

Internet Architecture, Freedom of Expression and Social Responsibility: Critical Realism and Proposals for a Better Future

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Abstract

The article opens by explaining the architecture of the Internet. Given its present *raison d'être*, a free highway allowing maximum freedom, one may argue that the bounds of free expression are broader in scope on the Net compared with the bounds of legitimate speech allowed on other forms of communication: Television, radio, the press. I contest this assertion, arguing that legally speaking, there is no difference between electronic communication and other forms of communication. Ethically speaking, people should be held accountable for what they publish on the Net, also when the content of their expression is *prima facie* lawful. I probe some problematic forms of expression that are available on the Internet in order to promote terrorism and criminal activity. The article goes on to argue that freedom of expression is important but so is social responsibility. Indeed, social responsibility theory in one form or another dominated thinking about the desirable relation between media and society and about the options for policy to improve the media for some decades after the Second World War. Responsibility is about answerability and accountability. Finally, the article concludes by offering a new paradigm Internet for the future called CleaNet ©. CleaNet © will be sensitive to prevailing cultural norms of each and every society and will be clean of content that the society deems to be dangerous and anti-social. No child pornography, hateful bigotry and terrorist material will be available on the new Net. Netusers, with the cooperation of ISPs and web-hosting companies, will together decide which content will be considered illegitimate and unworthy to be excluded from CleaNet ©.

Keywords: Internet architecture, CleaNet ©, Netcitizen, social responsibility, Immanuel

Kant

Introduction

The emergence of computer technology has massively expanded the amount of data that we can read and store, and has made access to this data easy. The Internet burst into our lives in the early 1990s without much preparation or planning, and changed them forever. It has affected virtually every aspect of society. It is a macro system of interconnected private and public spheres: household, literary, military, academic, business and government networks. The Internet has produced major leaps forward in human productivity and has changed the way people work, study and interact with each other. The mix of open standards, diverse networks, and the growing ubiquity of digital devices makes the Internet a revolutionary force that undermines traditional media and challenges existing regulatory institutions based on national boundaries. The Internet has created new markets and is profoundly changing the way people interact, find leisure, explore the world and think about human phenomena. In the Internet age, people often have cyber life in addition to their offline life. The two -- real life and cyber life -- are not necessarily one and the same.

On the Internet, the World Wide Web enables the organization and exchange of information. Websites have addresses, based on their unique Universal Resource Locator (URL), which allows users to locate and exchange information using a web browser.¹ The Internet has no central management or coordination, and the routing

¹ Amy E. White, *Virtually Obscene: The Case for an Uncensored Internet* (Jefferson, NC: McFarland & Company, Inc., 2006): 14-15.

computers do not retain copies of the packets they handle. The Internet's open architecture design and *raison d'être* are complete freedom, but soon enough people began to exploit the Net's massive potential to enhance partisan interests, some of which are harmful and anti-social. The discussions about the costs and harms of such content on the Internet, and how to address them, are in their infancy. The transnational nature of the Internet makes it very difficult, some say virtually impossible, for national authorities to unilaterally implement laws and regulations that reflect national, rather than global, moral standards.²

Generally speaking, the Internet is perceived as a free highway, and the way to combat problematic speech is said to be by more speech. Organizations and associations were set up to protect and promote freedom of expression, freedom of information and privacy on the Internet.³ People realize that the Internet can be exploited and abused but liberals commonly argue that the Free Speech Principle shields all but the most immediately threatening expression. For free speech advocates, the substantive danger is that of censorship. Freedom of expression is perceived as a fundamental human right and censorship should not be allowed to inhibit the Net free flow of information.

Most of Internet users act within the law. The prevailing argument is that we cannot punish the majority of Netusers because of the small numbers who exploit the

² Dick Thornburgh and Herbert S. Lin, *Youth, Pornography, and the Internet* (Washington, DC: National Academy Press, 2002); National Research Council, *Global Networks and Local Values: A Comparative Look at Germany and the United States* (Washington, DC: National Academy Press, 2001).

³ Among them are The Center for Democracy and Technology (CDT), <http://cdt.org/> ; The Electronic Frontier Foundation (EFF), <http://www.eff.org/> ; The Electronic Privacy Information Center (EPIC), <http://epic.org/> ; The Global Internet Liberty Campaign (GILC), <http://gilc.org/> ; The Internet Society, <http://www.isoc.org/>; The Association for Progressive Communication, <http://www.apc.org/>; Save the Internet, <http://savetheinternet.com/>

Internet. We should not allow the abusers to dictate the rules of the game. But of course we should fight against those who abuse this freedom.

In this context of new media, I wish to make a distinction between Netusers and Netcitizens.⁴ The term “Netuser” refers to people who use the Internet. It is a neutral term. It does not convey any clue as to how people use the Internet. It does not suggest any appraisal of their use.

The term “netcitizen” as it is employed here is not neutral. It describes a responsible use of the Internet. Netcitizens are people who use the Internet as an integral part of their real life. That is to say, their virtual life is not separated from their real life. Even if they invent an identity for themselves on social networks such as Second Life,⁵ they do it in a responsible manner. They still hold themselves accountable for the consequences of their Internet use. In other words, netcitizens are good citizens of the Internet. They contribute to the Internet's use and growth while making an effort to ensure that their communications and Net use are constructive. They foster free speech, open access and social culture of respecting others, and of not harming others. Netcitizens are Netusers with a sense of responsibility.

Let me now address the issue of the Internet as a public domain. Is the Internet similar to other means of communication, or does it constitute a category of its own, thus deserving special treatment. I will then address the question of whether Internet speech merit more protection than other forms of speech, answering in the negative.

⁴ Netcitizens are also called Netizens.

⁵ Second Life a virtual world developed that was launched on June 23, 2003 by Linden Lab. Its users, called “residents,” interact with one another via avatars. Second Life provides residents with opportunities to explore, socialize, participate in individual and group activities, create and trade virtual properties and services, and travel throughout the world. See <http://secondlife.com/whatis/>

Finally, I propose to consider the establishment of a new Net for liberal democracies called CleaNet ©. The hypotheses advanced here and the conclusions reached are limited to modern democracies emerging during the last century or so. That is to say, one assumption of the liberal ideology that I contest is the assumption of universalism. I believe that there are some basic universal needs that all people wish to secure such as food, raiment, and shelter; I believe that sexual drives are universal and that people need to have some sleep to be able continue functioning; I also believe that we should strive to universalize moral principles. But sociologically speaking we cannot ignore the fact that universal values do not underlie all societies. Ideally there are some ethical concerns that should be accepted by all societies, but in reality we know this is not the case. Some countries do not adopt liberal democracy as a way of life. Instead they adhere to other forms of government that are alien to the underpinning values of democracy: liberty, equality, tolerance and justice. Some societies do not accept the norms of respecting others, and not harming others that form the *raison d'être* of democracy.⁶ According to Immanuel Kant, it is only through morality that a rational being can be a law-giving member in the realm of ends, and it is only through morality that a rational being can be an end in himself, having intrinsic value, i.e. dignity. Human beings are infinitely above any price: “to compare it with, or weigh it against, things that

⁶ On the notion of respect, see Ronald Dworkin, “Liberalism,” in *A Matter of Principle* (Oxford: Clarendon Press, 1985): 181-204; *idem*, *Taking Rights Seriously* (London: Duckworth, 1976); Reference to author; Richard L. Abel, *Speaking Respect, Respecting Speech* (Chicago and London: University of Chicago Press, 1998).

have price would be to violate its holiness, as it were.”⁷

In turn, the Millian Harm Principle holds that something is eligible for restriction only if it causes harm to others. Mill wrote in *On Liberty*: “Acts of whatever kind, which, without justifiable cause, do harm to others, may be, and in the more important cases absolutely require to be, controlled by the unfavourable sentiments, and, when needful, by the active interference of mankind.”⁸ Whether an act ought to be restricted remains to be calculated. Hence, in some situations, people are culpable not because of the act that they have performed, though this act might be morally wrong, but because of its circumstances and its consequences. While Kant spoke of unqualified, imperative moral duties, Mill’s philosophy is consequentialist in nature. Together the Kantian and Millian arguments make a forceful plea for moral, responsible conduct: Always perceive others as ends in themselves rather than means to something, and avoid harming others.

Liberal democracies accept these ideas as the foundations of governance. On the other hand, theocracy, apartheid, and forms of governance that are based on despotism, either of one person or of a small group, all deny the background rights and moral values of liberal democracy. Moral values, unfortunately, are not universally shared in all countries by all humanity. Thus my concern is with liberal democracies which perceive human beings as ends and which respect autonomy and variety. The arguments are relevant to other countries, but because non-democratic countries do not accept the basic liberal principles, because their principles do not encourage autonomy,

⁷ Immanuel Kant, *Foundations of the Metaphysics of Morals* (Indianapolis, Ind.: Bobbs-Merrill Educational Publishers, 1969) or <http://www.redfuzzyjesus.com/files/kant-groundwork-for-the-metaphysics-of-morals.pdf>. For further discussion, see Graham Bird (ed.), *A Companion to Kant* (Oxford: Blackwell, 2006).

⁸ John Stuart Mill, *Utilitarianism, Liberty, and Representative Government* (London: J. M. Dent. Everyman's edition, 1948), chapter 3 of *On Liberty*, or <http://www.bartleby.com/130/3.html>.

individualism, pluralism, and openness, and their behavior is alien to the concepts of human dignity and caring, one can assume that the discussion will fall on deaf ears. Non-liberal societies, based on authoritative conceptions and principles, deserve a separate analysis.⁹

While I am not a relativist, I believe that history and culture do matter. Societies do not adopt a universal common denominator to define the boundaries of freedom of expression. For instance, Germany and Israel are more sensitive to Holocaust denial, and rightly so. While the United States protects hate speech, racism and Holocaust denial, we would be most troubled if Germany were *not* to adopt restrictive measures against Internet sites that deny the Holocaust. There is no universally shared measure to decide the boundaries of freedom of expression. These boundaries vary from one society to another, and are influenced by historical circumstances and cultural norms.

Internet Architecture

⁹ See, for instance, discussions on Internet censorship in China, <http://www.irrepressible.info/static/pdf/FOE-in-china-2006-lores.pdf>;

http://humanrights.suite101.com/article.cfm/internet_repression_in_china; Internet repression in Viet Nam, <http://www.amnestyusa.org/document.php?lang=e&id=ENGUSA20061022001>;

<http://www.amnesty.org/en/library/info/ASA41/008/2006>; Internet repression in Iran, <http://www.voanews.com/uspolicy/2008-09-17-voa1.cfm>;

<http://bsimmons.wordpress.com/2008/09/18/internet-repression-in-iran/>;

http://www.iranian.ws/cgi-bin/iran_news/exec/view.cgi/45/26756; Internet repression in Syria, <http://www.menassat.com/?q=en/news-articles/1711-syria-more-victims-internet-repression>;

Internet repression in Ethiopia, <http://cyberethiopia.com/home/content/view/26/>;

[http://nazret.com/blog/index.php?title=ethiopia_blocks_opposition_web_sites&more=1&c=1&tb=1&pb=](http://nazret.com/blog/index.php?title=ethiopia_blocks_opposition_web_sites&more=1&c=1&tb=1&pb=1)

1. See also Athina Karatzogianni, *The Politics of Cyberconflict* (London and NY: Routledge, 2006): chap. 4.

When Gutenberg invented the print machine, he wanted everyone to have the bible. Now we have a new mode of technology which breaks the monopoly of the media, as the Gutenberg's print machine broke the monopoly of the monks over books. The Internet changes how people think. It is a new interactive medium which is different from the print and electronic media. The theory of free expression in print and in the media is the same but the construction is different. The construction enables anybody and everybody, people who have access to the conventional media as well as those who are denied access to voice their opinions, even the vilest and most disturbing opinions, without interference.

The Internet and its architecture have grown in evolutionary fashion from modest beginnings, rather than from a Grand Plan.¹⁰ The ingenuity of the Internet as it was developed in the 1960s by the ARPA scientists lies in the packet switching technology. Until ARPANET was built, most communications experts claimed that packet switching would never work.¹¹ In 1965, when the first network experiment took place, and for the first time packets were used to communicate between computers, the scientists did not imagine the multiple usages of this technology on society. The

¹⁰ B. Carpenter, "The Architectural Principles of the Internet," Request for Comments 1958, Internet Engineering Task Force (June 1996), <http://www.ietf.org/rfc/rfc1958.txt>

¹¹ Lawrence G. Roberts, "Internet Chronology" (October 24, 1999), <http://www.ziplink.net/users/lroberts/InternetChronology.html>. Roberts wrote: "Packet switching was new and radical in the 1960's. In order to plan to spend millions of dollars and stake my reputation, I needed to understand that it would work. Without Kleinrock's work of Networks and Queuing Theory, I could never have taken such a radical step. All the communications community argued that it couldn't work. This book was critical to my standing up to them and betting that it would work." Quoted in James Gillies and Robert Cailliau, *How the Web Was Born: the story of the World Wide Web* (Oxford: Oxford University Press, 2000): 26.

technology uses connectionless protocols for host to host resource sharing. It is based on the ability to place content in digital form, which means that content can be coded into binary numbers or bits (1 or 0), which is how computers store information.¹² In packet switching, the content of communication is divided into small, well defined groups of coded data, each with an identifying numerical address. Anything that can be digitized can be sent as a packet. It is possible to send an unlimited number of packets over the same circuit with different addresses. Diffused routers, rather than main switches, became the key to delivering the packets to the intended destination.¹³ Kleinrock, the inventor of packet switching, explicitly wrote that he did not foresee the powerful community side of the Internet and its impact on every aspect of society.¹⁴

The Net diffusiveness and its focus on flexibility, decentralization and collaboration brought about the Internet as we know it today. In the initial stages, the Internet was promoted and funded, but not designed, by the U.S. government. Allowing the original research and education network to evolve freely and openly without any restrictions, selecting Transmission Control Protocol/Internet Protocol (TCP/IP) for the NSFnet (network run by the National Science Foundation) and other backbone networks, and subsequently privatizing the NSFNET backbone were the most critical decisions for the Internet's evolution.

The great thing about TCP/IP is its generality. It can accommodate different devices and different types of networks of varying sizes and purposes. Data is transferred by means of the TCP/IP network technology that allows for complete inter-

¹² Luciano Floridi, *Information – A Very Short Introduction* (Oxford: Oxford University Press, 2010): 27-28.

¹³ John Mathiason, *Internet Governance* (Abingdon: Routledge, 2009): 7.

¹⁴ Leonard Kleinrock, "History of the Internet and Its Flexible Future", *IEEE Wireless Communications* (February 2008): 12.

operability on the Internet so that computers can communicate with one another even if they have different operating systems or application software. TCP/IP consists of two pieces: (1) TCP, or transmission control protocol, enables network communication over the Internet. The data are broken up into packets, with the first part of each packet containing the address where it should go. (2) IP, or Internet Protocol, which establishes a unique numeric address (four numbers, ranging from 0 to 255, separated by decimal points, which looks like this: 87.102.64.135.) for each system connected to the Internet. IP is a means of labeling data so that it can be sent to the proper destination in the most efficient way possible. TCP/IP makes the network virtually transparent to Netusers notwithstanding what system they are using, and it allows the Internet to function as a single, unified network.¹⁵

The Internet is about communication. On the Internet we find the basic components of communication: a sender, a message, a channel, and a receiver. Generally speaking, the Internet also provides opportunity for feedback. The volume, scope and variety of data that the sender is able to transmit over the Internet are massive. On the Internet, people can speak, chat, send email, buy merchandise, gamble, share and transfer files, post various forms of data. The Internet presents information in textual, audible, graphical and video formats, evoking the appearance and function of print mass media, radio and television combined. The Internet is a global system of interconnected computer networks that interchange data. It is a “network of networks” that consists of millions of private and public, academic, business, military, and government networks of local to global scope that are linked by copper wires, fiber-optic cables, wireless

¹⁵ Richard A. Spinello, *Cyberethics: Morality and Law in Cyberspace* (Sudbury, MA: Jones and Bartlett, 2000): 26; Johnny Ryan, *The Essence of the 'Net: a history of the protocols that hold the network together*, <http://arstechnica.com/tech-policy/news/2011/03/the-essence-of-the-net.ars/>

connections, and other technologies.

The fact that the Internet has no central management or coordination, and the routing computers do not retain copies of the packets they handle accentuates the free spirited environment of the Net. No one owns the Internet and no one can turn it off. The leading principle is liberty: We are all at liberty to exercise our autonomy by expressing ourselves and by posting our ideas on the Web. The lack of centralized control also means that it is difficult to prevent any agency determined to abuse the Internet for its own purposes. There is no phone line to cut.

The Internet is borderless. The technology encompasses continents. It started in the USA but with time the Internet has spread to all parts of the world. In 1996, the United States accounted for 66 percent of the world's Internet users. With the rapid and astonishing growth of other markets, especially the Asian, in 2008 the American market was reduced to 21 percent,¹⁶ in 2009 to 14.6, and in 2010 to 13.5.¹⁷ The number of Netusers continued to grow from 1,319 million in 2007, to 1,574 million in 2008, to 1,802 million in 2009, to 1,971 million in September 2010.¹⁸ The most recent figure accounts for some 29% of the world population. As of December 2010, the Indexed Web contains at least 2.69 billion pages.¹⁹

Lastly, the flexible, multipurpose nature of the Internet, with its potential to operate as a set of interpersonal, group, or mass media channels, is a unique communication system. The Internet provides many more avenues in comparison with

¹⁶ *Worldwide Distribution of Internet Users* (March 19, 2008), at <http://techcrunchies.com/worldwide-distribution-of-internet-users/>

¹⁷ INTERNET USAGE STATISTICS, <http://www.internetworldstats.com/stats.htm>

¹⁸ INTERNET GROWTH STATISTICS, <http://www.Internetworldstats.com/emarketing.htm>

¹⁹ The size of the World Wide Web, <http://www.worldwidewebsite.com/>

any other form of communication to preserve anonymity and privacy with little or no cost involved.

Should we protect Internet speech more than other forms of speech?

Given the present *raison d'être* of the Internet, a free highway allowing maximum freedom, one may argue that the bounds of free expression are broader in scope on the Net compared with the bounds of legitimate speech allowed on other forms of communication: Television, radio, the press.

Legally speaking, there is no difference between electronic communication and other forms of communication. Ethically speaking, people should be held accountable for what they publish on the Net, also when the content of their expression is *prima facie* lawful. The concern, of course, is with dangerous speech, one whose consequences could be harmful to society.

On April 19, 1995 Timothy McVeigh detonated a truck bomb outside the federal building in Oklahoma City. As a result, 168 people were killed and over 500 people were injured in the blast.²⁰ Now suppose that a week after the bombing an Oklahoma newspaper publish the bomb recipe used by McVeigh, explaining how people can obtain the bomb ingredients in any hardware store. Morally speaking, we may argue that the publisher had acted without public regard to safety. If someone were to follow McVeigh example and bomb another building we may hold the publisher accountable for the second bombing. The same reasoning will hold true if that person were to publish the bomb recipe on the Internet. Electronic communications does not alter legal or ethical implications.

²⁰ http://www.trutv.com/library/crime/serial_killers/notorious/mcveigh/dawning_1.html;

<http://www.time.com/time/2001/mcveigh/>

Deputy Assistant Attorney General Robert Litt, of the U.S. Justice Department's Criminal Division, observed that only hours after the Oklahoma City bombing, someone posted on the Internet directions -- including a diagram -- explaining how to construct a bomb of the type that was used in that tragic act of terrorism. Another Internet posting offered not only information concerning how to build bombs, but also instructions as to how the device used in the Oklahoma City bombing could have been improved.²¹ And on March 23, 1996, the *Terrorists Handbook* was posted on the Web, including instructions on how to make a powerful bomb. The same bomb was used in the Oklahoma City bombing.²²

In April 1997, David Copeland downloaded the *Terrorists Handbook* at a cyber cafe in Victoria. He also downloaded *How to Make Bombs part 2*. With home-made nail-bombs he was set to kill as many gay people as he could. In April 1999, the three bombs he planted in London killed three people and injured 139.²³ One website²⁴ conveniently compiles instructions how to make homemade and high explosives, a pipe bomb, a detonator, a grenade, a smoke bomb, and a time bomb.

²¹ *Report on The Availability of Bombmaking Information*, Prepared by the U.S. Dept. of Justice, submitted to the United States House of Representatives and the United States Senate (April 1997), Available at <http://www.usdoj.gov/criminal/cybercrime/bombmakinginfo.html>

²² Cass Sunstein, *Republic.com* (Princeton, N.J.: Princeton University Press, 2001): 52.

²³ Andrew Buncombe, Terri Judd and Jason Bennetto, "'Hate-filled' nailbomber is jailed for life," *The Independent* (June 30, 2000), "Profile: Copeland the killer," *BBC.News* (June 30, 2000); "Admiral Compton Bomber," *GaydarNation* (July 21, 2000), <http://www.rainbownetwork.com/UserPortal/Article/Detail.aspx?ID=7978&sid=81>

²⁴ Details with author.

Another example is a book titled *Hit Man: A Technical Manual for Independent Contractors*, published by Paladin Press.²⁵ Paladin publishes "action library," "burn and blow" books on self-defense and self-reliance, weapons and martial arts, bombs (including baby bottle and car bombs), improvised and plastic explosives, land mines, poisons, napalm, arson, and various ways on beating "the system."²⁶ *Hit Man* is an instruction book on how to commit a contract murder and walk away as a free person. Most of the book describes in detail how to solicit a client, arrange and negotiate for a contract murder. It provides a broad array of methods of murder, including the selection and modification of firearms, poisons, knives and other deadly means; the picking of locks and forging of documents; the actual murder including the precautionary measures that make a hit "successful," i.e., that the contractor will not be caught, and ways of disposing of the body.²⁷

On March 3, 1993, a contractor assassin named James Perry murdered Mildred and Trevor Horn, and also Trevor's private nurse, Janice Saunders. In soliciting, preparing for, and committing these murders, Perry meticulously employed countless of *Hit Man's* 130 pages of detailed factual instructions on how to murder and to become a professional assassin. Relatives of the three victims petitioned the courts against Paladin, arguing that the publisher is blameworthy because *Hit Man* is how-to book: how to commit murder. The families had alleged that Paladin had aided and abetted Perry for the three murders. They argued that the publisher of a mass distributed book is not protected by the First Amendment.

²⁵ <http://www.paladin-press.com/>

²⁶ *Rice et al. v. Paladin Enterprises*, United States Court of Appeals for the Fourth Circuit, Record No. 96-2412 (October 6, 1996), Brief of Appellee. See also Rod Smolla, *Deliberate intent* (N.Y.: Crown, 1999): 241.

²⁷ <http://mirror.die.net/hitman/index.html>; <http://ftp.die.net/mirror/hitman/4.html>

After a lengthy legal battle, the families won. The Court of Appeals for the Fourth Circuit held that the record amply supported the families' allegation. The book cannot be merely considered as "theoretical advocacy." Paladin provided assistance to Perry with both the knowledge and the intent in the solicitation, planning, and commission of murder and murder for hire. Thus, argued Luttig J., Paladin acted with a kind and degree of intent that would satisfy any heightened standard that might be required by the First Amendment prerequisite to the imposition of liability for aiding and abetting through speech conduct.²⁸

Paladin appealed to the Supreme Court for writ of certiorari but their petition was flatly denied, leaving Judge Luttig's opinion in force.²⁹ After this lengthy legal battle, on May 21, 1999, Paladin Press settled the case, giving the families of those killed by the hit man several million dollars, agreeing to destroy the remaining 700 copies of the book in their possession, and surrendering any rights they have to publish and reproduce the work. While the families were successful in damaging Paladin, they have not been successful in stifling the book. With the surrender of the publishing rights by Paladin Press, the book has entered the public domain, and was published on the Internet on May 22, 1999.³⁰ This legal lacuna is staggering. If the book was recognized as harmful and deadly, then it should cease publication altogether. There is no need to wait for the next murder aided and abetted by this publication. The mode of its publication, whether on paper or on the Web, should not make any legal or ethical difference. The current state of affairs that allows this to happen should be remedied.

²⁸ *Rice et al. v. Paladin Enterprises*, 128 F.3d 233 (1997), at 248.

²⁹ *Paladin Enterprises v. Vivian Rice et al.*, 523 U.S. 1074 (1998). See also *Paladin v. Rice*, petition for Writ of Certiorari, written by Lee Levine and Thomas B. Kelley *et al.*

³⁰ <http://mirror.die.net/hitman/index.html>

Social Responsibility

Lawrence Lessig distinguishes between two claims. One is that, given the Net architecture, it is difficult for governments to *regulate behavior* on the Net. The other is that, given the Net architecture, it is difficult for governments to *regulate the architecture of the Net*. The first claim is true. The second is not. Even if it is hard to regulate Net behaviour, it is not hard for governments to take steps to alter Net architecture. Those steps could make Net behavior more regulable.³¹

Freedom of expression is important but so is social responsibility. Social responsibility theory in one form or another dominated thinking about the desirable relation between media and society and about the options for policy to improve the media for some decades after WWII. Information ethics, understood as information-as-a-product ethics, may cover moral issues such as answerability, accountability and social responsibility.

Answerability implies responsiveness to the views of all with a legitimate interest in what is conducted, whether as individuals affected or on behalf of the society. It includes a willingness to explain and justify actions of publication or omission. The outcomes of answerability express and reaffirm various norms relevant to the wider responsibilities of an organization in society. The emphasis is on the quality of performance.³²

In turn, the main purposes of *accountability* (or justifications for requiring it) are:

³¹ Lawrence Lessig, *Code and Other Laws of Cyberspace* (New York: Basic Books, 1999): 43-44.

³² Denis McQuail, *Media Accountability and Freedom of Publication* (New York: Oxford University Press, 2003): 204.

- To improve the quality of the product or service.
- To promote trust on the part of the receiver or audience.
- To ensure the performance of some wider public duty.
- To prevent some harm to an individual or society (by warning of liability).
- To protect the interests of the communicator (whether organizationally or professionally).³³

The *Concept of Social Responsibility* assumes the following: *First*, that autonomous agents have the understanding of the options before them, have access to evidence required for making judgments about the benefits and hazards of each option, and able to weigh the relative value of the consequences of their choice.

Social responsibility *further assumes* that people are not islands to themselves. We live within a community and have some responsibilities to it. The responsibilities are positive and negative. That is, we have a responsibility to better the society in which we live, and a responsibility to refrain from acting in a way that knowingly might harm our community. The responsibility is ethical in nature.

The Concept's *third assumption* is that we are rewarded by the social framework in which we live, we care about society, would like to maintain it and to contribute to it. The contribution is proactive. We take active steps to do good and to avoid harm.³⁴ We

³³ Denis McQuail, *Media Accountability and Freedom of Publication* (New York: Oxford University Press, 2003), p. 308.

³⁴ Burton S. Kaliski (Ed.), *Encyclopedia of Business and Finance* (New York: Macmillan, 2001); Marvin L. Marshall, "Ensuring Social Responsibility," *Thrust for Educational Leadership*, Vol. 23, No. 4 (1994); Clifford Christians and Kaarle Nordenstreng, "Social Responsibility Worldwide," *Journal of Mass Media Ethics*, Vol. 19, No. 1 (2004); Kristie Bunton, "Social Responsibility in Covering Community: A Narrative

care for one another, communicate with respect and do not stand idly by while seeing that others might be in danger. Both the private and the public sector are morally accountable. As Novak, Trevino and Nelson argued, adopting social responsibility norms is the right way to behave.³⁵

Fourth, social responsibility carries burdens and obligations. People should respect their responsibilities, being cognizant of the consequences of their actions. At the same time, people have discretion as to the ways open for them to carry their responsibilities, in accordance with their capabilities and the circumstances at hand.

Fifth, people are accountable for their conduct. The duty to account for one's conduct is absolute. It needs to be transparent and comprehensive. There is no room for discount or trickery. Accountability exposes the agents to praise or criticism, to rewards or sanctions, in accordance with the issue at hand: How it was conceived, the way it was preformed, and its consequences.

Lastly, responsible agents avoid to the best of their abilities entering conflict of interest situations. Such situations might bring her to painful compromises and might entail harm to others. A chemist who develops a new medication should refrain from receiving sponsorship of a pharmaceutical company that might pressurize her to complete the development trials sooner rather than later and avoid disclosure of all pertinent information regarding the trial's success or failure. Medical development that is solely or primarily driven by profit considerations might be detrimental to

Case Study," *Journal of Mass Media Ethics*, Vol. 13, No. 4 (1998); William L. Rivers, Wilbur Schramm and Clifford G. Christian, *Responsibility in Mass Communication* (NY: Harper and Row, 1980).

³⁵ Michael Novak, *Business as a Calling: Work and the Examined Life* (NY: Free Press, 1996); Linda K. Trevino and Katherine A. Nelson, *Managing Business Ethics: Straight Talk about How To Do It Right* (NY: John Wiley, 1999).

medication users. On such matters, responsibility dictates extreme caution and complete openness. Henry Ford rightly said that a business that makes nothing but money is a poor kind of business.³⁶

Social responsibility is multifaceted and comes into expression in many ways. It is commonly understood to include taking care of your offspring financially and emotionally; working; caring for society through pro-social actions and beliefs; meeting obligations, being dependable, attending to needs of others and taking care of yourself.³⁷ These avenues of social responsibility contribute to both the well-being of individuals and of society.

The scope of responsibility is of immense importance. A person who drives her car is responsible for careful conduct on the road. A bus driver carries a greater responsibility as many more people might be harmed if she drives carelessly. A pilot carries yet greater responsibility not only because far more people might be affected by her conduct but also because a plane costs a small fortune. No manager would hire a careless person to sit in the cockpit. Responsibility is a *sine qua non* for the job notwithstanding how good one is in flying planes. These considerations of people and costs are substantive in defining the scope of responsibility.

Social responsibility carries a special meaning in the context of media, information and communication technologies (ICT). In the first half of the 20th Century, it was thought that the United States press would adopt social responsibility standards.

³⁶ http://www.brainyquote.com/quotes/authors/h/henry_ford.html; <http://www.dictionary-quotes.com/a-business-that-makes-nothing-but-money-is-a-poor-kind-of-business-henry-ford/>

³⁷ Hazel Rose Markus *et al.*, "Themes and Variations in American Understandings of Responsibility," in Alice S. Rossi (ed.), *Caring and Doing for Others: Social Responsibility in the Domains of Family, Work, and Community* (Chicago: University of Chicago Press, 2001), p. 397.

In 1947, the Commission on Freedom of the Press, headed by Robert Hutchins, met to address growing concerns of the waning credibility of the press. The Commission reached two basic conclusions that formed the basis of this theory: (1) the press has a responsibility to society; and (2) the libertarian press the United States has embraced is not meeting the social responsibility.³⁸ The belief was that the media should be controlled by community opinion, consumer action, and professional ethics as opposed to the free marketplace of ideas. The social responsibility theory was also called “glorified libertarianism.” Its goal was to impose strict codes of journalistic ethics on the press, and simultaneously ensure that the press continued to provide newsworthy news.³⁹

The same classic libertarian theory has been adopted for all information and communication technologies. It has been argued that ICTs make humanity increasingly accountable, morally speaking, for the way the world is, will and should be.⁴⁰ A member of these professions is trained to practice a core skill, requiring autonomous judgment as well as expertise. ICT professionals have an inviolable duty to serve the interest of their clients and often some wider social and public responsibility should be expected. Their work is governed by a set of appropriate ethics as well as being based on knowledge and skill. Certain standards and qualifications are expected to be maintained, following an accepted code of practice that observes wider responsibilities

³⁸ Scott Lloyd, “A Criticism of Social Responsibility Theory: an Ethical Perspective,” *J. of Mass Media*, Vol. 6 (1991): 199.

³⁹ Jon L. Mills, “The New Global Press and Privacy Intrusions: The Two Edged Sword,” paper presented at the Second Annual Berkeley-GW Privacy Law Scholars Conference, Berkeley (June 4-6, 2009).

⁴⁰ L. Floridi and J.W. Sanders, “Artificial Evil and the Foundation of Computer Ethics,” *Ethics and Information Technology*, Vol. 3(1) (2001): 55-66.

to clients and society.

A collective of persons, such as a corporation, might be said to be responsible for a state of affairs but it does not mean that all workers within the corporation have the same responsibilities. In a corporation, each member is responsible primarily for her own individual contribution. Each is personally responsible for the outcome in a partial way since each cannot be said to produce the overall outcome alone. For instance, a factory might produce hazard materials that spoil the environment. Factory owners will be held responsible for the contamination but we would not expect a production line worker to assume responsibility for it. In every organization there is an identified hierarchy that points to those who are answerable in every level for the performance of a given task. Responsibility is related to power and authority.

In a small dot.com start-up, team work is important. All participants know that they are interconnected. The quality of their collective performance will determine the final result. Each member recognizes her inter-dependence on other members for achieving the final result. Therefore, group members have a vested interest to help each other, including poor participants because the weak links might undermine the entire project. In communication projects, for instance, this leads to pro-active fault-finding where members recognize their collective responsibility for outcomes.

When something goes wrong, some group members may try to relieve responsibility from them, entailing that other members of the group are responsible for the wrong-doing. This is, unfortunately, a common practice, far more common than we like it to be. Responsibility deferral can be directed upwards or downwards. Upward deferral manifests itself by the statement "I am not responsible. I only obeyed orders. The boss is responsible." Downward responsibility takes place when a senior official rolls responsibility on a junior official, blaming her for the fault or wrong-doing. The

question where responsibility starts, and where does it stop, is not always easy. Often, when public wrong-doing is at issue, more than one person would be found responsible.

Sometimes, we may find justifiable grounds for responsibility deferral. For instance, this is the case when a junior officer could not have had the means to know particular consequences of her conduct. Some knowledge was beyond her remit of expertise. Other times, however, responsibility deferral will be unacceptable. A member of government who decided to open an unjust war on a neighboring country bears collective responsibility for the decision. She cannot say that the responsibility lies solely with the prime minister and/or minister of defence. As a participant in government, she was part of the deliberations leading to the declaration of war. The only way for her to relieve herself from collective responsibility is resignation. Mere objection to the decision, while remaining in cabinet, does not suffice. If she decides to remain in government, then she must accept responsibility for the wrong-doing.

A pertinent statement uttered when people wish to relieve themselves of responsibility is "I did not know". We cannot expect people to know all possible outcomes of their decisions; we can expect them to weigh foreseeable outcomes. If we could have reasonably expect the decision-maker to foresee the wrong-doing outcome then such statement will not stand.

Other statements are "there was nothing I could do" and "I have done all in my power". The question begs whether this was, indeed, the case. An assessment of one's conduct requires reviewing of the decision-making process, which options were weighed, whether the doer was cognizant of the harmful consequences of her actions, whether she did "all in her power" to avoid the wrong-doing or to minimize it. Ignorance or laziness cannot be regarded as convincing excuses for relieving responsibility.

CleaNet ©

It is time to consider the introduction of a new browser funded by an affluent person with a sense of social responsibility, an NGO or a group of NGOs wishing to establish a better Internet future for our children. The new browser will be called CleaNet © and will have no connections with any government.

The first step will be to convene a Netcitizens Committee that would decide what should be excluded from the new Net, what are the agreed-upon problematic topics that are regarded as unprotected speech. A public open call for members will be issued and the process will be conducted with transparency, full disclosure and open deliberation and debate. Clear deadlines for each step of the process will be outlined in order to assure that the process will not linger for many months. The Netcitizens Committee will be selected by a special Select Committee, nominated by the owners of the new browser. NGOs in the fields of New Media, human rights organizations, freedom of expression societies and institutions that promote social responsibility will be invited to serve on the CleaNet © Select Committee.

The Netcitizens Committee will include representatives of ISPs, web-hosting companies; Internet experts; media professionals; Internet scholars; government officials; human rights and minority rights organizations; freedom of speech organizations; computer engineers; judges, lawyers and other interested parties.

The Netcitizens Committee will include no less than 100 people and no more than 400 people, depending on the number of applicants willing to commit themselves for the responsible work at hand. This Committee needs to be a working committee. It cannot be too big.

Members will commit to work for one year, renewable for two more years at

most. After one year, the least active members will be asked to leave and they will be replaced by others. It is expected that a third of the committee will change each and every year. Such a reshuffle is advisable and productive.

As the work is hard and demanding, with considerable societal implications, members of the Netcitizens Committee will be paid for their work. The payment should not be too meager nor should it be very substantial. It should be enough to provide an incentive, denoting the responsible work at stake but it should not be the main job of the Netcitizen. It is recommended that it will be between 1000 and 2000 Euro per month.

The first issue on the agenda is to detail what should be ousted from the Net, and parameters for identifying problematic, anti-social speech. A detailed Terms of Fair Conduct will be drafted. Only material that is deemed problematic by at least 80% of the votes will be listed for exclusion. A separate list, “under review”, will include debatable speech to be considered and debated periodically until a resolution is made: either to permit it, or to filter it from CleaNet ©.

When the list of requirements will be concluded, the list will be handed to software engineers to design the algorithm for excluding material.

CleaNet © will be launched in a special press conference, notifying the public of its availability. CleaNet © could be downloaded freely with open access for all.

Netusers will have a choice: Retaining their present browser/s; adding CleaNet © as an alternative, or replacing their present browser/s with CleaNet ©.

CleaNet © will be attentive to societal cultural norms. For instance, while Holocaust denial is not problematic in the USA, it is most problematic in Germany and Israel. The Net should pay special attention to such sensitive matters.

It is assumed that while international consensus will exist about excluding

material such as child pornography, cyberbullying, the promotion of violent crime and terrorism from CleaNet ©, such a consensus will not exist regarding hate and bigotry. The notable exception will probably be the USA. However, such tolerant norms should not abide other countries that believe their Net should be free of bigotry and hatred. They may opt to filter that material.

Once implemented and out in the market, the government of each country will push its adaptation in the public sector. Only governmental agencies that have specific interest in studying anti-social material should be granted permission to use other browsers. Otherwise, we can assume that the public sector has no need to have access to -- for instance -- child pornography, criminal speech, terrorism and bigotry.

On CleaNet ©, search engines will not keep their ranking algorithms secret. Quite the opposite. They will proudly announce that the ordering of search results is influenced by standards of moral and social responsibility, commitment to preserving and promoting security online and offline, and adherence to liberal principles we hold dear: Liberty, tolerance, human dignity, respect for others, and not harming others.

The assumption is that once people become aware of the advantages of CleaNet ©, they would prefer it over their present browsers. There will be growing open discussions about the merits and flows of the new Net. Attempts will be made to remedy the flows.

The entire process of debating, implementing and browsing with CleaNet © will be transparent, opened for critic and feedback. Netcitizens will be welcomed to provide criticism on the CleaNet © Hotline and will receive an answer within 24 hours. Netcitizens will have the option to make their feedback public or private, with or without attribution.

Paid officers will screen the Hotline and pass thought-provoking complaints to a

Complaints Committee. The Complaints Committee will be a subcommittee of the Netcitizens Committee and will include 20 to 40 members. They will receive an additional payment 500-1000 Euros for their work. It is assumed that it will be a great honour and privilege to sit on this Committee, thus there is no reason for a higher salary despite the hard work involved. The Complaints Committee will study the complaints and will issue a reasoned response within a month. It is assumed that some Netusers will seek to admit into CleaNet © unauthorized sites. The Complaints Committee will study each and every complaint and respond.

By the end of each year, both the Netcitizens Committee and the Complaints Committee will issue an annual report about their work, which will be freely available to all interested parties. The reports will be as detailed as possible, including the terms of practice, how the terms were implemented, reflections on past-year work, lessons, reasoning for specific decisions and recommendations for the future.

An International Steering Committee of national representatives will be formed to learn from each other's experiences, to cooperate in case of need, to exchange views and to deliberate sensitive issues.

Conclusion

The Internet is a vast ocean of knowledge, data, ideologies and propaganda. It is ubiquitous, interactive, fast and decentralized. The ease of access to the Internet, its low cost and speed, its chaotic structure (or lack of structure), the anonymity which individuals and groups may enjoy, and the international character of the world-wide-web furnish all kinds of individuals and organizations an easy and effective arena for their partisan interests. The Internet contains some of the best written products of humanity, and some of the worse ones. It serves the positive and negative elements in

society.

At the beginning of the 21st Century, the Internet embraces some 300,000 networks stretching across the planet. Its communications travel on optical fibers, cable television lines, and radio waves as well as telephone lines. The traffic continues to grow in a rapid pace. Mobile phones and other communication devices are joining computers in the vast network. Some data are now being tagged in ways that allow websites to interact.⁴¹ Today, the growth of cloud computing is providing powerful new ways to easily build and support new software. By cloud computing it is meant a new generation of computing that utilizes distant servers for data storage and management, allowing the device to use smaller and more efficient chips that consume less energy than standard computers. Because companies and individuals can “rent” computing power and storage from services like the Amazon Elastic Compute Cloud, it is much easier and faster for someone with a good idea to turn it into an online service. This is leading to an explosion in new uses for the Internet and a corresponding explosion in the amount of traffic flowing across the Internet.⁴² The result is the most impressive web of communications in the history of humanity. Millions of people around the globe cannot describe their lives and function as they wish without the Internet.

Innovation will continue to be one of the main features of the Net. The Internet

⁴¹ Internet History, <http://www.greatachievements.org/?id=3747>

⁴² Eric Knorr and Galen Gruman, "What cloud computing really means," *InfoWorld*, <http://www.infoworld.com/d/cloud-computing/what-cloud-computing-really-means-031?page=0,0>; Michael R. Nelson, "A Response to Responsibility of and Trust in ISPs by Raphael Cohen-Almagor," *Knowledge, Technology and Policy*, Volume 23, Issue 3 (2010). See also <http://www.google.co.il/search?hl=iw&defl=en&q=define:Cloud+computing&sa=X&ei=3kMxTdKQEI6AhQfGw43eCw&ved=0CBsQkAE>

experimental project was based on open dialogue, where scientists posted Requests for Comments (RFC), on free exchange of information and ideas, on collaboration rather than competition.⁴³ There were no barriers, secrets or proprietary content. Indeed, this free, open culture was critical to the development of new technologies and shaped the future of the Internet. In the same spirit of Request for Comments, I invite readers to reflect on the ideas presented here and to explore new ways of thinking about the Internet, its advantages, its challenges and ways to address those challenges.

⁴³ Steve Crocker from UCLA played a key role in establishing the request for comments in 1969. See <http://tools.ietf.org/html/rfc1>