop technologies and their future application according to what we might call a value-sensitive design.

In addition, some actors should be particularly involved in the definition of codes of ethics, because of their roles as 'gatekeepers', that is controllers of the public space which cyberspace constitutes. Other varied actors have an interest in these codes: the professionals involved with these technologies themselves who, via these codes or this deontology, should be able to encourage enterprises to give thought to appropriate values to adopt in implementing these technologies; the users and communities of users who, in discussion forums, on-line games and elsewhere, should, through these codes, make themselves aware of the vulnerability of others; the online trainers, the librarians for whom a duty of neutrality would appear a solid foundation; those who run servers for online games or gambling should also obtain rules of conduct in such a way as to prevent addiction and protect youngsters.

Beyond that, the deontology of online journalism or social networks platform operators might be raised, even that of robots inspired by a code adopted in South Korea and, in turn, inspired by the famous novel by Isaac Asimov. As regards user communities, this ethical education is even more necessary given that with web 2.0 applications, each of us might become tomorrow a publisher, an author and a data controller. Ethical codes should be discussed as much as possible with the different stakeholders at all levels of internet communities, ISPs and intermediaries.

As regards the procedural aspects, we do insist on the importance of bringing all stakeholders together around the table. In order to have some legitimacy, it is useful that the drafting does not take place in closed groups but be based on dialogue with those interested in creating these codes. In all probability, the people interested will vary according to the object and domain of the code of ethics. Thus, the codes of ethics appropriate for online trading require a debate with consumers. Undoubtedly, legitimacy also implies a publicity code; each person must be able to know the rules of the game used by those who have adopted these codes.

Moreover, the contents should really enhance the rules of law already existing. A code of ethics, as all self-regulation, should not only conform to the rules of law, it is important that it constitutes a 'plus' dictated by concern for the respect of fundamental principles which inspire it; respect for dignity and autonomy, solidarity and social justice. This enhanced value of the content should be carried out with the aim to improve the effectiveness of the codes of ethics. Finally, in order to ensure a comprehensive analysis of the different aspects of new technologies or their new applications, would it not be better to bring to the table scholars such as psychologists, philosophers, psychiatrists and sociologists, until now significantly absent from our debates?

To conclude on that point, we recommend that UNESCO create an observatory on ethics in the information society. The usefulness of this observatory is obvious in terms of collecting information about existing good practice, exchanging models of codes of conduct, disseminating best practices in an appropriate manner and providing platforms for potential discussion.
Recommendations on actors and topics to be addressed
The first actors to be mentioned are the designers of information systems and producers of information and communication technologies (ICTs), particularly of computer equipment. Ethics about the environment or consumers' protection have given rise to principles which can be cited in this context: 'Whoever creates the risk should accept responsibility in part for the damages involved.' This first principle should induce the industrial world of information and communication technology to define standards and develop systems and products in conformity with rules of law which translate these ethical principles. This pleads for standards bodies to enter into dialogue with users, to develop 'privacy enhancing technologies' and, more broadly, to develop 'value sensitive design' (a concept taking ethical values into consideration). Beyond this, the principle calls for essential information about the risks created and transparency about the rationale which guides the functioning of these technologies and their use.

Undoubtedly, certain actions must be developed towards end users and towards addressing the overly-passive role which end users of technologies have played. The internet has become a place of consumption for imposed technologies and not a place of invention as a result of appropriate technologies. We plead for the dissemination of appropriate 'internet content-generated' technologies today, 'internet democracy-generated' technologies tomorrow, and for the development of original citizen platforms, capable of discussing models of information circulation but overall for the creation and development that makes up alternative modalities of governance.

The model known as 'Creative Commons' is a good example. We can imagine others, thus the spontaneous creation of platforms which will enable citizens collectively to enact a monitoring technology, to control the functioning of operators and to denounce any misuse of ethical and legal rules. That active role of end users requires appropriate education but also financial support to their representatives (as is the case as regards environmental questions) from states and international public organisations such as UNESCO. In relation to end users' education, the role of the educational world might not be restricted only to learn how people might use ICT technologies, but might focus more on a real appropriation by citizens including an ethical and participatory use of the latter.

The idea to create a 'highway code' is supported, not as a preliminary and obligatory examination preliminary for responsible media use but as a reference by which each user can situate him/herself. If educational establishments take part in this media education, the providers of goods and services should also extend their efforts to inform and educate. UNESCO might play an important role by supporting these educational efforts by providing adequate educational tools.

As the third actor, the state should be subsidiary in its intervention, that is to say:

1. to proclaim and translate basic ethical principles on the internet into legal language;
2. to monitor and oversee their effective implementation; and, if necessary,
3. if misuse is observed, or if economic actors should fail to uphold the values by appropriate self-regulation, to themselves adopt public regulation using transparent and open methods.

Beyond that, it is up to the state to be vigilant. The model here is co-regulation, in which the state invites all stakeholders around a table, taking care that they are all present and really independent representatives. Participatory democracy has to be considered as an important complement to the deliberative democracy (that of constitutionally qualified assemblies) if such conditions are fulfilled. Since certain categories of interests (civil liberties associations, consumers' associations, etc.) might have difficulties being represented for obvious financial reasons, it might be appropriate that state financial support be provided to organise the representation of certain interests (for example, consumer representatives on standards bodies). The state itself should be a model in the ethical use of information systems and seek to promote applications and products corresponding to these principles. Finally, the state should also intervene in the most appropriate way to be the provider of electronic, public information services on such essential matters as health, security and rules of law.

Finally, as regards UNESCO, perhaps it might be recalled that in 2005, UNESCO declared certain fundamental principles on bioethics, around which a world consensus was established. Why not reaffirm these same principles for the information society and elaborate their concrete significance in applying them to the information society? The same year UNESCO has, by a quasi-unanimous vote of all states,
proposed that nations worldwide should adhere to the Convention on Cultural Diversity. This convention should be applied in the digital world. Each country’s cultural expression assumes respect for the identity of its language on the net, domain names in all languages and basic software accessible in the various languages. It supposes that the cultures currently absent from the internet because of lack of means, can, with due respect for their identity, find their place there tomorrow.

By organising a conference in 2007 on ‘Ethics into an Information Society’, UNESCO together with the Council of Europe has reasserted the link between, on the one hand, the building of an ethics of the information society and, on the other, human rights and the supremacy of the state of law. That ethics should lead us to an awareness of principles which must govern the information society is evident, but these principles should find a continuation in the affirmation of the rights which they uphold. From this point of view, the first recommendation to be addressed to these two international public organisations is simple. Each one has, during the last years, built a foundation of principles and rights for which the assertion and amplification should contribute to the creation of a more ethical information society. Certain consequences have to be drawn down on this basis as we will now comment on.

Two topics and new regulatory suggestions

Privacy

In The digital person: Technology and privacy in the Information Age (2004), Solove describes the evolution of the relationships in our information society using two paradigms drawn down from two novels: The trial by Kafka and Nineteen eighty-four by Orwell. The first paradigm denounces the radical and increasing opacity of the data capture and data flows permitted by the increasing use of ICTs and their ubiquitous character. This opacity leads to a certain anticipatory conformism in the sense that data subjects adopt the behaviour they believe is expected by data controllers (DCs). The increasing asymmetry of information powers is also due to the huge amount of data that data controllers are collecting and processing, which enables them to define profiles and to take ‘appropriate’ decisions about our behaviours, our movements, facial emotions, clicking habits – in other words, on the basis of numerous instantaneous slices of our lives that we never expected might be significant. Additionally, information systems might keep the memory of all these events by storing that in the long term. Information systems have a memory an individual has not.

This phenomenon comes together with the emergence of certain applications which are linked to the technologies of ubiquitous computing, inducing what we might call the Observation Society paradigm. Under this paradigm, the DC combines multimodal capture of data 'extracted' from human bodies with an implicit understanding and interpretation of this data as valid and privileged source of 'truth' about the persons, their preferences, intentions, etc., following the assumption that the 'body does not lie'. Decisions are taken a priori on the basis of these data and profiles rather than on information from the data subjects. Since data subjects are not aware of this they are faced with decisions they are unable to understand and definitively to contest.

The agenda of the Tunis WSIS meeting has clearly pleaded in favour of the adoption of a global charter on privacy and UNESCO has to support this claim, by cooperating with the Council of Europe and promoting worldwide the Convention 108 on Data Protection. To be more precise, this convention is grounded in two main principles: transparency and proportionality. Undoubtedly, these two principles must be asserted again and to a certain extent enlarged.

So, we consider that transparency should encompass in our information society the right to a mastered and transparent functioning of computer equipment including RFID or other sensors embedded in our daily environment. Our computers are functioning to a large extent without the possibility for us to know exactly what they are exchanging, receiving and processing. The transparency of the processing means also the right to be informed about the data flows generated and the DC involved in these networks (who has access and for which purposes?). As regards the profiling, the people ‘profiled’, whether identifiable or not, must be given access to the ‘profiling methods’ present, how they are used and their logic. Individuals must have the possibility of refusing the profiling application and blocking certain automated data flows used for these profiling.

The proportionality principle has to be recalled at a moment when data capture is so easy and data processing capacities have grown to such an unexpected level that even data that
concern instantaneous slices of my life might be kept for an unlimited period. Economic efficiency including the interest of consumers or citizens (see the e-government efficiency myth) and private or public security nowadays are presented as justifying the processing. We have to resist the temptation that, since data are getting easier to capture and to process, their use to promote efficient services making the activities of companies more profitable or ensuring a better public service or control of the respect of the public regulations must be a priori permitted.

Freedom of expression

Freedom of expression, offline and online, is a basic inalienable right. If certain limitations are provided for by the text which enunciates these principles, we must resist the temptation of regulating a priori freedom of expression on the internet. The temptation is great as witnessed by certain recent attempts by governments to justify interference by public authorities. The technology might help by creating solutions which were not possible in the offline world, notably by screening all messages in order to detect expressions or images considered as shocking, offending or disturbing.

On that point, one has to recall the practice of the Council of Europe Court of Justice which asserts that democratic debate imposes the existence of a variety of opinions even if they might be considered as offending or disturbing people. We must learn to live with that risk and to concentrate our efforts only on certain precise regulations focusing on manifestly illicit (e.g. racism or child pornography) or seriously harmful contents and trust the powers of freedom of expression reinforced by the internet and its capacity to allow each citizen to react, discuss, and protest against certain practices or content. In our opinion, more speech might be the best way to solve the problem instead of developing filters, blocking measures or sanctions.

In that context, 'open' and transparent self-regulation (versus the confiscation by certain intermediaries of this self-regulation) conceived as the participation of all stakeholders in the regulation of the content on the internet is an appropriate way to maintain the internet as a public discussion place and forum to acceptable limits.

The second condition for the effectiveness of our freedom of speech relates to the ambiguous relationship between intellectual property rights (IPR) and freedom of expression. It is quite obvious that IPR regimes have been created for stimulating creativity and for supporting the dissemination of ideas and opinions. By asserting that, we re-emphasise that copyright finds its ultimate justification in the freedom of expression recognised by Article 10 of the 1950 Council of Europe Convention. At the same time, the copyright regime guarantees the possibility - in case of prevalent general public interest - to have access to works and denies the possibility of transforming copyright into a 'property right', through adequate technological measures (such as Digital Rights Management Systems or tattooing) and everlasting contractual provisions.

These measures reinforced by their legal enactment help limit a priori the access to certain works including overriding of legal exceptions (DRM) and/or require acknowledgement of the presence of the work in any of its fragments without any discussion about whether the conditions of the legal protection still hold in all these fragments (tattooing). They permit a reinforcement of the control of any reuse of each element of the work. And, in the same sense, the use of filtering and contractual provisions might be imposed without respect to copyright regulation requirements. A chilling effect on creativity might be feared. That is why we recommend an in-depth assessment of the impacts of all new technical and contractual tools on the traditional balance enshrined in copyright legislation. Furthermore, we encourage states to provide electronic universal access to economic, legal, social, cultural information held by the public sector such as archives, public libraries, museums (as suggested by WSIS).

The horizontal effect of the 1950 Convention of Europe ensures that the same freedom of expression principle and its limits are available also towards intermediaries such as search engines and web 2.0 platforms. Since they are becoming the private gatekeepers of the public discussion space, it is important that their policies as regards the control of internet content be clear and transparent to the public. Until now, these policies are quite unclear. The fear of 'over-censorship' by these private authorities calls for a control over their practice. Otherwise, the internet will become transformed by this privatisation of public space 'into a collection of largely privately owned and privately regulated places' (Nunziato 2005) without judicial control. To avoid that exaggerated privatisation of cyberspace, countries
have a positive duty to impose the respect of the freedom of expression on all actors and to recreate public places (i.e. public forums in cyberspace).

That assertion does not conflict with the self-regulatory or co-regulatory measures such as quality labels, moderators' intervention, rating systems, put into place by communities or information providers themselves. These initiatives might be interesting to promote the confidence and awareness of the ethical aspects of what must be our behavior on the internet. As already said, instead of punishing and sanctioning, it would be better to achieve the same goals by education and through codes of ethics discussed above and by developing ways and tools for internet users and information service providers to internalize norms and values.

With the new world of the internet, the concepts of the press and editors have to be reassessed. Not only because the actors are no longer linked to specific countries and are active throughout the world or a large part of the world but also because everywhere new actors are now contributing to the formation of public opinion. For instance, can we consider Google News, with its selection of press articles, as a press institution? YouTube is diffusing opinions, recording what is happening around the world, but its activity might not easily be considered as that of an editor, even if there is a certain selection of information and images and definitively a classification of them.

The traditional press sector is also developing new services online such as discussion forums and journalists' blogs which sometimes are clearly outside the control of the editorial board. As regards the actors implied in web 2.0 services, everybody could become a journalist, commenting through his or her blog on day-to-day events and their websites in certain cases receive an audience comparable to that of the newspapers. The concept of a journalist is not defined but it is commonly considered that his or her activity is to disseminate through a publication's editors his or her independent opinion on events which are of public importance and due to their important contribution to the formation of the public opinion, are submitted to a deontology which ensures the public's confidence (duty to check the sources, duty to limit him or herself to the information published to what is needed for the formation of the public opinion and so on). The respect of these obligations is, ensured by self-regulatory rules and organised by the peers themselves. To what extent might this deontology be applicable to citizens publishing their own opinions normally directed to a restricted public?

The role of the search engine has to be evaluated in the same context. To what extent is democracy implicated by their activities? Even if we certainly agree that search engines provide a major input to the democratic debate thanks to the possibility given to everyone to retrieve and access, from any country – including not only developed countries – all adequate information on a topic, we, nevertheless, would like to put into question this progress. The equity of chances to exist and to be consulted on the web scene is far from being obvious when we consider the 'link popularity' metric applied in most of the engines. A lack of transparency is thus the major issue raised in this context. Most users ignore how the ranking is done and often consider it as the true response and vision of the world of their queries.

Even if it is normal that the logics governing the functioning of the search engine are greatly dictated by economic and efficiency concerns, it remains that the method of selection has to be clear to everybody and could not be operated in an unfair way for ideological, anticompetitive or other reasons.

Last question: how to ensure cultural diversity in a global environment? Having asserted the absolute priority of freedom of expression, the EU has to recognise that certain values might be considered differently in a certain country than in the EU for religious, cultural or societal reasons. Nudity is accepted in some countries but is rejected and considered a threat to public morality in others. The French Yahoo! case concerning racist content illustrates the difference of approaches between the US and the EU as regards the prohibition of this kind of content. The adoption in 2005 of the UNESCO Convention on the Diversity of Cultural Expression already referred to is a clear recognition of this plurality of national perceptions of public order and moral.

The abolition of physical frontiers in the context of the internet might create difficulties for the countries to enforce, in the context of the internet, their own perceptions of what might remain an attribute of their national sovereignty. This sovereignty is, however, recognised even by WTO Conventions since Article XIV (a) of the GATS permits a country to
go against their market access commitments if taking measures is 'necessary to protect public morals or to maintain public order'. Reconciling public national sovereignty on the one hand and the global character of the internet on the other hand is not an easy equation. This kind of debate might not be correctly solved in the context of the WTO, only on the basis of a balance between trade interests and public interests.

Perhaps UNESCO might promote another solution to reconcile the freedom of expression principle and the right of each sovereign state to limit this fundamental liberty for prevalent public or general interest reasons. Perhaps an international panel created under the auspices of UNESCO might be the appropriate solution. Implicit in this thinking is the necessity of ensuring that infrastructure design enables each nation to enforce decisions taken, something difficult were the internet configuration not to permit this enforcement. That raises the delicate problem of state sovereignty on the net, a question we will address in our conclusions.

Conclusions
Technology assessment as a need
If technology is the risk, it might also be the solution. ICTs are a tool, more precisely a social construct, since their design and use are not predetermined but enshrine logic and are undertaken by their users. If technology certainly offers new opportunities to them and means to realise their goals, it is quite obvious that choices are still possible. We should never forget that if technology creates risk at the same time it might also bring solutions. In short, technology can make a contribution to humanity just as it can put in peril the liberties of citizens. The EU Data Protection Directive second statement asserts: 'Technology must be at the service of the human being, his or her freedom and dignity,' and this statement has been used in different cases in order to impose 'privacy by design' to computer equipment producers and information system designers. That assertion might be extended from privacy issues to freedom of information ones as regards labelling systems, filters, or software platform for internet content selection.

It implies that from a very early stage, research laboratories, information system producers and public or private standards bodies have to take into account these concerns and follow a 'human values-sensitive design'. That means an enhanced integration of moral and legal values from the very starting stage of technological design. To ensure this integration a societal assessment should be initiated both at the level of research laboratories and definitively at the level of standards bodies. It presupposes that computer scientists must be more aware of the legal and societal environment and impact of their findings. At the same time, information system producers and designers will have to support liability in cases where their products or services permit their users to infringe human rights legislation. In conclusion, it is at the roots of the technology where we should find the solutions to the risks created by the use of that technology.

Beyond these first reflections, as regards at least to ICT applications or technologies with major impacts (ambient intelligence, profiling, cloud computing...), societal assessment should be initiated with, as previously underlined, the participation of all stakeholders, empowering what we might call the 'ordinary' voices, such as representatives of all groups of society and in particular vulnerable ones, but also civil liberties associations, trade union representatives and consumer groups. The regulatory framework developed as regards environmental questions (the principle of precaution, the right of the population to be informed, and setting up of public debates) might serve as a good example.

The principles of transparency and deliberation ('multi-stakeholderism') affirmed notably by the Aarhus Convention, will henceforth find an echo. This will enhance the active role of citizens and their participation on the internet. Perhaps a permanent working group, a sort of observatory, has to be set up at global level by UNESCO. Its role would be multiple: to give advice and recommendations to the European institutions at their demand or on its own initiative, collect information and disseminate good practices, organise the public debate about the evolution of technologies and their societal impact.

Role of the state in promoting citizens' freedoms in cyberspace
According to European Court of Human Rights (ECHR) case law, the state is not merely under the obligation to abstain from interfering with individuals' privacy, but also to provide individuals with the material conditions needed to allow them to effectively exercise their right to private and family life and their freedom of expression. In other words, according to the theories of the 'positive duties' of the state...
combined with that of the 'horizontal effect' of the ECHR, states are under the obligation to take all appropriate measures to protect the fundamental rights of individuals against their infringement by other non-state parties. As regards especially privacy protection, the Council of Europe Convention 108 might be considered as the necessary global privacy regulatory framework since it is open to signature by third countries and offers a minimal common and acceptable basis for all countries.

'Zoning the net' according to citizenship might seem at first glance a sensible way to maintain the modern world's citizenship lines. However, such a practice will encounter problems, not the least of which will be citizens' dissatisfaction with differential treatment based on nationality. As in other areas of governance, a global approach is needed. It requires that each country seriously takes into account the various cultural approaches existing throughout the world, the refusal to impose on the others nations a unilateral view as regards the public order. A regulatory framework based on human rights implies a commitment to enter into a dialogue founded on mutual recognition of cultural differences and on some ethical common values revealed in international documents (especially the UNESCO Convention on the Protection and Promotion of the Diversity of Cultural Expression and the UNESCO Declaration on Bioethics and Human Rights) and universally accepted. These common values could be enumerated as follows:

1. each person's dignity and autonomy;
2. solidarity between individuals and peoples and social justice;
3. the need for beneficent technologies and prevention of their damaging effects.

If this dialogue does not happen, one might fear that the internet will become a Tower of Babel where fear and hate of others' speech will be the sad result and will have as a result the loss of this unique and unsullied chance of cultural, intellectual, political and human enrichment of the global society.

The role of citizens: From adrift to active participation

In the UNESCO report on Network Governance, Rundle (2005) speaks about 'citizens adrift' as the major problem of the future information society. Technological evolution is far beyond their ability to understand. Definitively that evolution brings many advantages and might lead to a new democracy where everybody might learn from each other, confront his or her ideas and therefore participate more actively to the vouloir vivre ensemble. Citizens should be seen not as simple consumers of services, manipulated to an extent never reached. To ensure this citizens' mastery of the technological environment, privacy regulation aiming at ensuring the autonomy of the individuals will definitively be a main concern.

That recognition and even – as already proposed – enhancement of our privacy regulation is not sufficient. The public voice must be heard. It refers not only to the societal debates which have to be organised at all levels including at the global level but also to the free debates the citizens must open up and promote by discussing all the possibilities offered by the technology. We underline the importance of citizens' networks supported or not by civil associations in order to defend alternative ways to develop the internet. Creative Commons and Open Net movements are examples but many others examples developed by peer-to-peer networks might be quoted in the context of the use of internet services, taking fully into account the benefits of the technological tools at their disposal.

To promote participation, citizens' education is a major issue, particularly as regards their awareness of the ethical issues and of the liability implied by their participation in the information society. That education is definitively needed at a moment where we are full actors on the internet through the web 2.0 services. The internet increases tenfold the power of individuals who, in a targeted or a dispersed way, in a conscious or unconscious manner, can with a simple message posted on the internet destroy the reputation of others, transmit a virus, or send or receive child pornographic contents and thus encourage the enslavement of human beings. The internet gives our actions a global impact, without any particular effort on our part, which prompts us to question individual and collective responsibility. Perhaps this individual and collective commitment to play a critical and active role in the design and choices of our information society constitutes a chance for our democracies.

References


Note on Contributor

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