ETHICS, SOCIAL MEDIA AND MASS SELF-COMMUNICATION

Robert W. VAAGAN

Associate Professor, Oslo University College - Faculty of Journalism, Library and Information Science

▪ Un modèle révisé de l'éthique en matière d'information est présenté. Il peut s'avérer utile dans l'analyse des défis éthiques, dans ce que Manuel Castells décrit comme un système émergent d'"auto-communication de masse" dans lequel les media sociaux jouent un rôle-clé. Le modèle identifie trois sources ou spécificités de notre ère de l'information qui débouchent sur cinq problèmes éthiques liés à cinq droits individuels. Alors que le système d'auto-communication de masse est envisagé quelque peu différemment par des théoriciens tels que Castells, Jenkins ou Lyon, la réflexion éthique associée au passage du web 2.0 au web 3.0 dépend du poids relatif accordé aux théories normatives de la vertu, du devoir et de la conséquence.

▪ Een herzien informatie-ethiek model wordt voorgesteld dat nuttig kan zijn in het analyseren van ethische uitdagingen in wat door Manuel Castells omschreven wordt als een opkomend systeem van "massazelfcommunicatie" waarin de sociale media een sleutelrol spelen. Het model identificeert drie bronnen of karakteristieken van onze informatietijd die vijf ethische resultaten genereren gelinkt aan vijf individuele rechten. Terwijl het systeem van massazelfcommunicatie ietwat verschillend door theoretici zoals Castells, Jenkins en Lyon voorgesteld wordt, hangt ethische reflectie in de overgang van Web 2.0 naar Web 3.0 af van het relatieve gewicht toegekend aan normatieve theorieën over deugd, plicht en consequentie.

Introduction

Joining library and information science studies more than a decade ago, my initial research on the ethics of librarianship[1] soon led me to the broader field of information ethics[2]. Shifting from 2005 to my faculty's section for Media, Communication and Journalism Studies, I continued to have an interest in ethics, leading to studies in open access and open source issues in electronic publishing[3,4] and to media pluralism and freedom of expression in the context of social media and globalization[5,6]. When I was invited to contribute to *Cahiers de la documentation/Bladen voor documentatie* it has prompted me to review my work on information ethics while at the same time taking into consideration some of the ethical dilemmas in what Manuel Castells sees as the emerging system of "mass self-communication" where social media play a decisive role[7].

Refining the model

Vaagan and Koehler[8], drawing on Zwass[9], employed the following model:

Here ethical issues were seen to be generated by three main, interrelated sources:

- the pervasive role and capacity of information systems to collect, store and retrieve data;
- the complexity of information systems;

- the intangible nature of information and digital goods, such as digitized music, film or software.

These sources were seen to give rise to four main ethical issues – privacy, accuracy, property and access – which in turn were associated with, respectively, the individual rights issues of privacy and free consent, due process, private property and fair treatment. The case of a Norwegian hacker taken to court by the American film industry was then discussed in terms of duty-based and utilitarian ethics.

Seven years later, the model still seems appropriate to discuss a broad range of issues related to information age ethics. The three sources are more pertinent today given factors such as the rapid growth of the Internet, technological advances e.g. in nanotechnology and globalized social media as vehicles for ever more information. The centrality of the listed ethical issues and
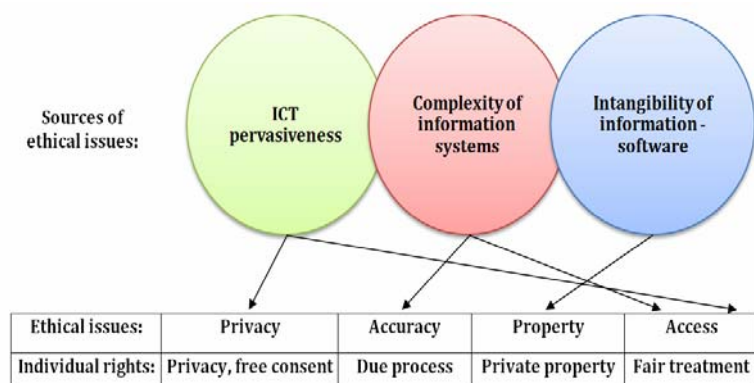

Fig. 1: Sources, issues and individual rights.

individual rights persists, as we see in the discussion on privacy and the EU *Data Retention Directive*, or in the discussion on how social networking media like *Facebook* can spread sensitive personal information. And there are still differences between duty-based ethical thought such as Kant's 'categorical imperative' which states we should always treat others as ends, never as means to an end, and utilitarian theory which holds that our chosen action must produce the greatest overall good for the maximum number of people[10].

A conservative estimate of the indexed World Wide Web in March 2011 runs to at least 13.9 billion pages[11], accessed by almost 2 billion Internet users or 28,7% of the world's population[12].

cal issue of long standing. Freedom of expression became a universal ethical right with the adoption in 1948 of the *Universal Declaration of Human Rights*. While this declaration has no legal status, it provides strong ethical guidance. Article 19 states that *"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 and regardless of frontiers"*[16].

Freedom of expression is further enshrined in international legal conventions such as Article 19 of the *International Covenant on Civil and Political Rights* of 1966, and in Article 10 in the *European Declaration of Human Rights* of 1950. Against this backdrop, I have refined the model

Tab. 1: World Internet population.

World regions	Population (2010 est.)	Internet users Dec. 2000	Internet users June 2010	Penetration (%)	Growth (%) 2000-10
Africa	1,013,779,050	4,514,400	110,931,700	10.9	2357.3
Asia	3,834,792,852	114,304,000	825,094,396	21.5	621.8
Europe	813,319,511	105,096,093	475,069,448	58.4	353.0
Middle East	212,336,924	3,284,800	63,240,946	29.8	1825.3
North America	344,124,450	108,096,800	266,224,500	77.4	146.3
Latin America/Carribean	592,556,972	18,068,919	204,689,836	34.5	1032.8
Oceania/Australia	34,700,201	7,620,480	21,263,990	61.3	179.0
World total	6,845,609,960	360,985,492	1,966,514,816	28.7	448.8

While digital gaps between and within regions and countries remain significant and while the Internet can be misused[13] and/or is mainly an elite medium[14], the total global Internet usage population is steadily increasing. At the same time, broadband access has been extended to many households in advanced economies and the use of social networking media, blogs, mobile phones, PDAs and iPads is spreading. Part of this growth is taking place in the most populous regions, notably in Asia, where 56% of the world's population is concentrated.

As for ethical issues and associated individual rights, the model needs refinement in terms of freedom; of expression, which is linked with access to information. In a poll conducted in March 2010 for British Broadcasting Corporation (BBC) covering 27,000 people in 26 countries, the Internet was seen as a "fundamental right" by four of five people sampled. In particular, in countries such as Mexico, Brazil and Turkey a majority of the pollsters support the idea of net access as a right[15]. I now acknowledge that freedom of expression ought to have been present in the original model since this is both a legal right and ethi-

as shown in figure 2, where social media are understood to be included in each of the three sources of ethical issues:
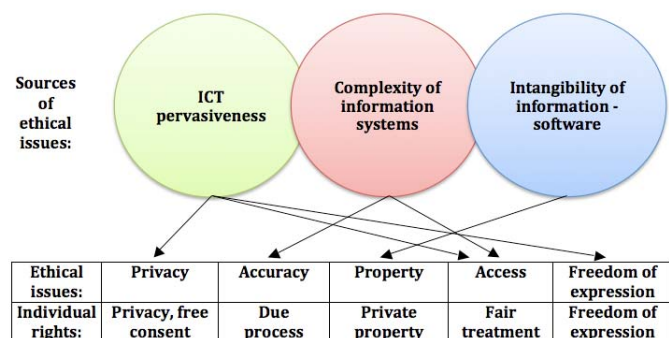

Fig. 2: Sources, issues and individual rights, including freedom of expression.

The press and media, access to information and freedom of expression

Migrating to media, communication and journalism studies has sensitized me to the fact that information is not only generated, stored and retrieved but also mediated to responsive audiences, thereby becoming communication. This makes it necessary to briefly reflect on the role of

the press and media in promoting access to information and freedom of expression. Though not universally respected, these are core principles for a well-functioning press and media in Western democracies. The two first clauses of the *Declaration of Principles on the Conduct of Journalists* adopted by the International Federation of Journalists (1954, 1986) reads as follows:

- "*Respect for truth and for the right of the public to truth is the first duty of the journalis*";
- "*In pursuance of this duty, the journalist shall at all times defend the principles of freedom in the honest collection and publication of news, and of the right of fair comment and criticism*"[17].

In Western journalism, there is a strong element of duty-based ethics. The press and media have a duty to print all truthful, newsworthy information that is uncovered, and to inform the public. This is the raison d'être of the news media, not entertainment or advertising[18].

Access to information depends to a significant degree on freedom of information legislation. In many Western democracies the press and media use this type of legislation actively to get material for their reporting. The first freedom of information law was passed in Sweden in 1766, and today at least 122 countries worldwide have adopted this type of legislation and/or standards of government openness and transparency[19]. Allowing access can have unexpected consequences. In the United Kingdom the first freedom of information act came into force as late as in 2005. By then the investigative journalist Heather Brooke had launched a successful campaign through the court system to gain access to the expense accounts of Members of Parliament, in the process uncovering widespread political corruption. The author has recently been appointed by the Norwegian Ministry of Foreign Affairs as head of two working groups for media freedom and responsibility in Norway's human rights dialogues with China and Vietnam. In 2008, China passed an open government information regulation while Vietnam is drafting a freedom of information act. These are challenging processes for both China and Vietnam where the communist party and state own and control all press and media outlets and where the role of the journalist so far is only to disseminate official information, not ask critical questions[20].

The dominating ethical issues for journalists in many countries with a free press are truth and objectivity in reporting, censorship (including self censorship), editorial and journalistic independence from authorities and owners, manipulation and fabrication of news, relationships with sources (including if necessary going to jail to protect the anonymity of sources), privacy and conflict of interest[21]. The journalist is often confronted by the dilemma whether it is in the public interest to infringe on someone's privacy[22]. The stance depends on professional codes of conduct or ethics, where as noted duty-based ethics is important in Western journalism. Some media scholars have advanced models of media literacy in which ethical considerations play a key role[23].

Social media and mass self-communication

As the information age progresses from Web 2.0 to Web 3.0, it is increasingly typified by technology-driven information overload and media saturation. The *State of the Blogosphere 2009* gave up estimating the size of the blogosphere which doubles every 6 months, and instead concentrated on the most influential and authoritative blogs. In 2008, this report had stated that 133 million blog records had been indexed since 2002, and that 900,000 blogs had been posted in the last 24 hours. The 2010 report confirms that a majority of global bloggers are highly educated and affluent, and self-expression and sharing expertise are their primary motivations[24].

Traditional media like one-way TV and radio broadcasting or print newspapers are losing market shares in many countries and regions to new, interactive, two-way electronic media like blogs, social networking sites such as *Facebook*, *MySpace*, *YouTube*, *Twitter*, *Wikipedia*. The ubiquitous mobile phone is increasingly becoming a portable mini-computer, and the iPad is increasing in popularity. Social media studies has adopted a three-level approach to analyze: *"information and communication technologies and their associated social contexts […] specifically, social media involve infrastructures with three components: a) artefacts or devices used to communicate or convey information; b) the activities and practices in which people engage to communicate or share information; and c) the social arrangements or organizational forms that develop around these devices and practices"*[25].

Despite this broad and inclusive definition, ethics is only indexed once in this authoritative source and only briefly discussed in terms of building infrastructure standards that will affect big user communities[26]. While ethics is still insufficiently explored in social media studies, there is interesting new work appearing[27,28,29]. This will surely improve in Castells's system of "mass self-communication". Expanding on his concept from the late 1990s of "the network society" that was simultaneously global, networked and informa-

tional, Castells in his latest study on shifts in communication power, notes that the diffusion of the Internet has given rise to a new communication form which differs from traditional mass communication. It is typified by the capacity of sending messages from many to many, in real or chosen time, and with the option of employing point-to-point communication, narrowcasting or broadcasting, depending on situational specifics. Castells calls this "mass self-communication" because it can reach a global audience (e.g. posting a video on *YouTube* or a blog with RSS links to various web sources) and the production is self-generated: *"This form of communication has developed with Web 2.0 and Web 3.0, or the cluster of technologies, devices and applications that support the proliferation of social spaces on the Internet thanks to increased broadband capacity, innovative open-source software, and enhanced computer graphics and interface, including avatar interaction in three-dimensional virtual spaces"*[30].

Collective intelligence or hypersurveillance?

Two other scholars with interesting views on contemporary and future ICT and social media scenarios are Henry Jenkins and David Lyon.

Jenkins theorizes about the relationship between three concepts – media convergence, participatory culture and collective intelligence. The first describes content flow across multiple media platforms, and multiple media industry cooperation as well as migratory behavior of resourceful media audiences searching entertainment experiences anywhere they can find it. Convergence does not, however, take place through media appliances but "within the brains of individual consumers and through their social interactions with others"[31]. The second concept departs from previous notions of passive media consumption and instead recasts consumers as interacting participants acting according to rules they do not fully comprehend. Finally, collective intelligence is seen as an alternative source of media power that we are only learning to employ[32]. Jenkins therefore seems to be close to Castells views.

Lyon provides a very different perspective. Drawing on Bentham's Panopticon, an architectural design for prisons in the 19th century which allowed wardens to watch prisoners without being seen and inspired by Foucault's idea of disciplinary regimes and continuous surveillance, David Lyon coins the neologisms "superpanopticon" and "hypersurveillance" to describe contemporary and future ICT monitoring and surveillance systems. These can be associated with either of 4 main strands of surveillance theory:

- the nation state orientation which focuses on political-military imperatives and inter-state struggles and draws on the work of Mosco, Pareto, Sorel and Michels;
- Weberian-based bureaucratic surveillance and computerization intermixed with Kafkaesque uncertainty and fear;
- technologic modernity surveillance that draws on Jacques Ellul and technicization of policing and information brokerage; and finally;
- Marxian-influenced political economy like the work of Gandy that places new surveillance technologies in a class-conflict framework[33].

This rather gloomy vision differs significantly from the more optimistic scenarios of Castells and Jenkins.

Ethical issues and individual rights

Here I will briefly review the five ethical issues and associated individual rights and link these with the ideas of Castells, Jenkins and Lyon. I very briefly relate the discussion to normative ethical reflection and virtue-based, duty-based or consequentialist ethical thought[34].

Privacy

Vaagan and Koehler[35] did not focus on privacy or its associated individual right of privacy and free consent, and only noted the debate on the *Total Awareness Act* following 9/11 and the differences between privacy standards in the USA and Europe. If space had permitted I would have liked to comment on the EU *Data Retention Directive* or *Facebook*, but I will limit the discussion to Google. Here the surveillance theorist Lyon has much to say, and so has Jenkins in terms of participatory culture and Castells on self mass communication by e.g. uploading footage to Google-owned *YouTube*.

Google's rise to become a dominating stakeholder in the information, communication and media business is well documented[36]. In a review of Google in January 2010 entitled *Ende der Privatheit*, *Der Spiegel* highlighted many of the ethical dilemmas that are associated with Google's bipolar drive to organize the entire world's knowledge while adhering to the company motto of "Don't be evil"[37]. In a follow-up issue in April 2010 on Google's ethically motivated decision to withdraw from China due to Chinese Internet censorship, Google co-founder Sergey Brin, who was born in Russia and experienced surveillance, stated that *"We believe this was our best choice in order to defend the principles of transparency and freedom of information"*[38]. These features make Google interesting from

both a virtue-based, duty-based and consequentialist ethical perspective.

Google's existing array of applications include *Google Sky Map*, *Nexus One*, *Google Latitude*, geographical mapping, *Google Books*, *Google Earth /Street View*, *YouTube*, *Google Alerts*, *News*, browser *Chrome*, *Google Product Search*, *Gmail*, *Picasa* and
Google Maps Navigation. Privacy concerns have been stirred especially by *Google Earth/Street View* and *Google Buzz*. The former blurs faces and car plates to protect anonymity but is still seen by some as invasion of privacy. The latter was dropped by Google when it was admitted that composing a list of social media friends based on registered e-mail contacts had its drawbacks. But it is especially the applications currently in developement and under planning that have motivated *Der Spiegel* to use the title "End of Privacy". *Goggles*, a visual recognition application, can identify faces from vast visual databases (including *Picasa*) and can be linked with *Google Social Search*, *Google Docs*, *Google Health*, *Google Blogs* to allow integrated text and visual identification, collating commercial information in social networks and personal profiles (including health) and preferences to a degree that potentially removes all privacy[39].

Accuracy

Accuracy and its associated individual right of due process were not main concerns in Vaagan and Koehler[40]. The perils have long been clear in the event that inaccurate information about our health, financial situation, travels, communications, personal lives etc. is registered and retained for a longer period e.g. by *Google*, *Facebook* or police/security forces. This is particularly so if such information is beyond our control and there is no provision for correcting or deleting inaccurate data. Slander or lies placed by an anonymous source on a web server beyond your national jurisdiction is almost impossible to delete. Inaccurate information may prevent you from getting health insurance, a job or being promoted. Not surprisingly, surveillance theorists like Lyon are concerned by accuracy. Social media, notably blogs, add to the dissemination of information whose accuracy is often dubious[41]. Yet social media can be used to "set the record straight" and contradict stories planted in the mainstream press. In 2010, a video was posted on *WikiLeaks*, showing US soldiers in Iraq killing civilians in July 2007, including two Reuters reporters. The official US version had been that their forces had been attacked and acted in self defence. In 2010 also *Wikileaks* started publishing 250,000 documents obtained from U.S. embassies worldwide, giving a backstage and more accurate picture of how U.S. ambassadors view international politics. But legal action has been taken against *Wikileaks* founder Julian Assange and many question his ethical motivations. Also in terms of accuracy, the relevance of both virtue-based, duty-based and consequentialist ethical thought is clear.

Property

In Vaagan and Koehler (2004/2005) property and the associated individual right of private property is discussed in some detail, including the World Intellectual Property Organization and consumer group reactions to the EU Directive for the Enforcement of Intellectual Property Rights. The legal and ethical controversy between proprietary versus public domain ownership surfaced in the *Pirate Bay* court case in Sweden in April 2009. The *Pirate Bay* is the world's largest file sharing website. Although the IPRED Directive was implemented by EU member states in 2006, it did not come into force in Sweden before 1 April 2009. The *Pirate Bay* ruling in February 2011 by the appeals court in Stockholm upheld a previous court ruling from April 2009. Then Stockholm city court had found the 4 *Pirate Bay* owners guilty of assistance to copyright infringement and sentenced them to one year in prison and a fine of 30 million SEK (3.3 million EUR). The appeals court shortened the jail sentences by some months but raised the fine to 46 million SEK (5.1 million EUR). These rulings reinforced proprietary ownership[42]. In a related but different context, ownership of material uploaded in Facebook user profiles has been a bone of contention. Facebook has now restored ownership to users but only after considerable pressure from dissatisfied users. Property is an issue we find in Jenkins' ideas of participatory culture, collective intelligence and media convergence, and also in Castells focus on shifts in power relations in "mass self-communication". In terms of ethics, property can therefore be fruitfully analyzed from either a virtue-based, duty-based or consequentialist perspective.

Access

In Vaagan and Koehler[43] access and the associated individual right of fair treatment are discussed in some detail, including digital divides. Above I have listed many factors that contribute to improved access globally. As for social media, it is interesting to note that while these contribute significantly to the process of globalization[44,45,46], their role is still not sufficiently explored in primers on globalization[47]. This, though, will change in view of newer work on globalization and ethics[48]. In Norway a case involving the provision of access has recently been settled by the courts, and

seems to support both Jenkins and Castells' arguments. The music and film industry had long demanded that Telenor – the dominating 54% state-owned telecommunications provider and one of the world's largest mobile phone suppliers – must block access for its Internet subscribers to The *Pirate Bay* to prevent illegal file sharing. Telenor refused to comply and the case went to court. Both the district court and appellate court found no provision under the *Intellectual Property Act* to conclude that Telenor assisted in punishable or indemnifiable acts among end users by not blocking *The Pirate Bay*. The decision has gladdened the file sharing community and angered the proprietary ownership side. The latter is now seeking a revision of the *Intellectual Property Act* to cover providing access to and infrastructure for illegal file sharing. From an ethical standpoint it seems that access can be meaningfully analyzed from a virtue-based, duty-based or consequentialist viewpoint.

Freedom of Expression

This new element is seen both as an issue and individual right, linked with access. Above I have argued that it should have been incorporated in the first model since it is not a new issue. In fact, the Norwegian constitution was revised in 2004 when article 100 (freedom of expression) was strengthened. In global terms, freedom of expression is of course nominally present in many constitutions, conventions and declarations. But as organizations like Amnesty International or Reporters without Borders remind us of – and Google by withdrawing from China - censorship (including self censorship) and lack of freedom of expression are common practices in many, if not most, countries today. This is clearly both a legal and ethical issue of great magnitude. That is why I find it so interesting that newer research confirms that the Internet is seen in a majority of countries sampled as a basic human right[49]. At the same time, if we are to believe surveillance theorists like Lyon, increased freedom of expression has a price – increased surveillance. While freedom of information can be usefully analyzed from both a virtue-based, duty-based or consequentialist perspective, I have noted that in Western journalism, duty-based ethics has a strong position.

Conclusion

Internet and social media have for many become the main source of information today, and this poses several challenges for ethical reflection. This paper has presented a model of information ethics that focuses on the five ethical issues of privacy, accuracy, property, access and freedom of expression. These are linked with the five individual rights of privacy and free consent, due process, private property, fair treatment and freedom of expression, respectively. The model is seen as relevant for both LIS and the field of Journalism, Media and Communication studies. The system of communication developing around us is envisaged somewhat differently by theorists such as Castells, Jenkins and Lyon. From an ethical perspective, much depends on the emphasis given to normative theories of virtue, duty or consequence.

Robert W. Vaagan
*Oslo University College –
Faculty of Journalism
Library and Information Science*
St. Olavs plass 4
0130 Oslo
Norway
Robert-Wallace.Vaagan@jbi.hio.no

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References

1   Vaagan, Robert (ed.). The *Ethics of Librarianship: An International Survey*. IFLA/Walter De Gruyter, 2002.
#
2   Vaagan, Robert; Koehler, Wallace. Intellectual property rights vs. public access rights. Ethical aspects of the DeCSS decryption program. *Information Research: an international electronic journal* [on line], 2004/2005 (consulted on 20 March 2011), vol. 10, n° 3, <http://informationr.net/ir/10-3/paper230.html>
#
3   Vaagan, Robert. Open Access scientific, electronic publishing and Bakhtinian dialogism. Westminster Papers in Communication and Culture [on line], 2007 (consulted on 20 March 2011), vol 4, n° 2, p. 85-99. <http://www.wmin.ac.uk/mad/page-1715>
    #
4   Vaagan, Robert. Open standards in scientific communication and publishing. *Nordicom Review* [on line], 2007 (consulted on 20 March 2011), vol 28, n° 1, p. 111-122. <http://www.nordicom.gu.se/?portal=mr& main=info_publ2.php&ex=247&me=2>

\#

5   Vaagan, Robert. Information Ethics Revisited: Social media and Freedom of Expression. *Ibersid - Journal of Information and Documentation Systems*, 2010, n°1, p. 29-35.

\#

6   Vaagan, Robert (ed.). *New Media, Mediated Communication and Globalization*. In Intercultural Communication Studies. XVII:3, 2008.

\#

7   Castells, Manuel. *Communication Power*. Oxford University Press, 2009.

\#

8   See note 2.

\#

9   Zwass, Vladimir. Ethical issues in information systems. In *Encyclopedia of Library and Information Science*, Marcel Dekker, 2003, p. 1054-1062.

\#

10 The Internet Encyclopedia of Philosophy [on line]. <http://www.iep.utm.edu/ethics/> (consulted on 20 March 2011).

\#

11 WorldWideWebSize.com [on line]. <http://www.worldwidewebsize.com/> (consulted on 20 March 2011).

\#

12 Internet World Stats [on line]. <http://www.internetworldstats.com/stats.htm> (consulted on 20 March 2011).

\#

13 Rice, Ronald; Haythornthwaite, Caroline. Perspectives on Internet Use: Access, Involvement and Interaction. In Lievrouw, Leah; Livingstone, Sonia (eds.). *Handbook of New Media*. Sage Publications, 2006, p. 92-113.

\#

14 Hindman, Mathew. *The Myth of Digital Democracy*. Princeton University Press, 2009.

\#

15 British Broadcasting Corporation . *Internet access is a "fundamental right"* [on line]. <http://news.bbc.co.uk/2/hi/8548190.stm> (consulted on 20 March 2011)

\#

16 United Nations. *Universal Declaration of Human Rights* [on line]. <http://www.un.org/ en/documents/udhr/> (consulted on 20 March 2011).

\#

17 International Federation of Journalists [on line]. <http://www.ifj.org/en> (consulted on 20 March 2011).

\#

18 Smith, Ron F.. *Ethics in Journalism*. Blackwell, 2008.

\#

19 Vaagan, Robert. *Human Rights, Access to Information and the Role of the Media in China and Vietnam* (forthcoming).

\#

20 See note 19.

\#

21 Frost, Chris. *Media Ethics and Self-Regulation*. Longman, 2001.

\#

22 See note 18.

\#

23 Potter, W. James. *Theory of Media Literacy. A Cognitive Approach*. Sage Publications, 2004.

\#

24 Technorati. *State of the Blogosphere* [on line]. <http://technorati.com/blogging/feature/state-of-the-blogosphere-2009/> (consulted on 20 March 2011).

\#

25 Lievrouw, Leah; Livingstone, Sonia (eds.). *Handbook of New Media*. Sage Publications, 2006.

\#

26 Leigh, Susan; Bowker, Geoffrey C.. How to Infrastructure. In Lievrouw, Leah; Livingstone, Sonia (eds.). *Handbook of New Media*. Sage Publications, 2006, p. 231-245.

\#

27 McMahon, John; Cohen, Ronnie. Lost in cyberspace: ethical decision making in the online environment. *Ethics and Information Technology*, 2009, n° 11, p. 1-17.

\#
28 Levahot, Keren. "MySpace" or Yours? The Ethical Dilemma of Graduate Students' Personal Lives on the Internet. Ethics & Behavior, 2009, vol. 19, n° 2, p. 129-141.

\#
29 Altschuler, Shoshanah; Benbunan-Fich, Raquel. Is music downloading the new prohibition? What students reveal through an ethical dilemma. *Ethics and Information Technology*, 2009, n° 11, p. 49–56.

\#
30 Castells, Manuel. *Communication Power*. Oxford University Press, 2009.

\#
31 Jenkins, Henry . *Convergence Culture. Where Old and Social media Collide*. New York University Press, 2006.

\#
32 See note 31.

\#
33 Lyon, David. New Directions in Theory. In Webster, Frank (ed.). *The Information Society Reader*. Routledge, 2008, p. 327-344.

\#
34 See note 10.

\#
35 See note 2.

\#
36 Stross, Randall. *Planet Google. One Company's Audacious Plan to Organize Everything We Know*. Free Press, 2008.

\#
37 Von Bredow, Rafaela; Dworschak, Manfred; Müller, Martin U.; Rosenbach, Marcel. Ende der Privatheit. *Der Spiegel*, 11 January 2010, n° 2, p. 58-69.

\#
38 Author's translation
    Von Follath, Erich; Lorenz, Andreas; von Rohr, Mathieu; Rosenbach, Marcel. Goliath gegen Goliath. In *Kalter Krieg im Internet. Google gegen China. Der Kampf um die Freihet im Netz.* Der Spiegel, 29 march 2010, n° 3, p. 91-99.
    \#
39 See notes 37 and 38.

\#
40 See note 2.

\#
41 See note 28.

\#
42 Wikipedia. *The Pirate Bay* [on line]. <http://no.wikipedia.org/wiki/The_Pirate_Bay> (consulted on 20 March 2011).

\#
43 See note 2.

\#
44 See note 31.

\#
45 Friedman, Thomas L. *The World is Flat. The Globalized World in the Twenty-First Century*. Penguin Books, 2006.

\#
46 See notes 6 and 7.

\#
47 Lechner, Frank. J.; Boli, John (eds.). *The Globalization Reader*. Blackwell Publishing, 2008.

\#
48 See notes 27 and 29.

\#
49 See note 15.\#