Law and Cyber Society: Socio-legal perspectives on the Internet

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This article is intended to explore some socio-legal perspectives on the Internet from a critical point of view. It discusses the culture of the Internet and the legal predicaments that have arisen lately due to problems that involve various jurisdictions and legal cultures.

1 Introduction

Laws and legal institutions have to a large extent been based on geographic boundaries and physical space. Law has, more often than not, been considered as the conventional strategy of the state to control and maintain social order within its domains and as an instrument to effectively promote and uphold regulations. Laws and regulations are in general constructed on legal concepts that have emerged for centuries throughout time and they are influencing everyday life in different ways. If we, for conceptual purposes, understand law as a system of rules, the interaction between law and society has until recently been both fairly straightforward and based on customs, traditions, geographical boundaries and physical space.[1]

However, in the 90s we experienced a punctuation of the legal equilibrium when a new dimension was introduced, the Internet. The long term stability within the legal domain came abruptly to an end, requiring new approaches to meet the different demands and changes that were taking place. Legal disputes and dilemmas with different characters that we were used to see, started to appear as outcomes of new behaviors in regards to IT-related business transactions, online banking, various forms of personal interactions on the Internet, electronic communication, etc. The disposition of the conflicts was by no means new but how to decide on where they should be resolved was not as easy to determine considering that some of the cases could involve different countries, legal cultures and policies.

To give an example on how complex conflicts can get when different countries, legal cultures and policies are colliding the following fictitious case has been constructed;

A website in south of Sweden called “www.modifiedchip.com/” offers modified PlayStation 2 chips that circumvent copy protection for this gaming device. The company and its website are both well known by Swedish gamers and the company has been booming for five years and it has six full time employees. The owner of the company is a 32 year old Danish engineering student who lives in Copenhagen but is studying and has established his company in Malmo, Sweden where his girlfriend lives.

In January 2008, the company gets information that they are indicted in Tokyo, Japan by the Sony Corporation because of Sony's intellectual property rights have been and are being violated by the production of modified chips. The Sony Corporation wishes to send a message to manufacturers and distributors of mod chips that they will continue to pursue legal action against any (what Sony

1 Arthurs Harry. W. & Kreklewich, Robert, *Law, Legal Institutions, and the Legal Profession in the New Economy*, Osgoode Hall Law School, York University, 1996, p. 16.

considers to be) illegal production. The Sony Corporation has been successful with a similar case in Belgium, but the company has also lost cases in Spain and Italy. An Italian court ruled that Sony Playstation 2 console owners have the right to modify their hardware once they have bought it since they, as the owners of the gaming device, are considered to have full ownership by Italian law.

Furthermore, the same month the owner of the small company is ordered to appear in court in Toronto, Canada, because some of the modified chips they have sold overseas have caused severe problems to a number of NTSCs based consoles in Canada and destroyed both the Playstation 2 and the expensive LCD-screen-TVs they were connected to (the PAL system is predominant in Sweden and Europe and not compatible with the North American standard NTSC). The mod chip business is entirely legal in Sweden, but since the company uses the Internet to conduct its business, it finds itself confronted with the criminal laws of all countries connected to the Internet.

In cases like these it is unclear what constitutes jurisdiction: is it the place where the product was purchased or sold, the country of residence of the vendor or the buyer. Would it be possible that all of the above could qualify?

Phenomenon like these are less likely to appear when physical interaction or transactions are taking place and laws that are based on geographic boundaries, customs and physical space are applicable. By advertising in different languages like Swedish, Danish, German Spanish and English this particular website reaches out to all gamers in the world. The website uses a dot com domain name which makes it difficult for some visitors to identify the company's home country. Whose legislation is prevalent in legal matters like the one described? Does the Danish owner of the small company in Sweden have to go to court in Japan as he was ordered to do and if so who is paying for the relocation and loss of income and where will he serve time in case he is convicted of a crime?

The legal dilemmas that have arisen lately presents tremendous challenges for the different legal systems and since people are getting more inclined to interact with different settings around the world, there is a need for harmonizing legal systems in order to comply with the new evolving patterns of retail. These problems are fairly new in a historical perspective and they were not presenting any significant legal problems 20 years ago when the punctuation of the legal equilibrium was initiated.

This example illustrates inconsistencies in jurisdictions even within the European Union where one court system rules in favor of the transnational corporation while two court systems clearly do not. The gaming industry is by no means exclusive in this sense by providing products that are legal in one country and illegal in the next. In a globalized economy where identical products are being sold in most countries in the world the consumer have the possibility to decide where he or she wants to get the desired products from, no matter where they are being offered and sold. Most enlightened consumers today compare prices before they shop and find websites that are offering everything from generic drugs online which might be legal in one country but illegal in the next to guns and firearms. Websites are subject to change with rather short notice and are today an easy and inexpensive way of promoting and selling products.

But how did it start? The first steps to, what was going to be a dramatic change for people, states and the law were taken already in 1989 when Tim Berners Lee designed- and worked on a global hypertext project, which would later be known as the World Wide Web. Berners Lee created the non-proprietary and free World Wide Web, which has revolutionized how we now access all kinds of information, media and furthermore on how we interpersonally interact with one and another through computer-based-communication. Geographical boundaries and physical space for interpersonal communication, business transactions, have stopped being a problem when it concerns interaction between people or transactions between enterprises situated in different locations in the world.[2]

The ever-increasing use of information systems and networks has gradually resulted in a more interconnected world with all the positive aspects it entails but we have also been confronted with new-fangled societal issues, which consequently have created new demands on the legal system. As discussed in a recent UN publication *The Law of Cyber Space*, computer networks are now considered to be vital components in most societal systems *"and support critical infrastructures such as energy, transportation, and banking and finance, and play a major part in how companies do business, how governments provide services to citizens and enterprises, and how people communicate and exchange information. The number and nature of technologies has multiplied and will continue to grow, as has the nature, volume, and sensitivity of information that is moving from place to place. At the same time, these information systems and networks are being exposed to a growing variety of new threats. Electronic commerce and the marketplace cannot thrive without strong and safe information networks which the public can trust. One element of assuring such secure networks is a comprehensive legal framework to deter, identify, and prosecute attacks on them*.[3]

The globalization of technology, information networks, culture and communication has dramatically changed the relationship between law and society. As Johnson & Post point out when discussing the rise of law in cyberspace, *"territorially based law-making and law-enforcing authorities find this new environment deeply threatening"*. (Johnson & Post 1996:2) The rapid technological and social changes along with the globalization of digital communication and media have produced socio-technological/legal dilemmas that are difficult to handle from a legal point of view. New conditions that require regulation emerge for which there are no or only inadequate traditional norms on which to base such regulation.

2 Berners Lee, Tim, *Weaving the Web: The Original Design and Ultimate Destiny of the World Wide Web*, HarperCollins Publishers., 1 edition, U.S.A, 2000.

3 Kamal, Ahmad, *The Law of Cyber-Space - An Invitation to the Table of Negotiations, Published by UNITAR* - United Nations Institute of Training and Research, Switzerland, 2005, p. 17.

2 The Culture of the Internet and Legal Predicaments

The Internet consists of a multitude of electronic information in forms of digital images, texts, videos, etc. The Internet has in only a few decades become the backbone of most information systems and plays a most important role in everyday communication for millions of people. The Internet consists of websites, virtual communities and networks in basically every language available and is it possible to even discuss whether there is a culture of the Internet or not?

In his book, *The Internet Galaxy*, Manuel Castells concludes that technological systems are socially produced and that social production is culturally informed. What Castells means is that the culture of the producers of the Internet immensely contributed to shape the medium in the beginning, in view of the fact that the producers were indeed the actual users. The Internet is in constant change and new socio-technological inventions are in many cases also the source for the growth of new enterprises that are trying to meet the demands on the global market. Castells identifies a transformation between the early days and the present situation and distinguishes between producers/users and the consumers/users of the Internet. The producers/users are the ones *"whose practice of the Internet feeds directly back into the technological system; while consumers/users are those recipients of applications and systems who do not interact directly with the development of the Internet, although their uses certainly have an aggregate effect on the evolution of the system"*.[4]

The Internet culture according to Castells is a collective construction that transcends individual preferences while influencing the practices of people in the culture. Castells develops his ideas and identifies the Internet culture as being characterized by a four layer structure;

1) *the techno-meritocratic culture*
2) *the hacker culture*
3) *the virtual communitarian culture*
4) *the entrepreneurial culture.*

These four layers contribute to an ideology of freedom that is prevalent on the Internet and *"should not be recognized as the founding culture since it does not interact directly with the development of the technological system"*. If we try to analyze this four layer structure in relation to the Internet culture we understand that freedom has many uses and that these cultural layers, in Castells words, are hierarchically disposed. Castells continues with saying that the techno-meritocratic culture becomes specified as a hacker culture by building rules and customs into networks of cooperation aimed at technological projects while the virtual communitarian culture due to its character contributes with a social dimension to technological sharing in the sense that it is bringing social interaction and symbolic belonging to the Internet. The fourth layer, the

4 Castells, Manuel (2003), *The Internet Galaxy: Reflections on the Internet, Business, and Society*, Oxford University Press, USA, 2003, p. 36.

entrepreneurial culture is, according to Castells, working *"on top of the hacker culture, and on the communitarian culture, to diffuse Internet practices in all domains of society by way of money-making."* The different layers are consequently dependent on each other in order to operate and survive.[5]

While the openness and the evolving capacity of the Internet's architecture has been the source of its main strength there are also a growing number of password protected virtual communities that are not open to ordinary Internet users. Some of these virtual communities/networks are socially constructed around tracker systems by users with similar interests. The tracker systems allow the members of the community to exchange digital information without any external involvement or disturbances. The members of the community/network are dedicated to use peer-to-peer file sharing (P2P) communications protocol and in many cases there are strict rules which regulate the behavior of the users in the community (also known as private tracker sites).

In Sweden as much as 83% of the population has some sort of access to the Internet according to statistical information from 2006. The daily use among gender and ages does however vary considerably. There is an apparent digital divide of the daily use when examining the statistical data from the first quartile of 2006. It appears that women between 55-74 years are with only 29% clearly the group that is using the Internet on a daily basis the least.

Daily use of the Internet by gender and age in the first quartile of 2006

	Proportion, %		Number	
	Women	Men	Women	Men
16-24 years	77	77	399,678	404,676
25-34 years	69	79	372,640	460,269
35-44 years	62	75	418,924	495,994
45-54 years	59	68	312,768	394,017
55-74 years	29	47	296,243	464,476
Of which 55-64 years	39	51	233,058	308,792
Total	55	67	1,800,251	2,219,433

Source: "www.scb.se/statistik/IT/IT0102/2006A01a/Bok5b.xls".

Not surprisingly, we can conclude from the statistical information that the largest proportion of daily Internet users are found in the 16-24 age group followed by the age group 25-34 years. The daily use is fairly high in all age groups and fairly equal in a gender perspective except for the age group 55-74 years where we can note a considerable discrepancy in the daily use between women and men. If we look at the Internet related activities for 2006 in Sweden we discover that there are noticeable differences in for example peer-to-peer

5 Castells, Manuel (2003), *The Internet Galaxy: Reflections on the Internet, Business, and Society*, Oxford University Press, USA, 2003, p. 37.

sharing by age and gender. As much as 45% of women and men in the age group 16-24 years were involved in peer-to-peer sharing activities and the men were clearly in majority.

Internet related activities 2006

	Proportion, %			Number		
	Total	Women	Men	Total	Women	Men
Used the Internet to make telephone calls	7	5	8	692,252	216,757	475,496
Created a web page	15	10	20	986,155	327,829	658,326
Used peer-to-peer sharing	20	11	28	1,301,838	354,033	947,805
Used a search engine	79	76	83	5,222,417	2,465,513	2,756,904

Used peer-to-peer sharing by age and gender 2006

	Proportion, %			Number		
	Total	Women	Men	Total	Women	Men
16-24 years	45	33	57	467,480	169,553	297,927
25-34 years	31	13	48	349,907	71,298	278,609
35-44 years	20	10	30	264,239	64,982	199,258
45-54 years	12	6	18	132,508	29,365	103,142
55-74 years	4	2	7	87,703	18,835	68,868

Source: “www.scb.se”.

Peer-to-peer sharing has been frequently discussed in the media in terms of illegal activities, piracy and copyright related problems and according to the statistics from the Swedish Statistical Bureau it is quite a popular activity among both men and women.

The behavioral norms of approaching media have dramatically changed in the society during the last decade, facilitated by improved digital media technologies. Enhanced technological solutions and software innovations have released opportunities of profound transformations in the communications infrastructure. The interface of cell phones, interactive video games, handhelds, laptops, GPS, television, radio, wireless devices are merging and give the consumers new-found possibilities to access whatever information that is desired. The revolution in information technology and the expansion of peer-to-peer networks are two factors that are facilitating file sharing and access to new media.

The hierarchical broadcast technology like television is no longer as attractive to the younger generations. Their media usage is not equivalent with how it was 10 years ago. The top-down distribution system that decides when and what we can watch has lost its dominance to new ways of for example

enjoying the favorite show. The TV is used in new ways, (for gaming, displaying home videos, etc.), in many homes but the broadcast culture is being under attack by the new and emerging technology.

There are clear evidences that the hierarchical technology is losing its dominance to more flexible technologies that give the viewer or the user more favorable options. In the TV culture, viewers have no real power, except to channel surf or cancel their subscription with the cable company. In the Internet culture, viewers have the power to interact and get access to media in a variety of ways.

3 The Internet and Illicit Activities

The Internet can be perceived as a multifaceted mirror image of the society or of many different societies that have merged into one virtual world constituted by a myriad of electronic networks that give this world its dynamic structure. In a socio-legal perspective it is imperative to remember that the Internet is just as much a social construction as a technological creation. The users of the Internet are also the producers of the Internet and its culture due to their online behavior and the footprints they leave when for example creating or updating websites, submissions to online discussion forums, blogging, submissions of media files to online communities, etc. As a virtual reflection of many different societies we are also exposed to the illicit element of human wrongdoings on the Internet.

The majority of criminal activities and legal offenses that were traditionally only taking place in the non virtual world have sequentially moved to the Internet which in turn has created a serious demand on the legal system to resolve the increasing rate of the online illegal activities. The enormous growth of global e-business has not only facilitated business-to-business (B2B) transactions but has consequently produced greater security problems and fraud cases. Cybercrime is frequently debated in media and among people. Cybercrime has become an immense problem and challenge due to the commercialization of the Internet and the problem is growing exponentially, both in frequency and complexity. As of 2001, approximately 80% of the transactions over the Internet were B2B and Manuel Castells rightfully claimed some years ago, that a networked economy with an electronic nervous system was clearly emerging.[6]

While **t**he economy is rapidly transforming and is becoming even more versatile than what we previous have experienced, the law enforcement is retroactive and trying to catch up with the transgressions that are occurring in the backwaters of the process, whether they are intentionally or not. The legislators are passing new laws to address online based criminal activities, and the police are forming special computer crime units and police officers are being trained to become fluent with information technology. The law enforcement landscape has changed.

6 Castells, Manuel (2003), *The Internet Galaxy: Reflections on the Internet, Business, and Society*, Oxford University Press, USA, 2003, p. 36, 65.

The traditional criminal activities that are found in the non virtual world as previously stated are also found online, which obviously makes it twice as hard in relation to resources for the law enforcement to maintain the same standards. Cybercrime generally refers to criminal offenses committed using the Internet or another computer network as a component of the crime and the range of criminal offenses is as broad as in the non virtual world. Cybercrime can basically be described as a criminal activity committed on the Internet whether it is against another individual(s), business, property or the State.[7]

In recent times we have more often than not been informed by mass media about the increasing rates of web-based hate crimes involving harassment cases, bullying, discrimination or other degrading treatment of people. Computers, cell phones, online communities, networks are being used as means to communicate hate related messages to certain individuals. The possibility of being anonymous when harassing or expressing hatred against individuals or groups has certainly made it easier for some individuals to continue with their illegal activities. Cybercrime as an evolving field has transformed the legal landscape and jurisdiction presents a problem in cybercrime cases considering that the criminal activity is by definition committed in cyberspace, which is abstract and not a physical place as previously discussed. The person behind the crime and the victim are often miles apart, and the criminal might never have set foot in the country or region where the harm occurs.[8]

The Internet culture is another complicating factor since many believe that the Internet should remain a "free-zone" where no governmental regulation or laws should apply. Others believe that existing laws are sufficient and can be effectively applied to the cyberspace environment. [9]

Interestingly from a socio-legal perspective, is that many individuals do not consider illegal digital reproduction as a serious crime and there are several explanations to this interpretation. For example illegal reproduction of software, music and movies do not carry the emotional, face-to-face impact that shoplifting, stealing and theft might do. Electronic data that is constituted by bits and bytes have lesser emotional impact due to its non physical nature and the relatively uncomplicated way to access this material.

As Debra Littlejohn Shinder discusses in her Scene of the Cybercrime: Computer Forensics Handbook, *"Software piracy is not "theft" in the traditional meaning of the word because it is taken by copying, not by depriving the owner of its use. Many people feel that software vendors' licensing terms are unfair, and thus piracy is somewhat justified retaliation. There is also a general feeling that because copying of software is so widespread and appears to do no harm, it's not a "real crime" (similarly to the way many people, who would never think of running a red light, feel about speeding)."*[10]

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7 Shinder Littlejohn, Debra, *Scene of the Cybercrime – Computer forensics Handbook*, Syngress Publishing, Inc., U.S.A, 2002, p, 5.

8 Shinder Littlejohn, Debra, *Scene of the Cybercrime – Computer forensics Handbook*, Syngress Publishing, Inc., U.S.A, 2002, p. 629.

9 Ibid.

10 ibid p. 46,47.

When discussing Shinder's hypotheses with first year students in Criminology it was clear that this particular target group of computer users actually sustained the arguments above. None of the students that were asked would even consider stealing an audio CD, DVD or digital software in a store while the great majority could not see any wrong with downloading and using illegally reproduced software, music or movies. As one male student expressed himself in relation to his media habits and how to access the media;

"I watch a lot of movies and TV shows! My favorite shows are CSI and Prison Break and I follow them religiously but I am not slaved to the TV couch every night. I download the shows from "www.bittorrents.org" or I get it from Limewire and then I watch the shows whenever I have time…. on for example the bus, between classes or late at night. Usually, the shows are uploaded right after they have been broadcasted so I can download the torrents – unzip the files and watch them on my IPOD or Laptop. It is really convenient because I am so busy with other stuff like sports, friends, studying, etc., that I do not want to be tied up for certain hours when the actual shows are broadcasted. I cannot really see anything immoral with this since the TV shows are broadcasted publicly anyway and if I had a PVR I could have recorded the episodes… Movies might be different but still I cannot really see that I am stealing or harming anyone, right…all my friends do it as well."[11]

Distribution of illegal reproductions of digital software, DVDs, Xvids, E-books, Audio-books, etc., is dominating many networks on the Internet and has become a problem for many Internet Service Providers (ISP) in terms of actual usage of broadband capacity and pressure from the law enforcement and the entertainment industry. Peer-to-peer file sharing (P2P) communication protocols are used by millions of Internet users on a frequent basis and many of the users cannot see anything wrong with it. Buying software for the PC or the Laptop is not an option for many IT savvy individuals considering that it takes perhaps less than an hour to download the preferred software from a P2P network.

4 Rules, Regulations and Culture in P2P Networks

In the early era of the Internet many anticipated a "free-zone" where law and regulations would not have any validity. The Internet was expected to be a lawless place where no legislator or state could intervene in order to regulate or sanction certain behavior. As Christina Rahmberg argues in her *Contracting on the Internet – Trends and Challenges for Law "In an open environment it is technically complicated to ascertain the identity of senders and receivers of electronic messages. And without identity there is no incentive to behave honestly, since dishonesty cannot be pinned on a person deserving of punishment."* Rahmberg also states that many people were concerned that the Internet *"would become a lawless inferno and that doing business on a basis of*

11 Interview with a *Male student 22 years old, November 22, 2007 at UOIT.*

honesty and trustworthiness would be impossible as long as there were no means of identification and no authority of law."[12]

Neither one of the projected outcomes have come true; instead we have experienced a similar process to the one in our non-virtual society. Furthermore, anonymity is not always a benefactor of dishonesty and *lawless infernos* if there are other incentives to stimulate honesty and netiquette. In for example most members based peer-to-peer file sharing networks (P2P) the participants are anonymous to each other while exchanging and providing digital information. What have been created within these networks are methods of rewards and sanctions or in a worst scenario exclusions (banning) from the networks if any misconduct is discovered. The P2P networks or communities have been under a lot of pressure from the Hollywood entertainment industry and organizations like the International Federation of the Phonographic Industry- (IFPI) and the Motion Picture Association of America- (MPAA).

Information technology is breaking new boundaries every day and new technology is creating new opportunities for innovative entrepreneurs, companies and individuals but also problems for the already established media corporations. Many scholars are discussing the positive and negative effects of the information society and that the increase of informationalism is interconnected with growing inequality and social exclusion. (Castells 2000:68) In recent years the concept of the network society has gained importance in information society theory.

According to scholars like Manuel Castells network logic is, besides information, pervasiveness, flexibility and convergence, a central feature of the information technology paradigm. *"One of the key features of informational society is the networking logic of its basic structure, which explains the use of the concept of 'network society'". "As an historical trend, dominant functions and processes in the Information Age are increasingly organized around networks. Networks constitute the new social morphology of our societies, and the diffusion of networking logic substantially modifies the operation and outcomes in processes of production, experience, power, and culture"*. For Castells the network society is the result of informationalism, a new technological paradigm.[13]

The network society has of course sides to it that are breaking or at least bending the law. P2P networks might be small and exclusive to a small group of digeratis or really large with countless members of different knowledge. Without having any substantial prior knowledge to what P2P networks or communities really do I decided to investigate their operations and internal systems bearing in mind that *"Technological systems are socially produced and social production is culturally informed"*.[14]

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12 Ramberg, Christina, *Contracting on the Internet – Trends and Challenges for Law*, in Law and Information Technology Swedish Views, SOU 2002:112, p. 109.

13 Castells, Manuel (2000), *End of Millennium, The Information Age: Economy, Society and Culture* Volume III, Blackwell Publishers, 2000, p. 69, 21, 500.

14 Castells, Manuel (2003), *The Internet Galaxy: Reflections on the Internet, Business, and Society*, Oxford University Press, USA, 2003, p. 36.

By registering as a member under false identity in one prosperous community and getting access to the tracker, a fascinating world opened up and to my surprise, surrounded by numerous regulations and rules that I certainly did not expect beforehand. For a number of years there has been quite a controversy over the existence and use of so called BitTorrent trackers although the use of BitTorrent is not illegal.

A number of jurisdictions have pursued legal action against websites that host BitTorrent trackers and one of them is the Swedish thepiratebay.org torrent website, which is run by a couple of dedicated individuals who call themselves an anti-copyright group. They have become infamous for the "legal section" at their website where letters and replies on the subject of alleged copyright infringements are publicly displayed and ridiculed by the owners and their lawyer. They claim that they run a legit operation and that no copyrighted and/or illegal material is stored on their servers. However, on May 31, 2006, the thepiratebay.org servers in Sweden were raided by Swedish police on allegations by the MPAA of copyright infringement; however, the tracker was up and running again three days later.[15]

It is important to notice that there are major differences between BitTorrent and many other peer-to-peer file-sharing systems. The BitTorrent itself does not present any search facility to find digital files by name. A user must find the initial torrent file by other means, such as a web search. Also, BitTorrent makes no attempt to conceal the host ultimately responsible for facilitating the sharing: a person who wishes to make a file available must run a tracker on a specific host or hosts and distribute the tracker address(es) in the .torrent file.[16]

The P2P networks are, as mentioned previously, surrounded by rules, regulations and sanctions and one has to learn the *"language"* in order to understand the normative structure. Seeding, leeching, uploads and ratios are just some concepts that are used on the trackers and according to Wikipedia *"In computing and specifically on the Internet, being a leech or leecher refers to the practice of benefiting, usually deliberately, from others' information or effort but not offering anything in return, or only token offerings in an attempt to avoid being called a leech. The name derives from the leech, an animal which sucks blood and then tries to leave unnoticed..." Leechers are also called Freeloaders in some online forums.*[17]

Among users of the BitTorrent file distribution protocol, a leecher is simply a user who does not yet have a complete copy of a particular file. Therefore all BitTorrent downloaders are to some extent leechers. BitTorrent clients regularly start to upload the files after they have started to download them; these users are not so called freeloaders since they contribute to *seed* the files. Therefore this kind of leeching is considered to be a legitimate practice as long as the set upload limit is unlimited or at a decent speed. Reaching an upload/download ratio of 1.0 (meaning that the user has uploaded as much as he/she has

15 "en.wikipedia.org/wiki/BitTorrent_protocol/".

16 "en.wikipedia.org/wiki/BitTorrent_protocol/".

17 "en.wikipedia.org/wiki/Leecher".

downloaded) in a BitTorrent client is considered a minimum in the rules of the tracker. [18]

The world's largest torrent tracker is the Swedish www.thepiratebay.org network, which had 1834 425 registered international users on July 25 2007 and probably just as many unregistered leechers. Sweden and its government have been profoundly criticized, by the U.S. entertainment industry, for being too lenient in regulating and restricting peer-to-peer file sharing. In correspondence to international pressure and other factors, the Swedish police searched ten locations across the country and confiscated the servers along with other computer equipment on May 31 2006, when collecting evidence. [19]

A message on thepiratebay.org website acknowledges the search, but the group has continually maintained its legality under Swedish law because no copyrighted material is actually stored on its servers. Instead, the group uses a file transfer technology namely BitTorrent, which speeds up downloads by splitting transfer duties among several peoples' computers instead of a single source. This so-called "peer to peer" transfer method makes file sharing more efficient and minimizes the need for expensive, professional Internet servers.[20]

Copyright protection laws tend to vary from country to country depending on the character of national jurisdictions. The overarching purpose of the anti-copyright theft laws is to protect valuable ideas and the creative industries according to the MPAA, who also has four major offices in Brazil, Singapore, Europe and Canada as well as many other branches around the globe. MPAA investigators work with international law enforcement to ensure that copyright is protected with respect to each country's legal system. Multinational companies are pressuring governments and organizations to take action and close down the increasing traffic. The U.S. entertainment industry has filed lawsuit in various countries aimed at closing down the networks that are scattered around the globe.[21]

According to the MPAA, "*whether you download a movie from an unauthorized source or sell counterfeit DVDs on the street, you are a movie thief whose crimes carry serious legal consequences. Federal and state laws and international treaties exist to stop people from stealing valuable copyrighted material. Pirates all over the world should know that law enforcement entities are committed to protecting copyrighted material because creative works such as motion pictures and television are as valuable as any other type of property. The MPAA and its member companies have a multi-pronged approach to fighting piracy, which includes educating people about the consequences of piracy, taking action against Internet thieves, cooperating with law enforcement authorities around the world to root out pirate operations, and encouraging the development of new technologies that ensure movies can be made available*

18 ibid.

19 "www.thepiratebay.org".

20 "www.forbes.com/home/intelligentinfrastructure/2006/05/31/piracy-internet-raid_cx_df_0531pirates.html".

21 "www.cbsnews.com/stories/2003/02/03/tech/main539104.shtml".

legally over the Internet and other digital media. As an industry, we are working hard to protect our creative works." [22]

There is no doubt that new technology has facilitated infringements of intellectual property that theoretically make large populations of computer users potential law breakers, when copying or sharing electronic copyrighted files, ideas, information and services.

Intellectual property is a legal terminology that has been frequently debated in media lately due to reports on increasing copyright infringement on the Internet facilitated by dedicated virtual communities/networks. Countries like Sweden and Canada have been profoundly criticized by transnational corporations and the entertainment industry due to allegedly lenient legal systems in relation to IT. These countries among others have been accused of being centers for software piracy and illegal file sharing hubs.

In cyber-space everything is composed of bits, the binary code that is the foundation of computing. In their digital form, images, music, video and text are perfectly reproducible; not just once, but an infinite number of times. There is no degradation to limit the value of duplicate copies. With digital media, all copies are originals. The binary reality of digital media poses vexing problems for how works are used and reused, as well as the rights and responsibilities of producers and consumers under existing law.

One of the virtues of the Web is its reach: the ability to widely distribute digital works faster and less expensively than ever before. There is great value in being able to communicate to millions of people. The downside is that content owners have little control over the subsequent dissemination and use of their work. In general most consumers are unaware or confused by expansive online license agreements or willing to dismiss them as overly restrictive or unfair. Intellectual property is the legal term that refers to industrial property and to copyright and related rights.

5 Concluding Remarks

As Robert A. Kagan clearly points out in - *Law & Society in Transition: Toward Responsive Law*, law appears to penetrate and constrain even larger realms of social, political and economic life than before, generating both praise and blame. Depending on ones political perspectives, socio-cultural contexts or ideological stand points, law and its social functions are perceived in different ways. To some individuals and organizations, law is primarily a mode of oppression – a coercive instrument which the rich and powerful invoke to discipline those they define as troublesome, or more subtly, ostensibly even/handed set of rules that in actuality protects and legitimates existing political and social hierarchies. The increasing juridification of everyday social and commercial life imposes a stultifying formalization of human activity and the Internet would be no exception.[23]

22 "www.mpaa.org".

23 Kagan, Robert A. in Nonet, Philippe, & Selznick, Philip., *Law & Society in Transition: Toward Responsive Law*, Transaction Publishers, U.S.A, 2001, p. vii.

Law changes and develops in synchronicity with societal progresses and to some extent it also fulfills public expectations and/or demands. However, in recent times we have experienced a dramatic transformation in how we access media and consequently how we utilize information technology. The Internet has transformed the world beyond recognition in how people work, interact, purchase, learn, live and access information and entertainment. This socio-technological change caused by new ways of using information technology has put certain pressure on legislators, law enforcement officers, legal institutions and subsequently also the courts in how to deal with new forms of legal disputes, crimes and misconducts.

Law has become an increasingly important mechanism for how to regulate Internet behavior and to deal with crimes that are committed in online communities and/or by using information technology. Since the late 1990s we have noticed a greater than ever demand from the commercial sector and particularly from the entertainment industry to regulate the behavior of Internet users in relation to intellectual property infringement and file-sharing. The entertainment industry is strongly lobbying so that legislators and governments are influenced to rethink crime and law in relation to P2P file sharing. For more than a decade we have seen on the one side tendencies of public outrage and moral panic concerning the easiness to access *immoral content* on the Internet, these groups are demanding censorship and control while on the other side there are strong powers that are trying to stop the juridification of the Internet.

The development of the information society and the socio-technological paradigm has resulted in new ways of interpersonal communication and processing information and news ways in how the law will be able to regulate these interactions (if necessary). Information technology has for the past decades been the dynamic motor of globalization and has provided us with the new dimension popularly called cyberspace where we can interact with others and cultivate social relations independently of geographical distances.

The socio-technological paradigm has undoubtedly already had a significant impact on the law per say, determining the emergence of new areas of law (like data protection and telecommunication law), but also considerable changes in many traditional legal domains like intellectual property rights, contracts, administrative law, criminal law and labor law through for example distance work.[24] There is undoubtedly a great need for socio-legal research in how to analyze the evolving capacity of the socio-technological paradigm and subsequently also on how to design and determine regulatory decision making within this field.

24 Castells, Manuel (2003), *The Internet Galaxy: Reflections on the Internet, Business, and Society*, Oxford University Press, USA, 2003.

References

Arthurs, Harry. W., and Kreklewich, Robert., (1996), *Law, Legal Institutions, and the Legal Profession in the new Economy*, Osgoode Hall Law School, York University, Canada.

Berners Lee, Tim, (2000), *Weaving the Web: The Original Design and Ultimate Destiny of the World Wide Web*, HarperCollins Publishers., 1 edition, U.S.A.

Castells, Manuel (2000), *End of Millennium, The Information Age: Economy, Society and Culture,* Volume III, Blackwell Publishers.

Castells, Manuel (2003), *The Internet Galaxy: Reflections on the Internet, Business, and Society*, Oxford University Press, USA.

Johnson, David. R & Post, David. G, (1996), Stanford Law Review 1367, U.S.A.

Nonet, Philippe, & Selznick, Philip.(2001), *Law & Society in Transition: Toward Responsive Law*, Transaction Publishers, U.S.A.

Kamal, Ahmad, (2005), *The Law of Cyber-Space - An Invitation to the Table of Negotiations, Published by UNITAR*- United Nations Institute of Training and Research, Switzerland.

Ramberg, Christina, (2002) *Contracting on the Internet – Trends and Challenges for Law*, in Law and Information Technology Swedish Views, An Anthology produced by the IT Law Observatory of the Swedish ICT Commission, SOU 2002:112, Printed by Elanders Gotab AB.

Shinder Littlejohn, Debra, (2002), *Scene of the Cybercrime – Computer forensics Handbook*, Syngress Publishing, Inc., U.S.A.

Internet sources

"www.scb.se/statistik/IT/IT0102/2006A01a/Bok5b.xls".

"en.wikipedia.org/wiki/BitTorrent_protocol/".

"www.forbes.com/home/intelligentinfrastructure/2006/05/31/piracy-internet-raid_cx_df_0531pirates.html".

"www.cbsnews.com/stories/2003/02/03/tech/main539104.shtml".

"www.mpaa.org".

Interview

Male student 22 years old, November 22, 2007, UOIT, Canada.